DANMARKS OG GRØNLANDS GEOLOGISKE UNDERSØGELSE **RAPPORT 2022/5**

Cannon balls from Bremervörde (D)

A characterization of historic cannon balls using SEM and LA-ICPMS microchemistry

Tonny B. Thomsen, Nynke T. Keulen, Benjamin D. Heredia & Sebastian N. Malkki

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Summary

A total of 41 historic cannon balls from the 16th and 17th centuries were analysed by SEM (AQM and BSE) and LA-ICPMS with the aim of grouping the cannon balls using their textural and chemical-compositional attributes. With emphasis on using typical textures occurring in the cannon balls, the general composition of the sample material, trace element chemistry of carefully selected and omnipresent Fe-rich phases, and a principal component analysis (PCA) methodology, the cannon ball can be divided into at least three, but likely four groups with distinct and reasonably noticeable attributes. The report includes the results from this reconnaissance study, which constitutes a first attempt to characterize such materials using a combination of electronic microscopy and LA-ICPMS instrumentation and method setup.

Dansk resume

Kanonkugler anvendt i det 16. og 17. århundrede er blevet analyseret vha. SEM og LA-ICPMS for at undersøge om det er muligt på baggrund af deres tekturelle karakteristika og kemiske sammensætning at skelne imellem kanonkuglerne, for derved at kunne gruppere de respektive kanonkugler mhp. en arkæologisk fortolkning af brugen, oprindelsen og eftermælet for kanonkuglerne. Sekundært var det et mål at undersøge kanonkuglernes proveniens, det vil sige fra hvilke miner eller malm-områder kanonkuglerne kunne tænkes at de oprindeligt er udgravet fra. Hvis metoderne brugt ifm. produktion af kanonkuglerne har udslettet ethvert proveniens kendetegn, så undersøge proveniensen for fabrikationen af kanonkuglerne, dvs. hvor og måske hvordan kanonkuglerne er fremstillet. Denne rapport indeholder kun data for den første del af undersøgelserne rettet imod en gruppering af kanonkuglerne, da den tid som var allokeret til projektet kun tillod at gennemføre dette delmål. Kanonkuglerne formodes anvendt i forskellige krige, og er en del af Bachmann-Museum Bremervördes 102 stk. store samling af kanonkugler fra denne historiske tidsperiode.

Til undersøgelserne blev anvendt automated quantitative mineral mapping (AQM) og BSE imaging vha. Skanning-Elektron Mikroskopi (SEM) og efterfølgende Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICPMS). Med disse analyseinstrumenter er kanonkuglerne blevet karakteriseret teksturelt og den kemiske sammensætning bestemt.

Resultaterne af analyserne viser at det er muligt med denne instrument-sammensætning at inddele de analyserede prøver i mindst 3, men formentlig 4 grupper baseret på typiske teksturer, der forekommer i kanonkuglerne, samt nogle karakteristiske forhold for den kemiske sammensætning af kanonkuglernes jern-rigeste faser. Foruden SEM data og billeder samt kemiske sporelement-forhold er der også inddraget principal component analysis (PCA) til karakterisering af kanonkuglernes beskaffenhed mhp. en tilstrækkelig pålidelig gruppering af kanonkuglerne.

Resultaterne fra dette rekognoseringsprojekt bidrager til forståelsen af, hvordan man på baggrund af teksturelle og kemiske data kan differentiere imellem de forskellige typer af historiske kanonkugler, som i deres udgangspunkt måske ligner hinanden. En række yderligere analyser anbefales dog for at kunne indarbejde proveniensanalysen i karakteringen af sådanne materialer for derigennem at få det bedst mulige grundlag for en videnskabelig robust fortolkning.

Content

1. Rationale for the project

The Bachmann-Museum in Bremervörde, Germany, hosts a collection of 102 historic cannon balls discovered throughout the region. The cannon balls were utilized in various battles during the period from 1547 to 1674. The 102 specimens are composed predominantly of iron (97), lead (2), iron+lead (1), and 2 are stony cannon balls. The condition of the cannon balls greatly varies from almost intact original surfaces to slightly corroded or almost completely degraded material.

Some of the cannon balls can be assigned to entries in the access books. However, this is not possible for all the cannon balls found. For 62 of the iron cannon balls more or less accurate information exist for the place of discovery. This is typically in the vicinity of the Bremervörde Castle grounds near the former army path, or in the surrounding area (Fig. 1). Those cannon balls were most probably shot out from the castle's cannons. Other cannon balls have a somewhat unclear origin with respect to their archeological context. Some of them do not fit any cannon type known to be used. The calibers of these cannon balls in the inventory lists are just as diverse as those in the museum's collection, making it difficult to obtain further information from there. In addition, the inventory of the castle shrunk severely during 1657-1660 as a result of besieging by Denmark.

It is most likely that some of the cannon balls were produced by the intruding opponent. At this time, the iron ore material used for cannon balls was most likely cast fairly close to the location where it was mined using production methods characteristic of those facilities. The ore material and/or manufacturing processes of these cannon balls, as well as of the locally German-produced cannon balls, may have different chemical characteristics that can be used to differentiate between the various kinds of cannon balls.

It was the main purpose of this project to gain new knowledge about the cannon balls regarding the type variation of the cannon balls, thereby enabling the differentiation between them. If this differentiation was possible from the new results, a secondary target was to fingerprint or try to constrain the provenance of the cannon balls, including the differentiation between the production methods used for the cannon balls, which would tell something about the original site(s) for the manufacturing of the cannon balls.

In the project, we have used two different analytical techniques that produce complementary chemical and textural data to investigate what can be revealed from such data in terms of fingerprinting information usable for the interpretation of the archeological context for the cannon balls. To our knowledge, this project is the first study on the historic cannon balls from Bremervörde, where the composition of the cannon ball material is investigated using modern Scanning Electron Microscopy (SEM) and Laser Ablation ICP Mass Spectrometry (LA-ICPMS) techniques. The analytical methods and results of this reconnaissance study are reported here with supplementary data and (high-resolution) images given in associated files. The focus of the analytical work was on chemical and

textural imaging of the sample material using SEM, followed by microanalyses of selected chemical phases by LA-ICPMS.

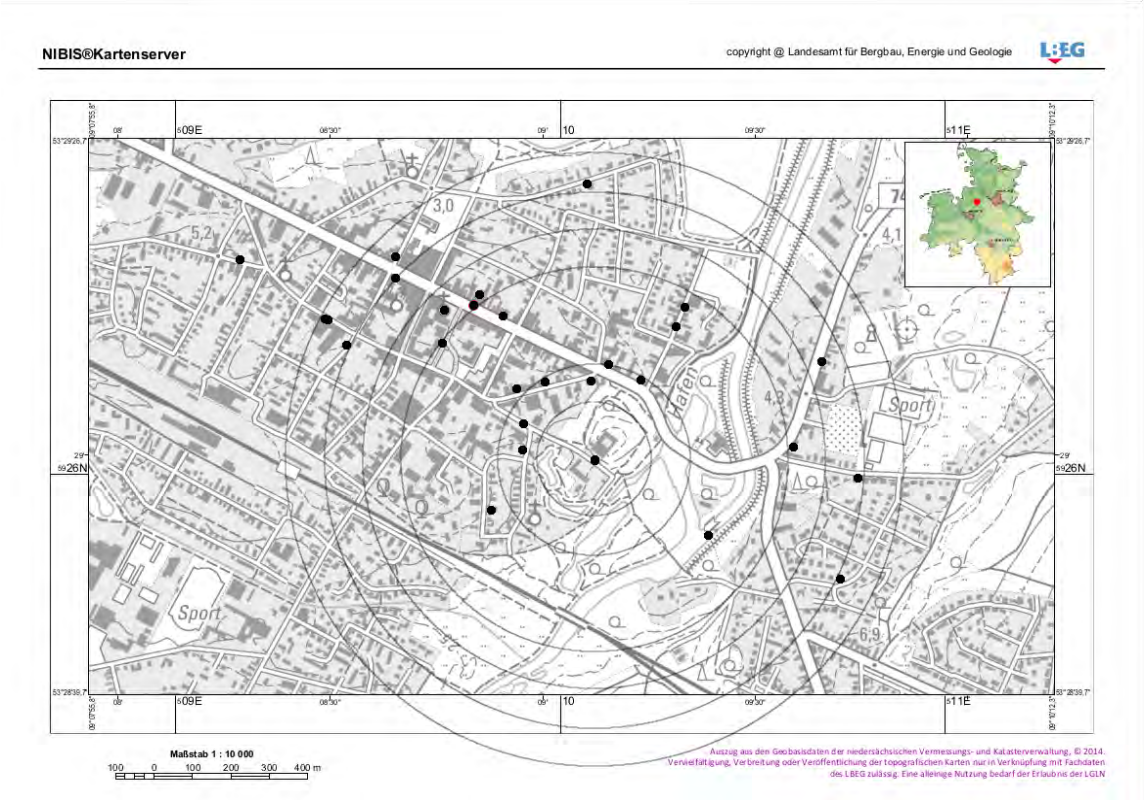


Figure 1: *At top, a photo of some of the cannon balls from the collection at the Bachmann-Museum, Bremervörde in northern Lower Saxony. The figure below is a map of the city of Bremervörde on a 1:10,000 scale with discovery locations (black dots) relative to the Vörde Castle for some of the cannon balls of the Museum's archaeological collection.*

2. Analytical techniques used

In disciplines like materials science, geoscience and akin, *in situ* microanalyses of crystalline materials are routinely carried out using analytical techniques like Scanning Electron Microscopy (SEM) and Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICPMS) to provide information about the texture of the analysed materials and their chemical composition (i.e., elemental or isotopic abundances). In this project we have used SEM, LA-ICPMS, and optical microscopy, to characterise the textural appearance and the chemistry of the materials sampled, either drilled out from the cannon balls or sent as the raw cannon balls material stored at the museum.

A set of 41 cannon ball samples (Appendix A) were mounted in epoxy and analysed in the Scanning Electron Microscope (SEM). The purpose was to obtain images for the texture and measure the approximate composition of the samples (chemistry and mineralogy). The images were also used as documentation for the Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS) analyses, where trace elemental compositions were determined. Part of the samples consist of flakes of the cannon ball, which were taken from the outermost layer. Other samples were drilled out of rust-cleaned cannon balls; these samples generally consist of very small pieces.

Sample preparation at GEUS included encapsulating selected pieces or all the cannon ball sample materials available into epoxy mounts of 40 mm in diameter using a Struers CitoPress-30 hot mounting press. The epoxy mounts were polished by routine procedures using Struers polishing instrumentation and diamond paste. The mounts were used for the subsequent analyses. The samples that consisted of drilled-out cannon balls material required chemical cleaning to remove the WD-40 used as lubricant during the drilling, as WD-40 contaminates the SEM and LA-ICPMS. The epoxy mounts were first imaged by optical microscopy, then analysed by SEM followed by LA-ICPMS.

Optical microscopy was used exclusively for acquiring overview pictures of the mounts. These were used to manoeuvre during SEM and LA-ICPMS analysis, and for reference to the back-scattered (BSE) and automated mineral images obtained by the SEM as well as for the analyses obtained by LA-ICPMS. All optical, BSE and AQM (se below) images are included into Appendix B.

SEM analyses were used in two ways, viz. back-scattered imaging and automated quantitative mineral mapping (AQM). ***Automated quantitative mineral mapping (AQM)*** was performed on the SEM at the Geological Survey of Denmark and Greenland (GEUS), using the ZEISS Mineralogic software platform (Fig. 2). All samples had representative areas imaged with a back-scattered electron contrast detector (BSE), which shows the material/density contrast in the samples, with the most dense/heavy material in white and lighter material in dark grey tones. Individual images are placed in a mosaic and saved as the BSE-map of the sample (Appendix B). Energy dispersive spectrometry (EDS) was applied to analyse the chemistry of the samples. The chemistry in each

analytical point analysed by the EDS detectors was interpreted as a mineral phase and each analytical point forms one pixel in a false coloured mineral map (MIN) (see Appendix B). Further details on the software and applied methodology can be found in Keulen et al. (2020). From the MIN map, we can extract the bulk mineralogy for the samples (reported in Appendix C), where only minerals/phases present in concentrations larger than 0.5 area% are shown.

The samples were analysed without coating at 30 Pa vacuum, 12-15 kV acceleration voltage, 120 μm^2 aperture, 275 kcps throughput rate and a dwell time of 0.015-0.025 seconds. The spot size used for the analysis varied from 0.5 to 20 µm (though mainly 2 or 5 µm) depending on the resolution needed for the optimal analysis results.

Limitations of the AQM and EDS technique

The ***AQM*** software has a first-match routine. This means that if a mineral in the list fits two descriptions, always the first mineral from the list that matches the chemistry is used in the classification. Thus, the order of mineral list items is important. Here, we applied the following order: first we selected the Fe-silicates from the sample, then a range of metals that often occurs in iron ores and potentially may be used as tracers: Sn, Co, Cr, V, Ti, Pb, Ni, Mn, Cu, Zn. Subsequently, the samples were investigated for the presence of phosphorus and sulfur. All these elements had a threshold value of 5 wt%. As a next step the iron content in the samples was mapped in steps of 10 wt% from 30% to 100% of iron in iron-oxides/hydroxides with pure iron as a last step. This shows the amount of rusting or oxidation (more oxygen, less iron), but also if the iron is pure or occurs as magnetite (Fe_3O_4) or hematite (Fe_2O_3). Finally, other silicates, especially quartz are coloured. The order of minerals in the Excel sheets matches this mineral list.

Hydrogen cannot be detected with ***EDS*** detectors. Thus, the chemical analysis cannot separate iron-hydroxides from iron-oxides. Various iron-rust minerals contain hydroxides, which will show in the EDS/AQM results as oxides. The various FeOx minerals can therefore be various types of rust as well as oxidized iron. Here, they will be described as FeOx and iron oxides/hydroxides.

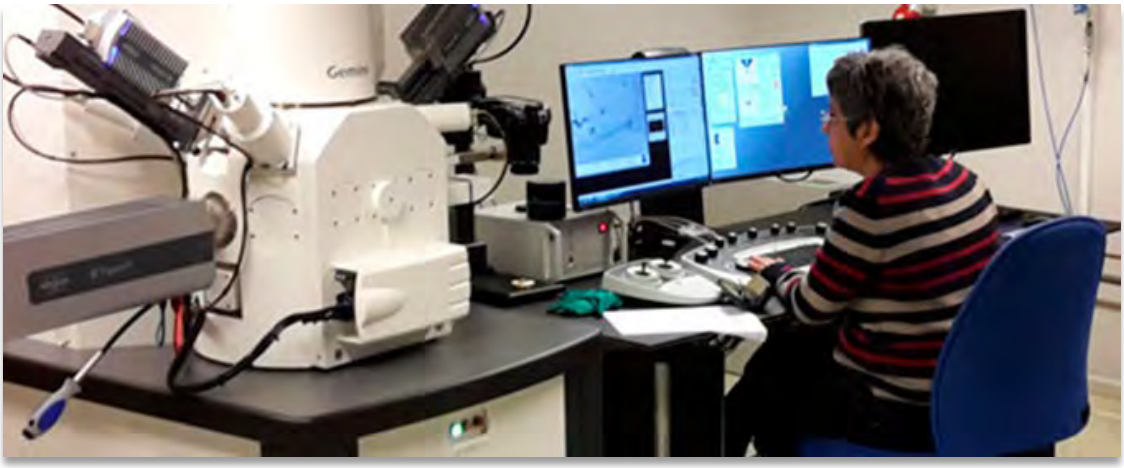


Figure 2: *The Scanning Electron Microscopy laboratory at GEUS.*

Laser ablation inductively coupled plasma mass spectrometry (LA-ICPMS) is used to measure the trace element concentrations of selected Fe-rich phases in the cannon ball samples. A NWR213 solid state Nd:YAG laser ablation system from Elemental Scientific Lasers (ESL) mounted with a standard TV2 ablation cell was coupled to an ELEMENT 2 double-focusing single-collector magnetic sector-field ICPMS from Thermo-Fisher Scientific (Fig. 3). The mass spectrometer is equipped with a Jet interface pump system and used X-type (jet) sampler and H-type skimmer Ni cones (thus Ni was not included into the analyses), and a quartz torch shielded with a grounded Pt electrode. Operating conditions and data acquisition parameters are listed in Appendix D.

The laser was heated up for at least 15 minutes before operation, providing stable laser output energy and flat ablation craters by the "resonator-flat" laser beam. Prior to loading, samples and standards were carefully cleaned using ethanol and an ultrasonic bath to remove surface contamination. The ablation cell with the custom-made sample holder was flushed with helium gas to minimize and stabilize the gas blank level. Helium was used as carrier gas and was mixed with argon gas ca. 0.5 m before entering the mass spectrometer. The mass spectrometer was run for at least one hour before analysis to stabilise and minimise the Hg and Pb background signal.

The ICP-MS was optimised for dry plasma conditions through continuous linear ablation of the NIST612 glass and the GJ-1 zircon standards. The signal-to-noise ratios were maximised for isotopes in the entire mass range of interest (i.e., Sc to Pb) while opting for low element-oxide production levels by minimising the $^{238}UO/^{238}U$ ratios. To optimise the top peak location for all elements, a mass offset correction procedure was employed. Instrumental drift was minimized by using a standard-sample-standard analysis protocol, bracketing 6 sample analyses by 3 measurements of the primary standard BCR-2.

The quality of the standard measurements was controlled by regular measurements of the reference standards NIST-610, NIST-614 glasses and the BHVO-2 basalt glass as well as a synthetic Fe-rich standard (E363) made from meteorite material (van Kooten et al. 2022). All standards yielded averaged internal 2SE uncertainties of <10 % for all elements with concentrations above 1-2 ppm, except for Cr and Sc (<20%). Average accuracies for most elements above 1-2 ppm was within 5-10% deviation from reference values, whereas the accuracy for elements with abundances below 2 ppm typically showed up to 20-25 % deviation (Fig. 4). Data were acquired from single spot analyses of 25 µm in diameter, using nominal laser fluence of ~3.5 J/cm^2 and a pulse rate of 10 Hz. Total acquisition time for single analyses were ca. 150 sec., including pre-ablation (5 pulses) followed by 60 sec. gas blank, then by laser ablation for 40 sec. and washout for 40 sec. Factory-supplied software from Thermo-Fisher Scientific was used for the acquisition of the transient data, obtained through pre-set spot locations. Data reduction was performed off-line through the software Iolite version 2.5 (Hellstrom et al. 2008, Paton et al. 2011) using the Trace_Elements_IS routine and ^{57}Fe as the internal standard element assuming 70 wt% Fe for all Fe-rich (Fe70-100) phases measured on the sample.

Figure 3: *The Laser Ablation ICP-MS facility at GEUS (the laser ablation instrument in front).*

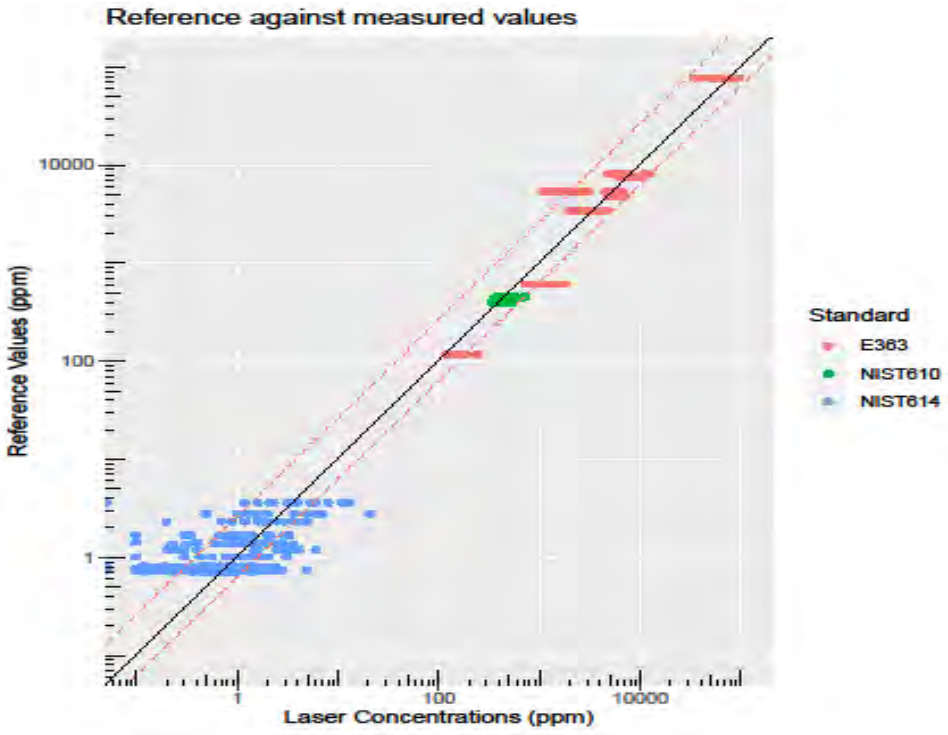


Figure 4: *Diagram showing the accuracy for the measured elements in the reference standards E363, NIST610 and NIST614 that were included in the analyses. The solid line represents the "perfect fit" (i.e., 100% accuracy) of the data, with the dashed lines along the solid line denoting the 10% accuracy-offset compared to published values for the reference standards.*

3. Results

Below are listed some of the attributes that were identified from the produced analyses. It is not intended to be an ultimate reporting of *all* possible results that can emerge from the new data. It is merely what we at GEUS were able to deduce from the data and images produced in the time available, and that we considered useful for interpretation with regards to the purposes of the study. A more detailed investigation of the data will most probably reveal further and more detailed information.

In general, we have focused our efforts on targeting the differentiation question only. This is because early in the project it became apparent that a profound investigation of the provenance for the geological origin of the Fe-ores in terms of a geographical or a geological fingerprinting was not possible. These limitations were due to the time available for the study and the lack of background information for comparison work. A complete investigation of provenance and Fe-ore fingerprinting will require a substantially deeper background study acquiring sufficient background information and data like comparable Fe-ore materials from relevant areas in question (e.g., Norway, Sweden, Denmark and Germany). In section 5, we have briefly described the requirement for a profound background study to be able to carry out such a fingerprinting of the cannon balls.

3.1. Results based on Scanning Electron Microscopy

The **SEM analyses** produced BSE and automated mineral (chemical) phase images (see Appendix B+C). Two different ways to divide the samples into subgroups were employed. First, we made a division based on *textural* features, these are best observed on the BSE images. Secondly, we made a division based on the *bulk composition* of the samples, these are easiest recognizable from the AQM maps (phase image).

Division 1: samples grouped by textural features

Based on their texture, samples could be divided into four groups (see Figure 5 for illustration of the most common textures). Note that for the sample material that were drilled out of the cannon balls, the textural analyses are much less certain, because the investigated surfaces are a lot smaller than for the large flakes and pieces that were collected from the other cannon ball samples.

A: *5843; 5872; 5913; 5933*:
These samples contain large amounts of iron-silicate minerals and show no signs of quenching. Possible interpretation: The cannon balls lack evidence of a cast-made iron production process and is most likely derived directly from an iron-ore. The material might be iron slags.

B: *5847; 5895; 5897; 5903*:
These samples have spherical and vermicular dendritic textures (see Fig. 5), but also contain subhedral iron oxide grains (melts at around 1400 ºC), sulfides, iron-silicate and silicate minerals (the latter melt at around 1200 ºC), which would indicate that the sample has not been fully but only partially melted.

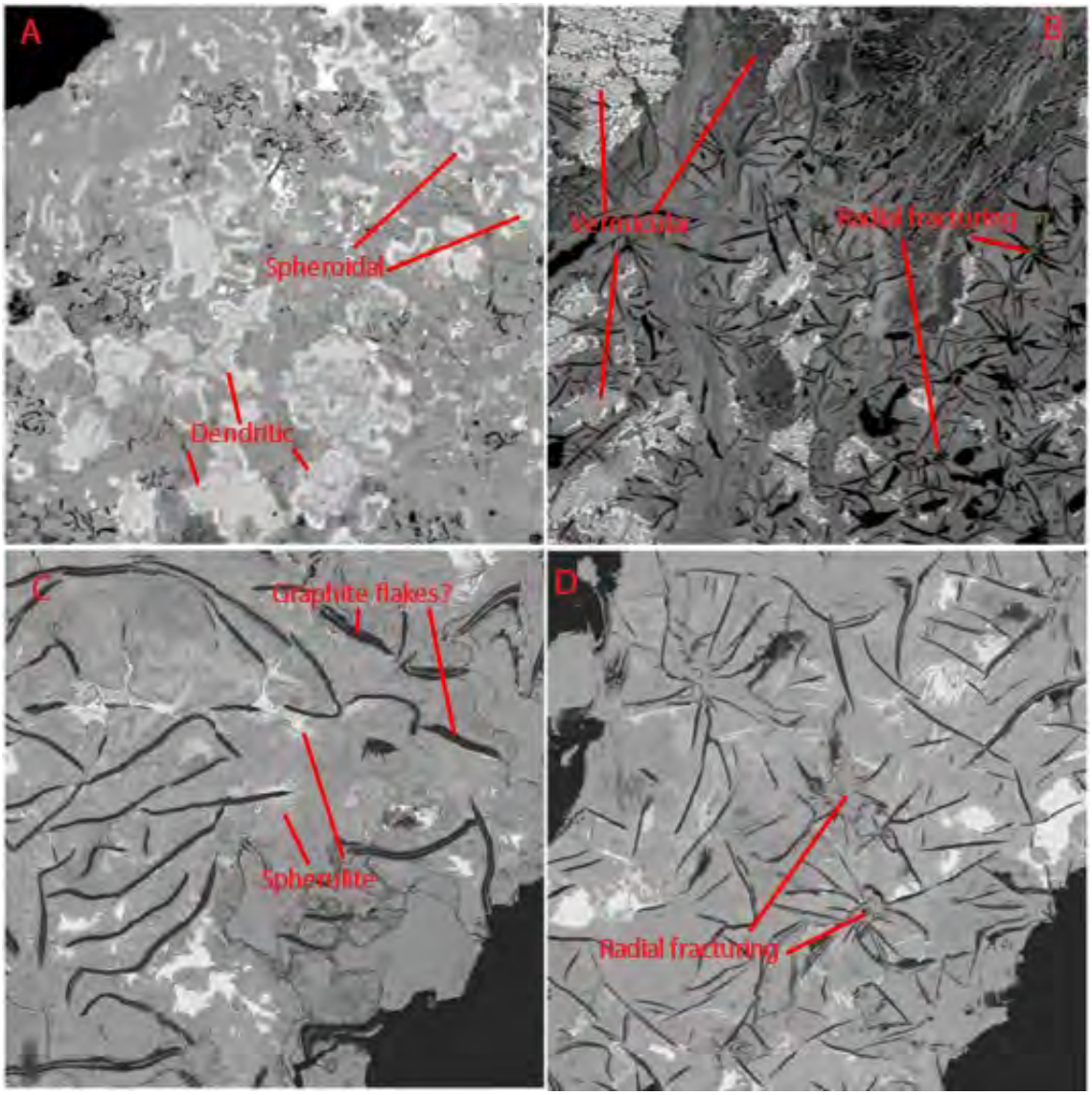


Figure 5: *Examples of textures observed in the BSE images of the cannon balls. A: Sample 5852 (group C in division 1), field of view 1.75 mm. B: Sample 5891 (group B in division 1), field of view 2.2 mm. C: Sample 5855 (group B in division 1), field of view 0.5 mm. D: Sample 5890 (group B in division 1), field of view 0.5 mm.*

C: 1*063; 5825; 5826; 5831; 5833; 5840; 5844; 5845; 5851; 5852; 5855; 5867; 5868; 5870epoxy; 5877; 5890; 5891; 5894; 5905; 5911; 5923; 5930*:
These samples show clear melting and quenching textures including spherulites/spheroidal textures, dendritic textures and radial fracturing (Figure 5). Furthermore, the samples contain no silicate minerals and are very iron-rich leading to the conclusion that they

have been melted. In addition, sample 5923, among others, shows a variation in iron oxide/hydroxide content from the edges and towards the center of the sample which corresponds very well with this sample being melted and subsequently cooled. Black lamella occurring in many of these samples could be graphite flakes, which are common constituents in cast iron (Figure 5).

D: *5837; 5846; 5857; 5870; 5871; 5893; 5898; 5899; 5904; 5910; 5934*:
Samples containing high amounts of pure iron that is very uniform with little to no additional textural information.

Division 2: samples grouped by bulk composition from SEM

At least three distinct cannon ball types appear to be present based on the mineral phase images: (**A**) cannon balls that include a substantial amount of phosphoric chemical phases; (**B** and **D**) cannon balls that are almost exclusively composed of iron (ore) and essentially no other constituents, and (**C**) cannon balls that are composed by various "impurity" constituents (compared to the pure iron cannon balls) and that in some cases resemble slag material.

In this division into subgroups, samples are distinguished mainly by their bulk composition as determined in area % by AQM (Fig. 6 and Appendix C). Note that the metals e.g., "Zinc" means that the phase detected contains at least 5 % Zn. Most of the material can still be iron or an iron-oxide/hydroxide, e.g., 95 % FeOx + 5 % Zinc. It was possible to make three subgroups based on this criterion. Results for the AQM analyses are given below.

A) Samples with more than 50 area% pure iron
1063; 5825; 5831; 5833; 5837; 5846; 5857; 5870; 5871; 5893; 5898; 5899; 5904; 5905; 5910; 5911; 5913; 5934:
The above samples (sorted by descending iron content) all contain more than 50% pure iron and up to a maximum of 88% pure iron in sample 5893. Some samples (e.g., 5905 and 5825) also contain phosphides. Some samples, 5934 and 5899, contain minor amounts of other metals (e.g., zinc) within the pure iron.

B) Samples with less than 50 area% pure iron
5826; 5840; 5844; 5845; 5847; 5851; 5851; 5855; 5867; 5877; 5890; 5891; 5894; 5903; 5923:
Samples 5826,5844,5891,5894,5923,5851,5890,5855 and 5877 contain none to small amounts of other phases than pure iron and iron oxides/hydroxides (FeOx) with varying amount of Fe and O. The remaining samples in this group contain a significant number of phosphides (e.g., 5867) and silicate mineral phases.

C) Samples with no pure iron (only iron oxides)
5843; 5852; 5868; 5870epoxy; 5872; 5895; 5897; 5930; 5933:

The third group of samples contains no pure iron in their bulk composition but do have high amounts of iron oxides/hydroxides. This group does in general also contain more silicate phases than groups A and B. Sample 5868 is very diverse in its composition and contains both sulphides, phosphides, silicates, FeOx and some metals.

3.1.1. Remarks to the SEM results

Note that sample 5870 was analysed twice, once on material derived from the outer part of the cannon ball (i.e., the “5870epoxy”) and once from drilled out material from within the cannon ball (i.e., the “5870”).

Although they are from the same sample, these two samples did not show the same criteria, neither in terms of texture, nor in terms of composition. Consequently, they were allocated to different groups. This demonstrates that significant differences exist even between sample pieces collected from the same sample; here from the outer crust of the sample material and from material drilled from within the cannon ball sample, respectively. The drilled sample material from within the cannon balls is less oxidized/rusty, but also shows less melting and quenching textures. It is thus likely that the largest variation in texture is observed at the outer rim of the cannon balls. This shows that comparison between the drilled sample material and pieces from the outer parts of the cannon balls can appear very different. This introduces an additional parameter increasing the uncertainty of the results, and it can in fact be questioned if it is reasonable to directly compare data that is obtained from the cannon balls in too differing ways or that originate from different parts of the cannon balls.

Future sampling of similar cannon ball materials should therefore be performed systematically and with great caution and must include the reporting from where the material is sampled from on the cannon balls, comparable to how it is listed in Appendix A

The samples 5867, 5868, 5870, 5897, 5903, and 5913 are examples of cannon balls that show a very large textural variation within the analysed area. The same may apply more generally to several of the cannon ball samples, i.e., they are very inhomogeneous in composition, even when looking only at the outermost layer of the cannon ball. Compositions should therefore be cautiously compared, rather to be taken as a list of included phases with an absolute number representing the entire composition of the cannon ball.

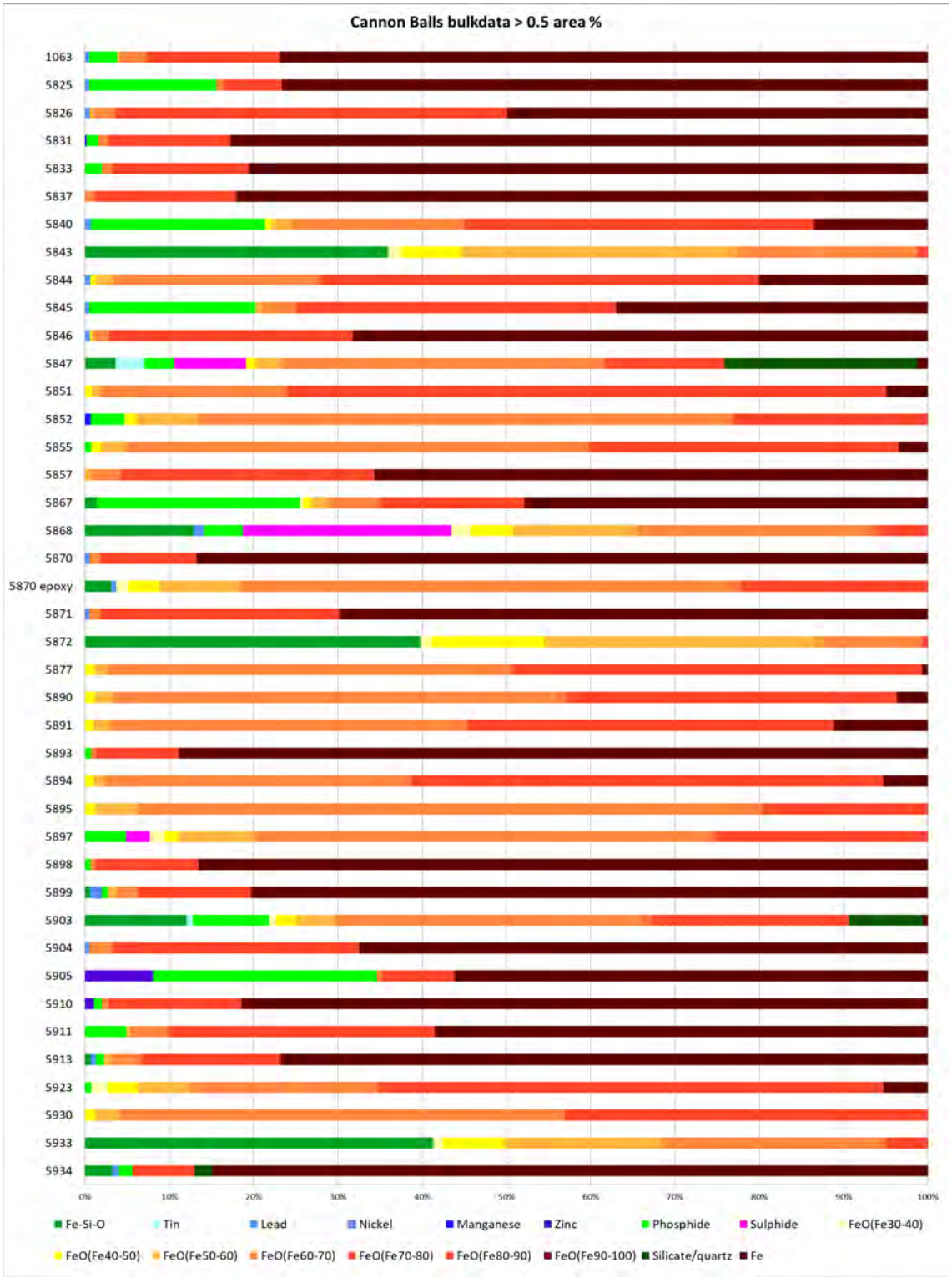


Figure 6: *Stacked bar chart with all the 41 cannon ball samples measured based on their bulk composition (normalised to 100% for phases above 0.5 area%). The colour codes correspond to those used on the mineral maps in Appendix B. The legend is explained under the Division 2 subgrouping in section 3.1.*

3.2. Results based on laser ablation ICP-MS analysis

The **LA-ICPMS analyses** focused on the *iron-rich* chemical phases in the sample material, with emphasis on the s Fe70-100 phases that consist of 70 to 100 % iron determined by AQM. The reason for selecting this chemical phase range was their omnipresence, which provided a good basis for comparison between the cannon balls, thus giving the best conditions to differentiate between them. The results are reported in Appendix E.

Three criteria were to be achieved for the chemical phases to be applicable for the aim of the study, viz. (1) the chemical phases used should preferably occur in all the cannon balls, (2) they should be sufficiently abundant in all cannon balls, and (3) the phases should be big enough and relatively fresh enough to be analysed by the LA-ICPMS system. In all samples, these criteria were fulfilled by the iron-rich phases with >50-60 % pure iron. Amongst those, phases in the Fe70-100 chemical range were assessed to be the most reliable targets for the analyses, presumably producing the most robust results. In addition to the Fe70-100 analyses, a few analyses of other phases occurring in the sample material, like phosphor-rich phases, were analysed, but no emphasis was put on the interpretation of these phases as they appeared in a relatively few samples.

The 30 elements selected for the LA-ICPMS analyses included the metals ***Sc, Ti, V, Cr, Mn, Fe, Co, Cu, Zn, Mo, Sn, Sb, Hf, W, Hg, Pb*** and the rare earth elements (***REE***) that include ***La, Ce, Pr, Nd, Sm, Eu, Cd, Tb, Dy, Ho, Er, Tm, Yb, Lu***. In particular, the transition metals were anticipated to give usable results for the distinction between the cannon balls. The REE were included because they are frequently used for provenance studies in geological investigations. Hg was included to monitor the Hg content of the cannon balls to avoid pollution of the instrumentation.

3.2.1. Chemical variations

In general, the LA-ICPMS analyses of the Fe-rich phases show that the elements ***V, Mn, Co, Cu, Zn, Mo*** and ***W*** carry the most prosperous potential regarding the distinction between the individual cannon balls, whereas the elements Sc, Ti, Cr, and the REE appear to be less useful. In certain samples the elements Sn, Sb and Pb indicate that they might be used for distinguishing between at least some of the cannon balls, however they behave somewhat erratic and appear to be less useful for the general differentiation. Based on the elemental data alone, the cannon balls can be separated into at least 3 groups, which generally follow the textural division 1 of the SEM analyses.

The resulting product of the “direct” and/or “bloomery” method for partially smelting iron ores (e.g., Blakelock et al. 2009; Buchwald 2005) produces a mixed range of textures and various chemical compositions. Major elements were not analysed with the ICP-MS in this study, so trace elemental compositions were calculated based on an assumed iron abundance of 70 wt% Fe for all cannon balls. For all samples, rare earth element (REE) concentrations were too low, mostly below the limits of detection for the mass

spectrometer. Thus, the REE are not included in the below description or in the statistical treatment of the data.

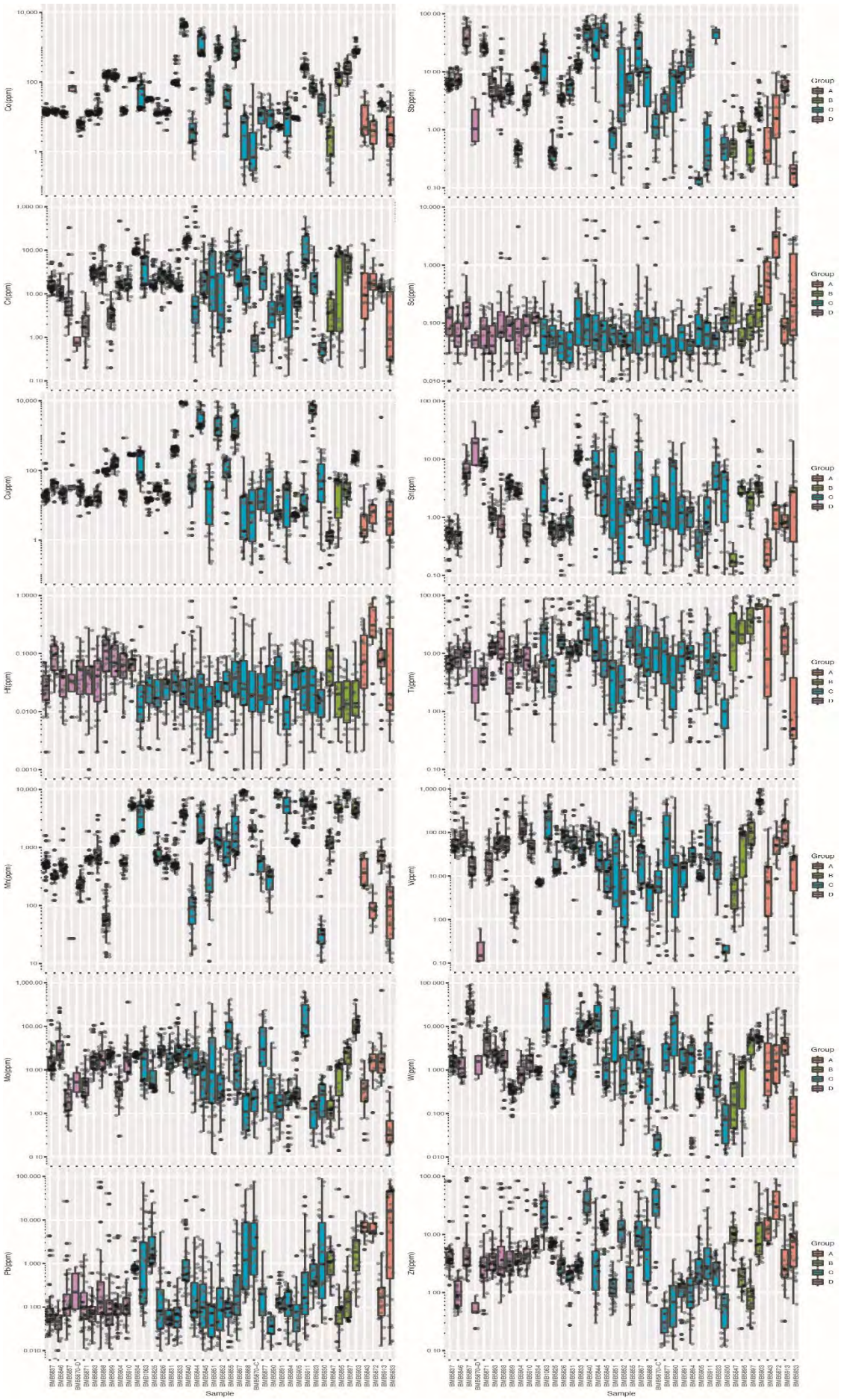
3.2.2. Trace element variations

The LA-ICPMS analyses predominately included the iron-rich phases, and the plots presented here do not include any other chemical phases. We realized fairly early that the chemical data produced from the cannon ball samples in general followed a comparable pattern as for the Division 1 of the SEM analyses (i.e., the separation based on the textural variations). Thus, we have chosen to keep this division in the below description of the cannon balls' chemical characteristics.

Figure 7 show boxplots summarising of all the elements considered here as useful discriminators, viz. Sc, Ti, V, Cr, Mn, Co, Cu, Zn, Mo, Sn, Sb, Hf, W and Pb. It is noticeable that ***Group A*** (samples 5843, 5872, 5913 and 5933) does not show a great variation in Co, Cu, and Pb. ***Group B*** (samples 5847, 5895, 5897 and 5903) shows a great variation in Ti, whereas ***Group C*** (samples 1063, 5825, 5826,5831,5833, 5840, 5844,5845, 5851, 5852,5855, 5867, 5868, 5870epoxy, 5877, 5890, 5891, 5894, 5905, 5911, 5923, 5930) has a large variation in Mo, and ***Group D*** (5837, 5846, 5857, 5870, 5871, 5893, 5898, 5899, 5904, 5910, 5934) shows large variation in Sb. All samples from group A, B and D show nearly constant concentrations of Hf, Sc and Mo. When looking at the some of the element ratios (e.g., Fig. 8A), it is observed that some samples of groups B and C contains an order of magnitude less and some samples of group A an order of magnitude more of the Zn/(Cu+Co) ratio than group D (i.e., the samples containing a high amount of pure iron). Furthermore, the ratio Co/Cu approximates the unity for Group D, despite the variation for the remaining groups (A, B, C; Fig. 8B). The group A can be clearly distinguished using e.g., the ratios Sc/Mn and Pb/Cu (Fig. 8C and D), whereas the use of W in relation to any other elements (e.g., the W/Ti in Fig. 8E) appear to be less applicable for the discrimination between the cannon balls.

Here, it should be noted that although we have investigated many ratios, we emphasized on those ratios that we assume would provide the most relevant information for the aim of this study. However, for the time allocated we were not able to perform a deeper analysis including all possible ratio constellations that potentially could give additional or supporting results, and which could ultimately provide a more thorough interpretation of the chemical data set produced. Thus, although single elements can be allocated to two or more groups, it is the joined results that we have used to interpretate to where a particular sample should be allocated.

Figure 7 (on next page): *Box and whisker diagrams for the cannon ball samples, showing the abundance spreading (coloured boxes) and the median values with associated uncertainties (vertical lines) for each sample measured by the LA-ICPMS. The differentiation into separate groups is based on the SEM Division 1 described in section 3.1.*


Co(ppm)
Cr(ppm)
Cu(ppm)
Hf(ppm)
Mn(ppm)
Mo(ppm)
Pb(ppm)
Sb(ppm)
Sc(ppm)
Sn(ppm)
Ti(ppm)
V(ppm)
W(ppm)
Zn(ppm)
Group
A
B
C
D
Sample

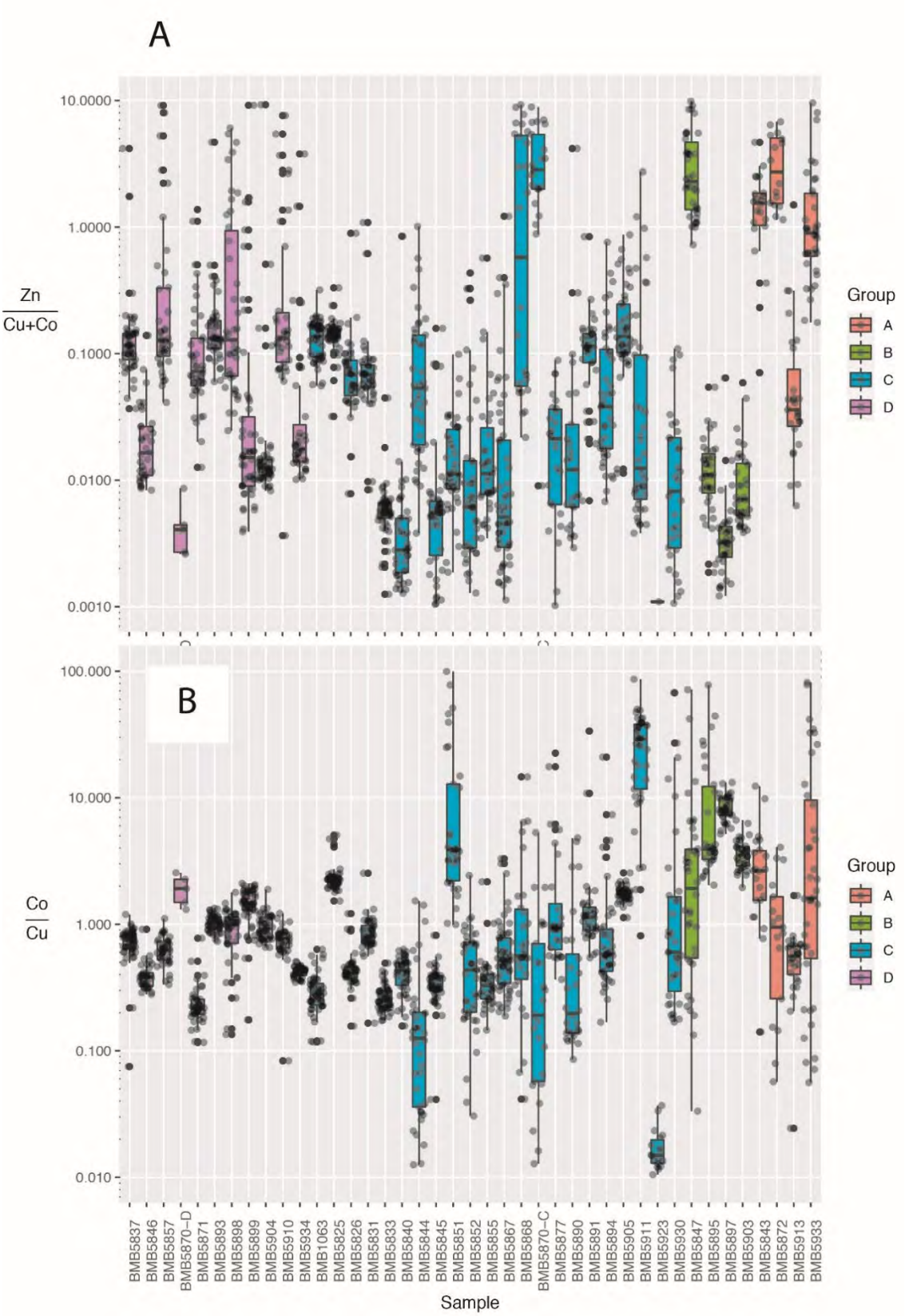
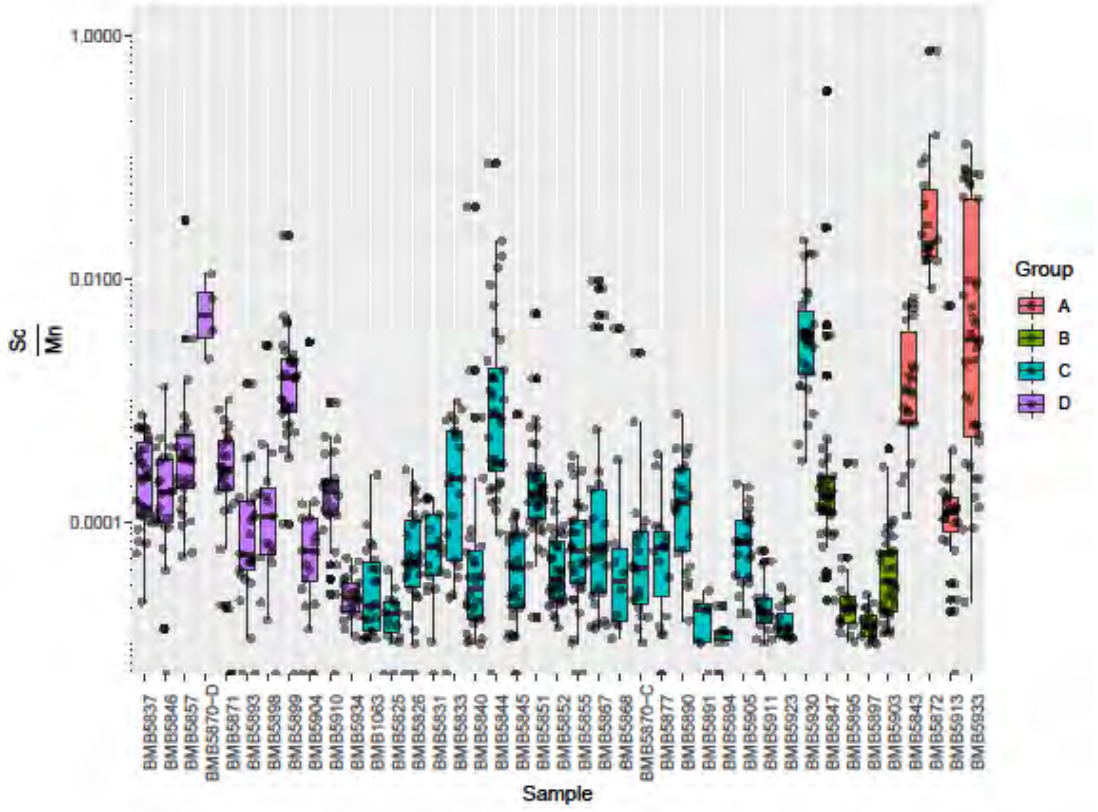
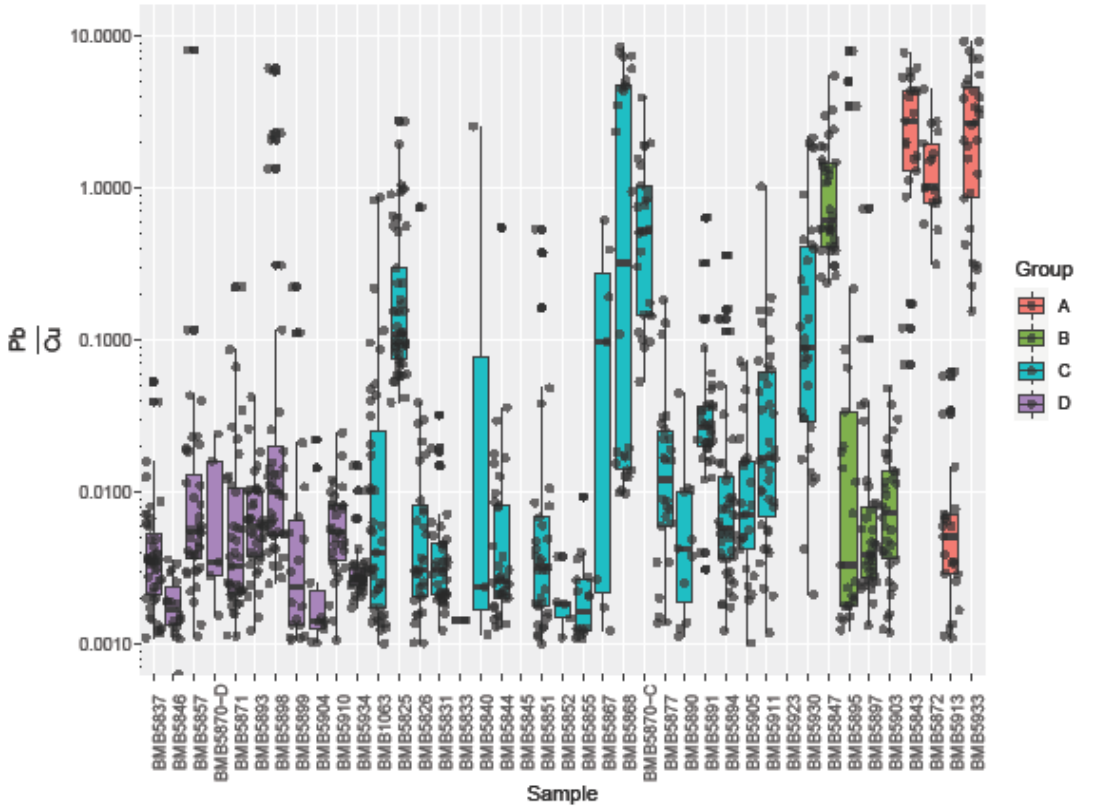


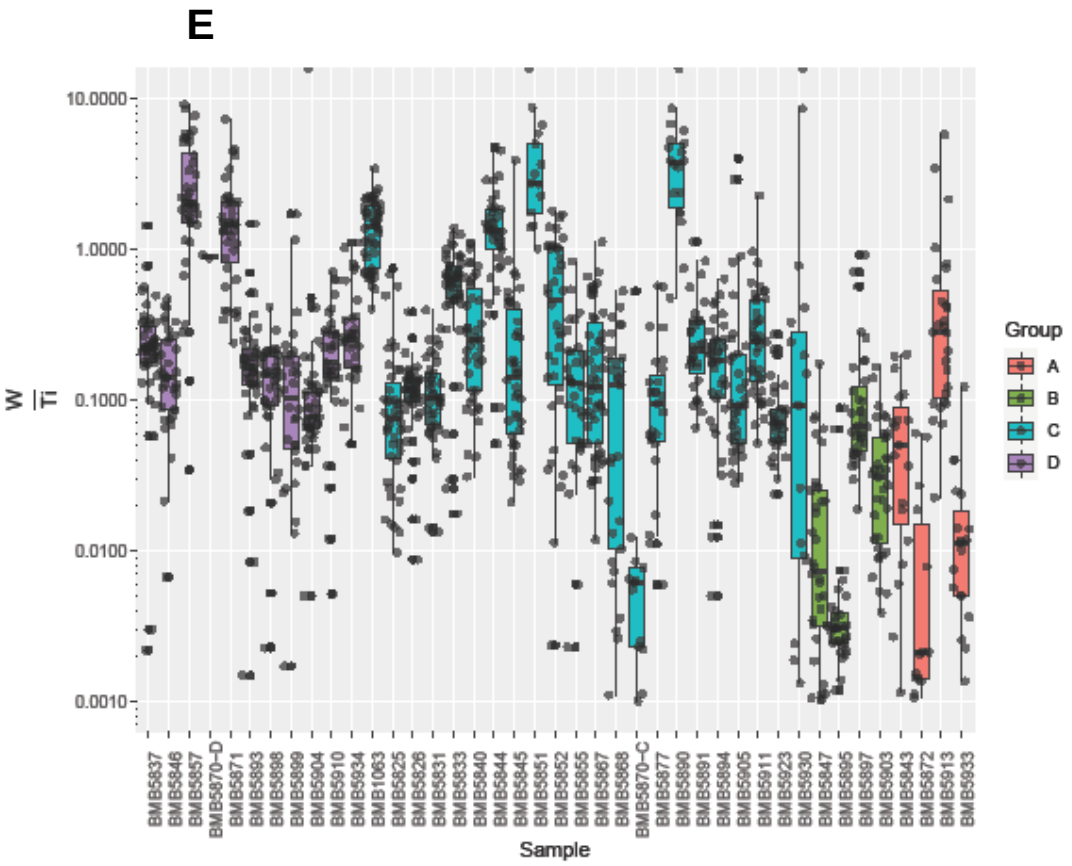
Figure 8 (p. 20-22): *Box and whisker plots for the cannon ball samples expressed as sample ratios between elements.* ***A****: Zn/Cu+Co ratio.* ***B****: Co/Cu ratio.* ***C****: Sc/Mn ratio.* ***D****: Pb/Cu ratio.* ***E****: W/Ti ratio. Further descriptions are provided in the text. Note that some samples of each of the textural division have similar ratios but have an unlike spreading of the individual data points.*

C


1.0000
0.0100
0.0001
Sc | Mn
Group
A
B
C
D
BMB5837
BMB5846
BMB5857
BMB5870–D
BMB5871
BMB5893
BMB5898
BMB5899
BMB5904
BMB5910
BMB5934
BMB1063
BMB5825
BMB5826
BMB5831
BMB5833
BMB5840
BMB5844
BMB5845
BMB5851
BMB5852
BMB5855
BMB5867
BMB5868
BMB5870–C
BMB5877
BMB5890
BMB5891
BMB5894
BMB5905
BMB5911
BMB5923
BMB5930
BMB5847
BMB5895
BMB5897
BMB5903
BMB5843
BMB5872
BMB5913
BMB5933
Sample

D


10.0000
1.0000
0.1000
0.0100
0.0010
Pb | Al
Group
A
B
C
D
BMB5837
BMB5846
BMB5857
BMB5870–D
BMB5871
BMB5893
BMB5898
BMB5899
BMB5904
BMB5910
BMB5934
BMB1063
BMB5825
BMB5826
BMB5831
BMB5833
BMB5840
BMB5844
BMB5845
BMB5851
BMB5852
BMB5855
BMB5867
BMB5868
BMB5870–C
BMB5877
BMB5890
BMB5891
BMB5894
BMB5905
BMB5911
BMB5923
BMB5930
BMB5847
BMB5895
BMB5897
BMB5903
BMB5843
BMB5872
BMB5913
BMB5933
Sample



When plotting concentrations in bivariate diagrams, it shows noticeable positive element ratio correlations. For instance, the Pb/(Co+Cu) against W/(Co+Cu) on Fig. 9 chiefly show a positive correlation as observed in the semimajor axis of the ellipse containing the 95% of data (ca. 2 sigma in the confidence interval). Moreover, the density plots show the distribution of the numerical values in the data, in which groups A, C and D have W/(Co+Cu) values close to 0.1 whereas group B has values close to 0.01, i.e., an order of magnitude less. For the Pb/(Co+Cu), it is observed in the density plots that modal values range from 0.01 to 0.02 for Groups C and D, for group A modal values of ca. 1.00, and a bimodal distribution for Group B.

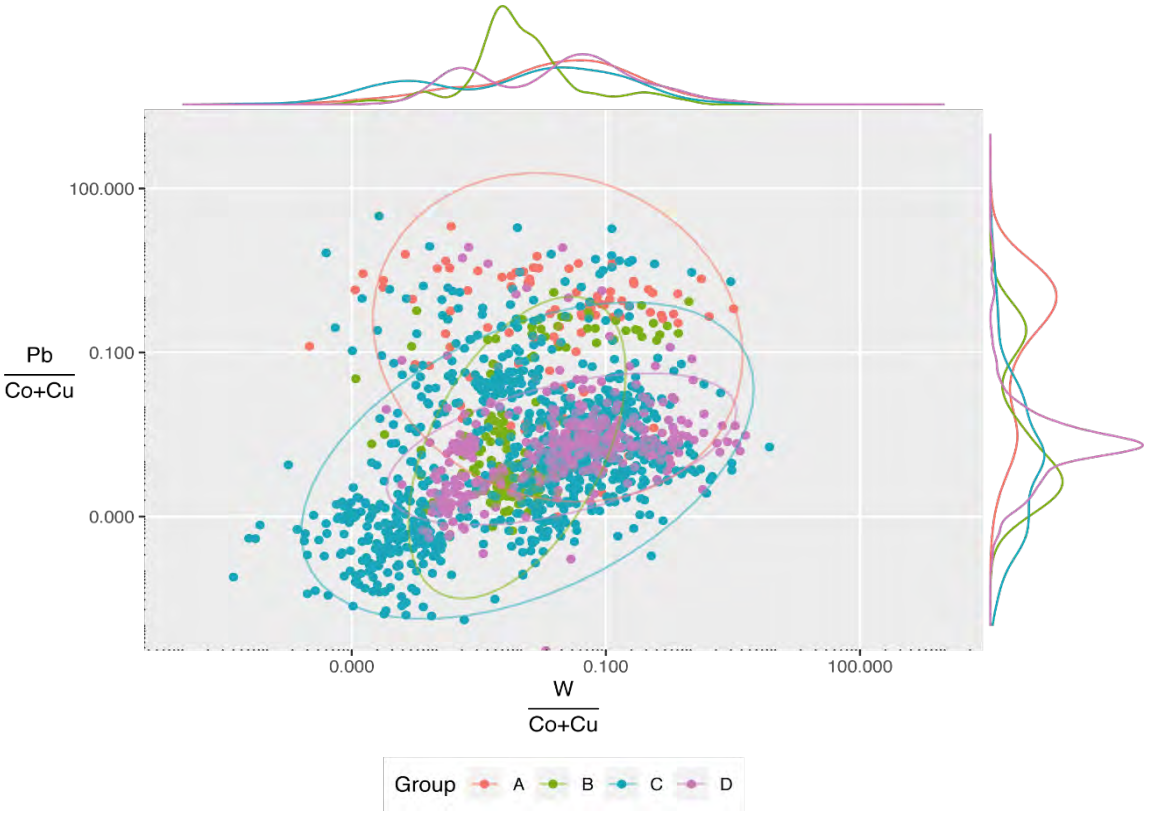


Figure 9: *Bivariate diagram of the ratios for Pb/(Co+Cu) against W/(Co+Cu), showing a major positive correlating between and within the samples in particular for group C and D samples. Density plots show the distribution of individual data points within each sample. Group A appears different compared to the other three groups.*

3.2.3. Principal Component Analysis (PCA)

As described above, the produced set of data is fairly complex, and thus challenging for a possible explanation of the chemical variability of the cannon balls. An attempt to deal with the challenge of possible interpretations for the chemical variations linked to the textures, a method for reducing the dimensions of the chemical data was selected by looking at principal components though preserving some statistical information (e.g., variability) as much as possible. Mathematically, variables maximising the variance of seemingly uncorrelated components can be assessed by linear transformations. These new linear variables (or principal components) are reduced to solving an eigenvector problem (e.g., Jolliffe and Cadima, 2016). In this exercise, the data set was divided into p-numerical variables (i.e., variations in the analysed chemical elements) for each of the n-number of samples. All vectors are then defined in the p-x-n matrix, seeking for the linear combination with maximum variance.

When performing principal component analysis (PCA), the largest eigenvalue of the given component is of great interest since the eigenvalue can be associated to the variances of the linear combinations (see Jolliffe and Cadima, 2016 for details about the mathematics). We thus selected major metals that show a consistent concentration

above the limits of detection for the mass spectrometer, viz. Sc, Ti, V, Cr, Mn, Co, Cu, Zn, Mo, Sn, Sb, Hf, W and Pb, as described above. All elements were calculated to ppm level.

Amongst these 14 elements, concentrations of Sc and Hf were generally constant. Thus, we expect lesser variations in the chemical exchange in these two elements for all cannon balls. However, it was opted to use all elemental concentrations for producing two dimensional components, namely PC1 and PC2, explaining 57.2% of the total variance. As shown on the bivariate diagram of Fig. 10, the standardised PC1 explains 45.29% of the variance whilst the PC2 only explains 11.91% variance in the set of data. This is most probably due to the presence of outliers, which increase the uncertainty in the linear transformation. Although it is observed variable degrees in the covariances, two main groups can be observed, namely one where Co, Cu and Mn suggest highly correlated variables, and one including Sn, Cr, Zn, V, W, Hf, Mo and Ti, with less prominent, one-dimensional correlated variables.

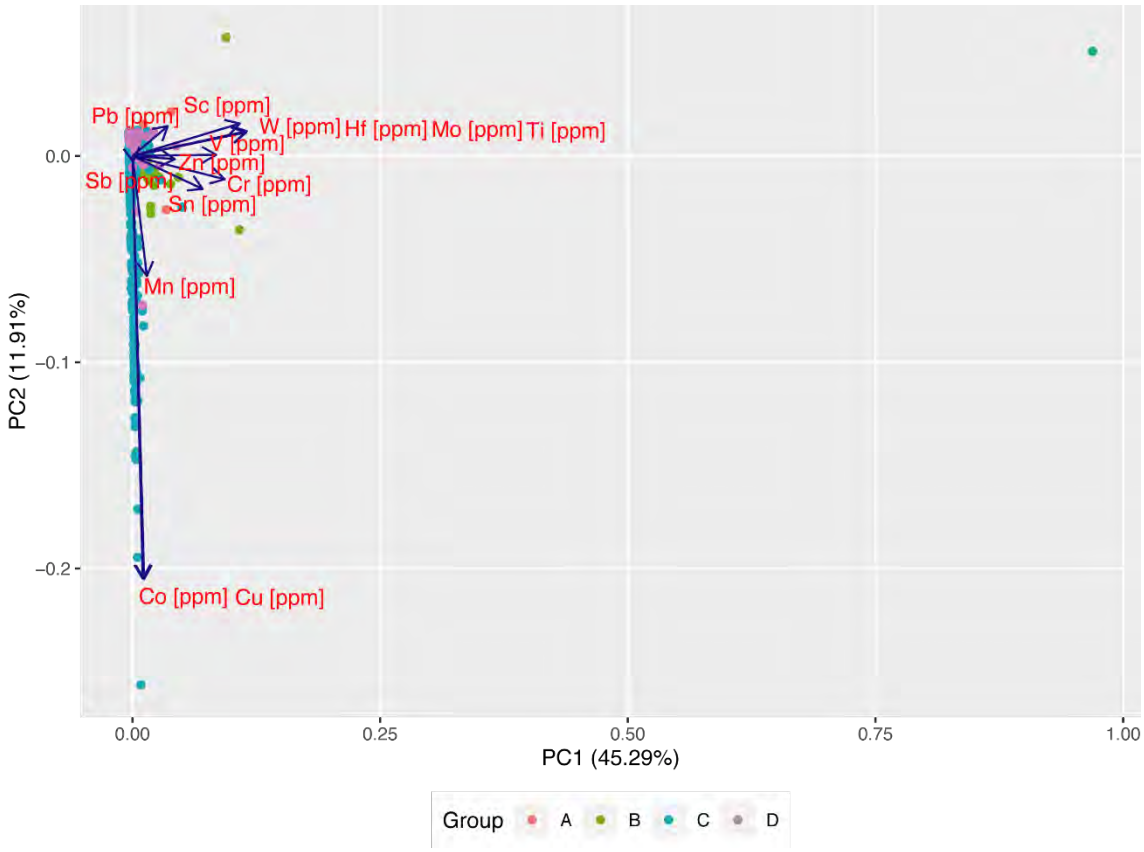


Figure 10: *Bivariate diagram with the result of our principal component analysis (PCA). It includes the first two principal components (PC1 and PC2) and shows the variables in form of vectors and sample points for each of the cannon ball samples. The samples proximity to a given vector may indicate how influenced that sample is by the given vector. For instance, samples of group C are very much influenced by the variables Co and Cu, whereas samples of group B are influenced by Sn. The PCA analysis supports our observations from the variation diagrams in Fig. 7, 8 and 9.*

4. Concluding remarks

Based on the analyses carried out by SEM and LA-ICPMS, the cannon balls can optimally be divided into 4 separate groups, whereof at least 3 groups show distinctly different textural and chemical features. This division, however, must be taken as indicative only based on the somewhat limited data material received, which furthermore demonstrated a large compositional and textural variation, and moreover, for some samples were in a condition difficult for carrying out microchemical analyses.

Nevertheless, although the results in parts only allow for a somewhat uncertain interpretation, this study demonstrates that analysis using the technical constellation of AQM + BSE imaging by SEM combined with microchemistry analysis of the most Fe-rich phases by LA-ICPMS on sample material from historic cannon balls made predominantly of iron, can provide sufficiently reliable textural, compositional, and microchemical results that can be used for discriminating between single cannon ball materials. As the textural and microchemical variation within the cannon balls are formed by two at least semi-independent processes, i.e., the smelting and casting process vs. the source of the iron ore, respectively, the division into the four different groups with their own history might proof to be rather robust. The threshold of when such analyses can or cannot be applied is, however, not possible to assess based on the sample material employed in this study.

The aim of the study to fingerprint the cannon ball sample material in order to allocate them to distinct ore locations or rock domains within Scandinavia or the German countries have not been undertaken, mostly due to a significant lack of background information to where our analyses could be compared. However, together with a more profound background study of potential provenance locations in terms of possible mining and manufacturing sites for the cannon balls, this study constitutes a plinth for further investigations to ultimately be able to fingerprint the cannon balls' provenance geographically as well as geologically. To get a sufficiently robust analytical background data material it might be beneficial to supplement the data from this study with more analyses of the same kind and/or additional isotopic data from analytical facilities that can offer analyses of a higher quality and resolution.

This report provides some suggestions how the data can be interpretated and how to work further on with the data material produced in this study. It was not the scope of this work to provide in-depth results, but merely to test if the employed techniques can be used for separating the cannon ball samples into distinct groups, and for making a plinth for future analyses helpful for the differentiation and in turn for future provenance investigations of the cannon balls. Seen in this view, we think that this report constitutes a reasonably solid platform for further investigations of iron-rich cannon ball materials.

5. Recommendations for future work

With the above results as benchmark, we have below listed a few recommendations for further investigations that are considered to benefit the study of the cannon balls in terms of type differentiation and provenance:

- **Bayesian models and Principal Component Analysis (PCA)**
  This study provides several methods how to compare and group the samples (e.g., texture, composition, LA-ICPMS trace element data), including some first PCA analysis. It is, however, beyond the time allocated to this study to deliver a more profound PCA analysis. To obtain a more complete grouping, a multi-variate statistics analysis could thus be performed. Statistical analysis using especially Bayesian models (e.g., Longman et al. 2018) would presumably be very beneficial for the isotope (ICPMS) analyses. Through this kind of analysis, it might be possible to resolve plausible sources of iron ore and perhaps even sequential mixing of the source material used in the cannon balls. A clear division and grouping of sources would allow resolving the principal components. These constraints on the parametrisation of the variances and covariances in the chemical data could advocate a better characterization of the raw materials from which the cannon balls are manufactured.

- **Profound background study for fingerprinting the provenance/origin**
  For the study of provenance/origin of ore locations, a more substantial literature study is required. During this work we suggested to contact the geological surveys of Norway (NGU) and Sweden (SGU) for background and chemical data on Fe-ores and their locations (mines) in the time period of question. Similar, for institutions within the historic/archeological field for data material to compare to the data produced herein. Without this data material there is no baseline data material to compare the analyses to, and it is at best very difficult (if not impossible) to determine any provenance location of the Fe-ore material from which the cannon balls were produced.

- **Isotope fingerprinting of the cannon balls**
  Despite the efforts of elucidating the geochemistry of the cannon balls, data still limit the identification of the iron source. It is well known that lead (Pb) isotopes provide unique insights on the origin of a geological sample, ranging from tracing the sources and subsequential contribution from other sources by means of pollution and/or mixing. Naturally occurring Pb is composed of the isotopes ^{208}Pb (52%), ^{207}Pb (ca. 23%), ^{206}Pb (24%) and ^{204}Pb (1%). Whereas ^{208}Pb is the final radioactive decay product of ^{232}Th, ^{206}Pb the final product of ^{238}U, and ^{207}Pb the final product of ^{235}U through radioactive decay, the ^{204}Pb is a non-radiogenic isotope (i.e., not a product of radioactive decay). Combining radiogenic and non-radiogenic isotopes of the same element (e.g., μ-values of Pb) offers the option to investigate the natural geological sources of dissimilar materials and the rate of mixing processes that produced changes in the original isotopic composition of the source material. For this kind of provenance study characterizing the cannon balls' origin and affiliation to potential ore locations, analyses using instrumentation that offer a higher sensitivity and resolution is required. This can be a multi-collector ICPMS, ion probe (SIMS) or thermal ionization mass spectrometry (TIMS), or akin techniques.

6. Acknowledgements

Mojgan Alaei, Høgni Vesturklett and Carsten Guvad from GEUS are thanked for their hard work with the careful sample preparation and cleaning of the cannon ball materials.

7. Electronically appendices (supplementary files)

Appendix. A. Sample list and Analyses at GEUS
Appendix. B. Optical microscopy, BSE and AQM images
Appendix. C. AQM (SEM) results
Appendix. D. LA-ICPMS operating and data acquisition parameters
Appendix. E. LA-ICPMS results

8. References

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Appendix A - Sample material analysed at GEUS

Samples used:			GEUS PREPARATION AND ANALYSIS WORK							INFORMATION FROM THE MUSEUM				
Prep. #	Sample Name	Batch #	Mount type	Acquisition method	SEM (AQM and BSE)	LA-ICPMS analysis*	Optical images	Group	Comments	Fundort	Durchmesser	Kilogramm	Pfund Nürnberg	Kanonentyp
1	BMB 5847	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	B	2021_09_09	BRV, Unteroste bei Bremervörde	12.35	6.35	12,46 (14,94)	Viertelkartaune
2	BMB 5851	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	C	2021_09_09	Bevern, Feldmark, Herbert Kastel Nedderstenmoor 26	8.8	2.5	4,91 (5,88)	6-Pfünder, Viertelfeldschlange, Achtelkartaune
3	BMB 5852	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	C	2021_09_02	BRV, Stadtgebiet	7.4	1.2	2,36 (2,82)	2,5-, 3-Pfünder, (Schwedische 3-Pfünder)
4	BMB 5855	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	C	2021_09_14	BRV, Oste Baustelle(Anlage eines neuen Ostelauf mit Wehr und Schleuse und südöstlich der neuen Gerichtsherrenbrücke), (im Landratsamt)	11	4.8	9,42 (11,29)	10-Pfünder, Halbe Feldschlange
5	BMB 5872	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	A	2021_09_02	BRV, kleines Finkenmoor, Parzelle von A. Bachmann, steckte in Ortstein	11.3	5.15	10,11 (12,12)	12-Pfünder, Viertelkartaune
6	BMB 5890	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	C	2021_09_13	BRV, Neue Straße,vor der alten Apotheke (Neue Str. 24), Ausschachtung zur Kanalisation	8.4	2	3,93 (4,71)	5-Pfünder, Viertelfeldschlange
7	BMB 5891	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	C	2021_09_13	BRV, Neue Straße,vor der alten Apotheke (Neue Str. 24), Ausschachtung zur Kanalisation – zugeordnet	9.3	2.3	4,51 (5,41)	6-Pfünder, Viertelfeldschlange, Achtelkartaune
8	BMB 5894	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	C	2021_09_02	BRV, Fresenburgsmoor, gefunden beim Torfgraben von Klaus Wehrenberg an der Höhne (Waldstraße), auf seinem Moorgrundstück in der Nähe des Fresenburger Moordammes am „neuen Kanal“ etwa 0,70m tief im oberen Bleichmoostorf	7.8	1.7	3,34 (4)	3,5-, 4-Pfünder, Viertelfeldschlange
9	BMB 5903	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	B	2021_09_02	BRV, in der Buschmoorstr. Grundstück von Johann Busch (Alte Str. 58)	8.8	2.2	4,32 (5,18)	5-Pfünder, Viertelfeldschlange
10	BMB 5923	Case study	40 mm, single sample	Like in collection	Yes	Yes	Yes	C	2021_09_15	BRV, westlicher Burggraben, eingeliefert von Scheller, (August, Walkmühlenstraße 22)	14.6	6.9	13,54 (16,23)	15-Pfünder, Notschlange, (Ganze Feldschlange)?
11	BMB 5930	Case study	40 mm, single sample	Like in collection	Yes	Yes	Yes	C	2021_09_10	keine Angaben	7	1.8	3,53 (4,23)	4-Pfünder, Viertelfeldschlange
12	BMB1063	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_25	keine Angaben	15	12.2	23.95	Halbkartaune
13	BMB5825	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_25	BRV, Wesermünder Str. 34	8.3	2.05	4.02	5-/6-Pfünder (Viertelfeldschlange)
14	BMB5826	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_25	BRV, Neue Straße 34 o. 89	12.2	5.95	11.68	12-Pfünder, Viertelkartaune
15	BMB5831	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_25	BRV, Gartenstraße (32), by (Johann) Schlüter	7.5	1.4	2.75	3-Pfünder
16	BMB5833	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_26	BRV, from the river oste near Ostendorf	11.3	5.2	10.3	11-/12-Pfünder (Halbe Feldschlange)
17	BMB5837	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_08_26	BRV, Fresenburgsmoor, moorland from Heinrich Hauschild (Wesermünderstraße 36)	7.8	1.7	3.34	4-Pfünder (Viertelfeldschlange)
18	BMB5840	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_26	BRV, Großer Platz, Finder: Malermeister Hinrich Meyer, Großer Platz (18)	7	0.95	1.86	2-Pfünder
19	BMB 5843	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	A	2021_09_01	BRV, Schloss Vörde	11.5	5.4	10,6 (12,7)	Halbe Feldschlange, 12-Pfünder
20	BMB5844	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_26	BRV, Ernst-Bode-Straße, excavation for road construction	6.8	1.2	2.36	2,5-Pfünder
21	BMB5845	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_27	BRV, moat from the castle	7	1.2	2.36	2,5-Pfünder
22	BMB5846	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_08_27	BRV, Walkmühlenstraße 18	5	0.5	0.98	1-Pfünder (Falkonett)
23	BMB5857	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_08_31	BRV, Castle Vörde	19.4	27.3	53.58	Doppelkartaune?
24	BMB5867	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_31	BRV, Alte Straße, courtyard from Johann Siems, present from Johann Siems (Alte Straße 59)	6.7	0.95	1.9	2-Pfünder
25	BMB 5868	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	C	2021_09_01	BRV, Hafenstr., glühsingsche Haus (Bäckermeister und Gastwirt Johann Neue Straße 2) bei Ausschachtung für Kanalisation gef. (o. 14.04. Amtsallee), 06.08	9.9	3.25	6,37 (7,65)	7-Pfünder, Falkaune, Achtelkartaune
26	BMB5870epoxy	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_08_30	BRV, Fresenburgsmoor, moorland from Hinrich Aldag an der Höhne	9	2.55	5	6-Pfünder
-	BMB 5870	Case study	40 mm, single sample	Gathered material	Yes	-	Yes	C	-	BRV, Fresenburgsmoor, Grundstück von Hinrich Aldag (Waldstraße 113) an der Höhne	9	2.6	5,1 (6,12)	6-Pfünder, Viertelfeldschlange, Achtelkartaune
27	BMB5871	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_08_30	BRV, Fresenburgsmoor, found by (Hinrich) Grafelmann, (Wesermünder Straße 34)	10.9	4.65	9.13	10-Pfünder (Halbe Feldschlange)
28	BMB 5877	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	C	2021_09_14	keine Angaben	6.9	1.05	2,06 (2,47)	2,5-Pfünder, (Schwedische 3-Pfünder)
29	BMB5893	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_08_31	BRV, Fresenburgsmoor (nördlich vom Fresenburger Moordamm), finder Ernst Buck, Bei der Höhne	11	4.9	9.62	10-Pfünder (Halbe Feldschlange)
30	BMB 5895	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	B	2021_09_10	BRV, Fresenburgsmoor?	6.7	1	1,96 (2,35)	2,5-Pfünder, (Schwedische 3-Pfünder)
31	BMB 5897	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	B	2021_09_10	BRV, Hindenburgstr. 104/Neue Str., im alten Haus Bachmann?	7.3	1.25	2,45 (2,94)	3-Pfünder, (Schwedisches Regimentsstück)
32	BMB5898	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_08_31	BRV, Hindenburgstr. 104/Neue Str., in the old house of Bachmann	7.5	1.5	2.94	3-/3,5-Pfünder
33	BMB5899	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_08_30	BRV, Hindenburgstr. 104/Neue Str., in the old house of Bachmann	8.8	2.7	5.3	6-Pfünder
34	BMB5904	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_08_30	BRV, Amtsallee, Geschenk von Amtsgerichtrat Wilhelmi	13	7.65	15.01	16-Pfünder (Notschlange)
35	BMB5905	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_09_06	probably BRV, Großer Platz (Rosenbrocks Garten), from Frau Paulsen, BRV Großer Platz	11.6	5.4	10.6	11-/12-Pfünder (Halbe Feldschlange)
36	BMB5910	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	D	2021_09_06	BRV, Hafenstraße	7.3	1.4	2.75	3-Pfünder
37	BMB5911	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	C	2021_08_27	BRV, Hafenstraße	7.9	1.7	3.34	4-Pfünder (Viertelfeldschlange)
38	BMB5913	Batch 1	40 mm, dual sample	Drilled out material	Yes	Yes	Yes	A	2021_08_27	BRV, Neue Straße (27), by Hotel von Husen, finder: Eberhardt Weißer Alte Straße 19a	14.4	10.2	20.02	Halbkartaune? (Ganze Feldschlange)
39	BMB 5933	Case study	40 mm, single sample	Gathered material	Yes	Yes	Yes	A	2021_09_10	keine Angaben	19.9	28	54,96 (65,87)	Doppelkartaune?
40	BMB5934	Batch 1	40 mm, single sample	Drilled out material	Yes	Yes	Yes	D	2021_09_06	BRV, submitted by H. Meyer, BRV, Brunsburg	7.3	1.5	2.94	3-/3,5-Pfünder
40					41	40	41							

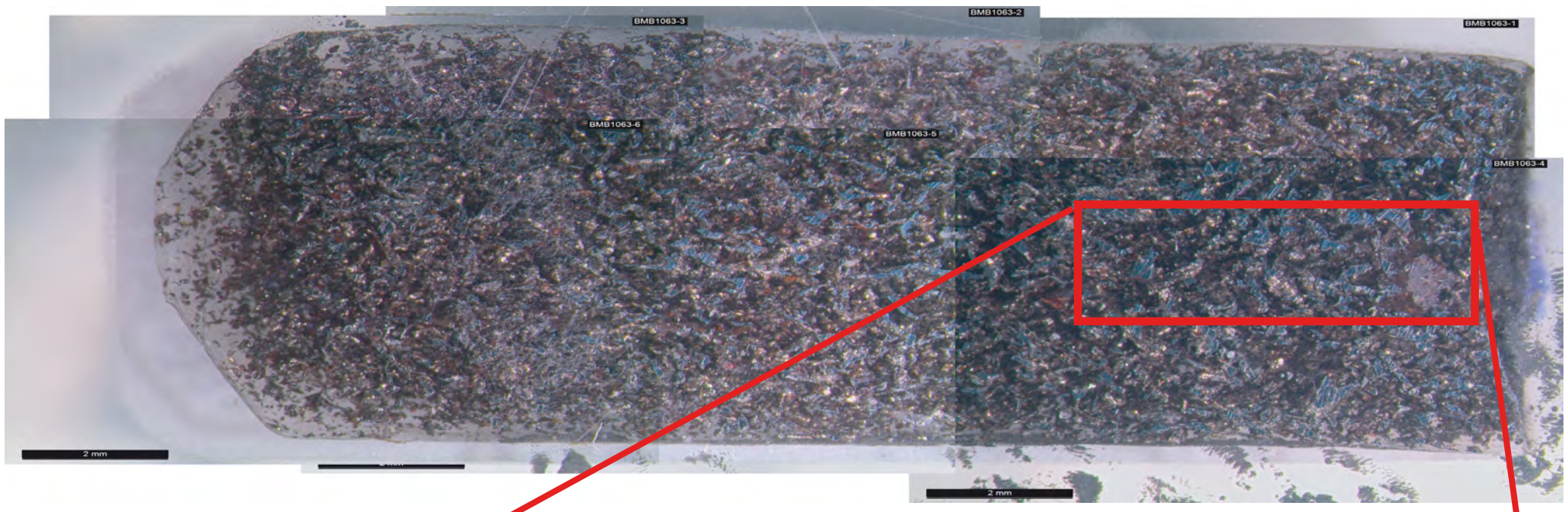
Samples not used:														
	BMB 5836	Case study	-		-	-								
	BMB 5841	Case study	-		-	-								
1	BMB 5847	Batch 2	-		see Prep # 1	see Prep # 1	see Prep # 1		*It is already done (see above)*					
	BMB 5853	Case study	-		-	-	-							
	BMB 5863	Case study	-		-	-	-							
	BMB 5864	Case study	-		-	-	-							
25	BMB 5868	Batch 2 + case study	-		see Prep # 25	see Prep # 25	see Prep # 25							
-	BMB 5869	Batch 2	NO		-	-	-		Too powderized material					
5	BMB 5872	Batch 2	-		see Prep # 5	see Prep # 5	see Prep # 5		*It is already done (see above)*					
	BMB 5873	Case study	-		-	-	-							
	BMB 5874	Case study	-		-	-	-							
	BMB 5875	Case study	-		-	-	-							
	BMB 5876	Case study	-		-	-	-							
	BMB 5878	Case study	-		-	-	-							
	BMB 5879	Case study	-		-	-	-							
	BMB 5881	Case study	-		-	-	-							
	BMB 5882	Case study	-		-	-	-							
	BMB 5883	Case study	-		-	-	-							
	BMB 5884	Case study	-		-	-	-							
	BMB 5886	Case study	-		-	-	-							
-	BMB5892	Batch 1	-	Drilled out material	-	-	-		Not enough material					
	BMB 5901	Case study	-		-	-	-							
	BMB 5902	Case study	-		-	-	-							
	BMB 5906	Case study	-		-	-	-							
	BMB 5907	Case study	-		-	-	-							
	BMB 5908	Case study	-		-	-	-							
	BMB 5909	Case study	-		-	-	-							
	BMB 5914	Batch 2 + case study	NO		-	-	-		too much rusty material					
	BMB 5915	Case study	-		-	-	-							
	BMB 5921	Case study	-		-	-	-							
10	BMB 5923	Batch 2	-		see Prep # 10	see Prep # 10	see Prep # 10		*It is already done (see above)*					

*** BMB named CB ("CannonBalls") in the laser ablation ICPMS analyses!**

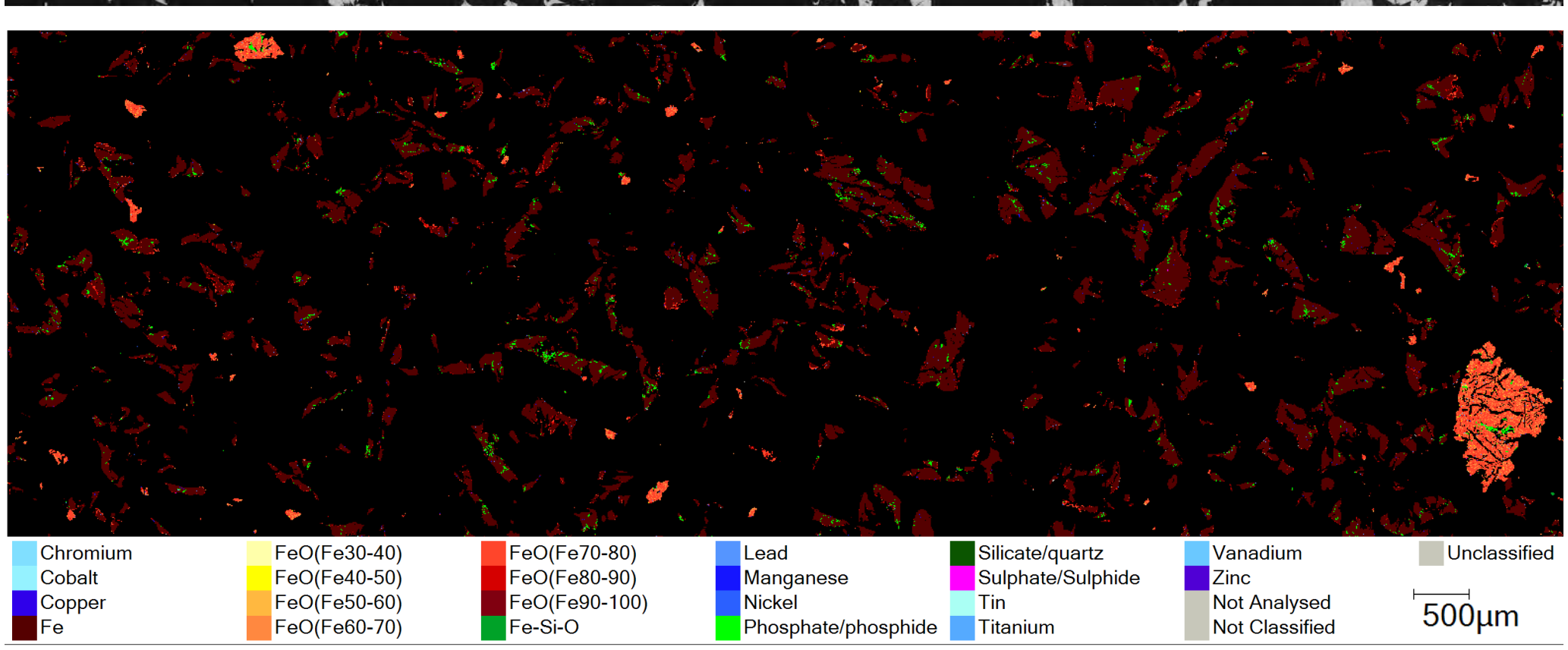
Appendix B – Optical microscopy, BSE and AQM images

BMB1063

Optical microscopy image



BSE image

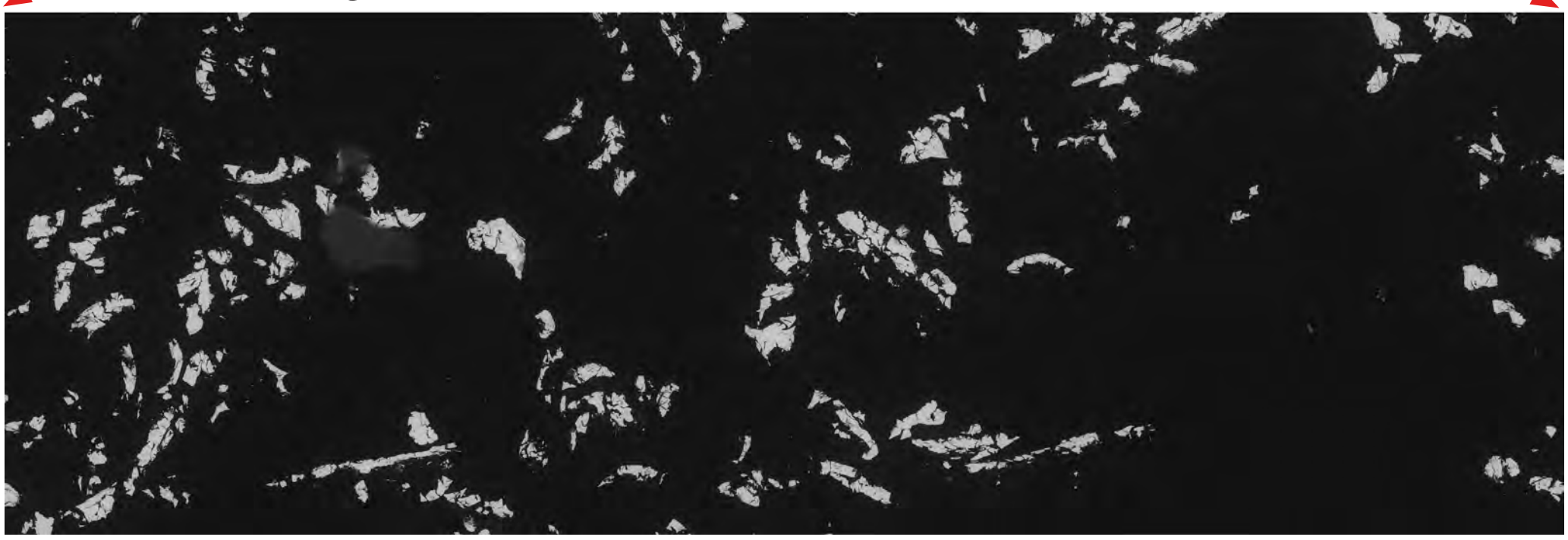


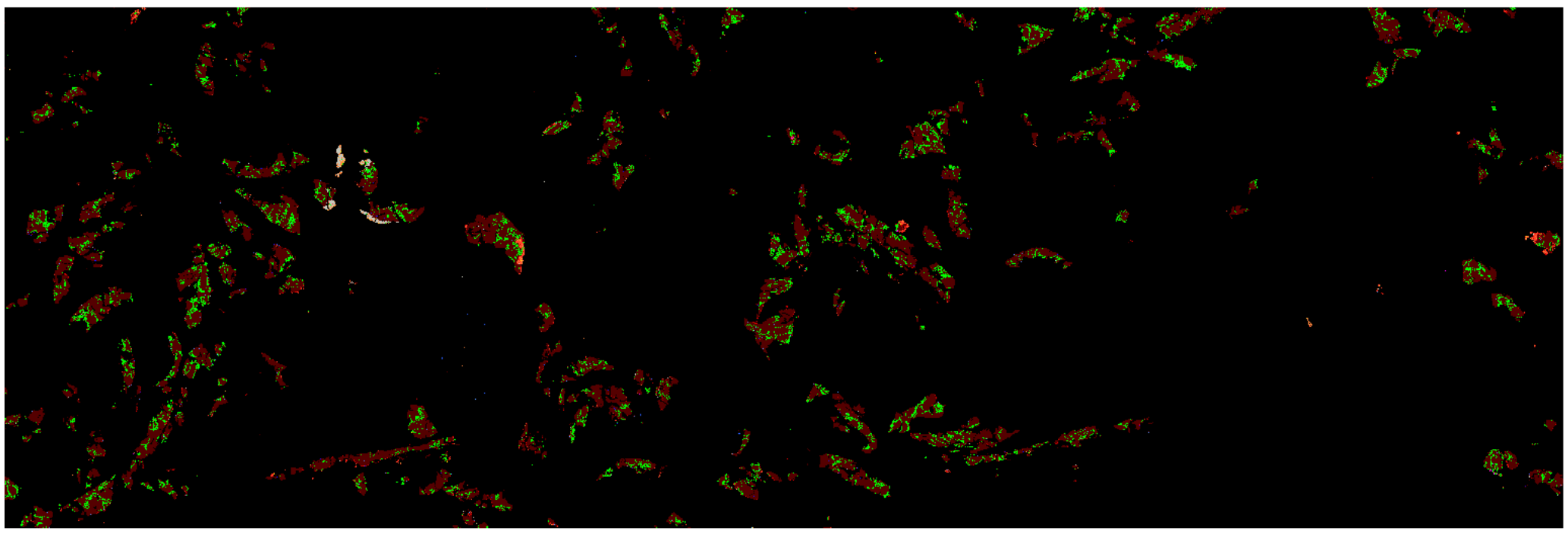
Mineral phases image

BMB5825

Optical microscopy image

BSE image



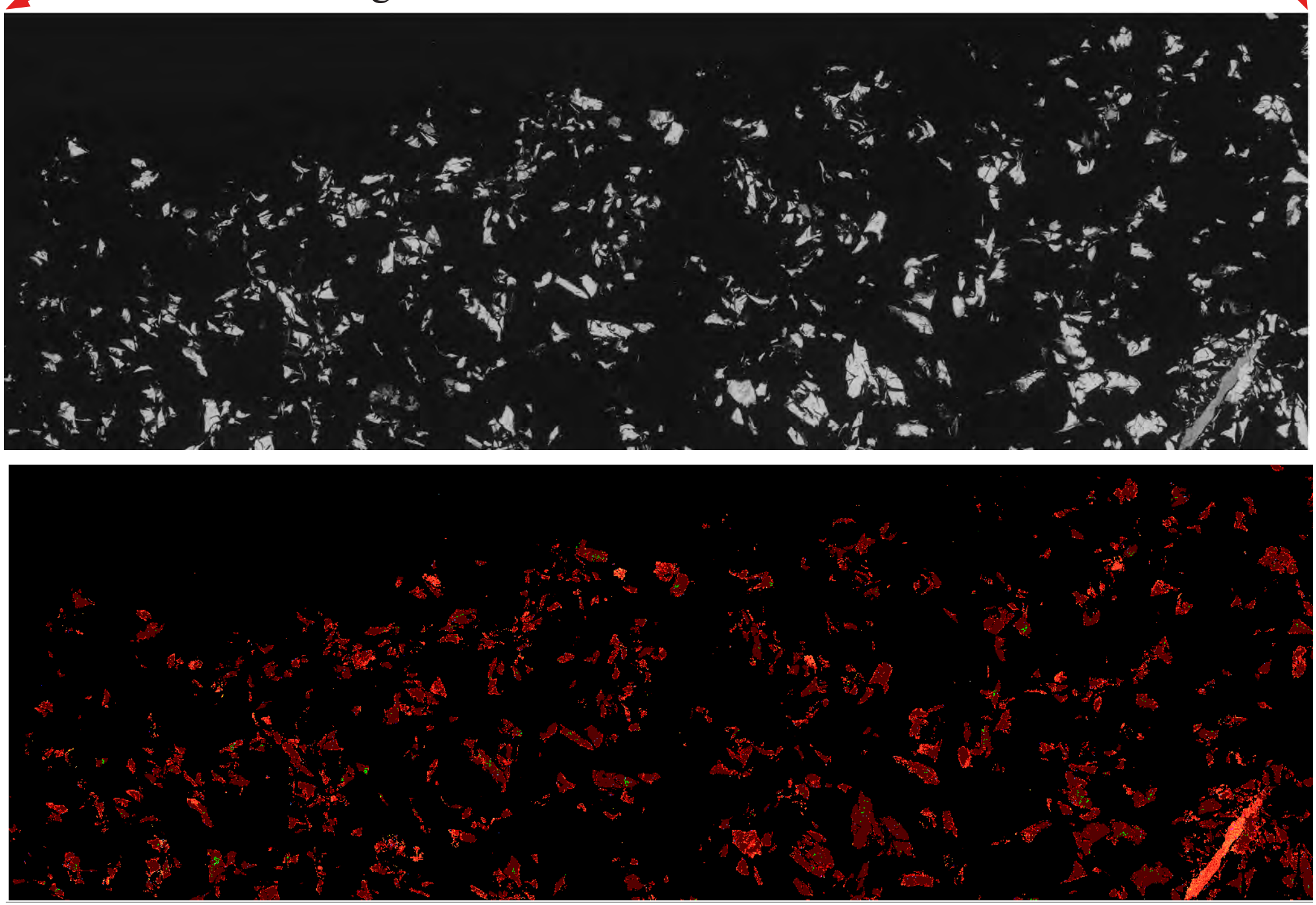


Mineral phases image

BMB5826

Optical microscopy image

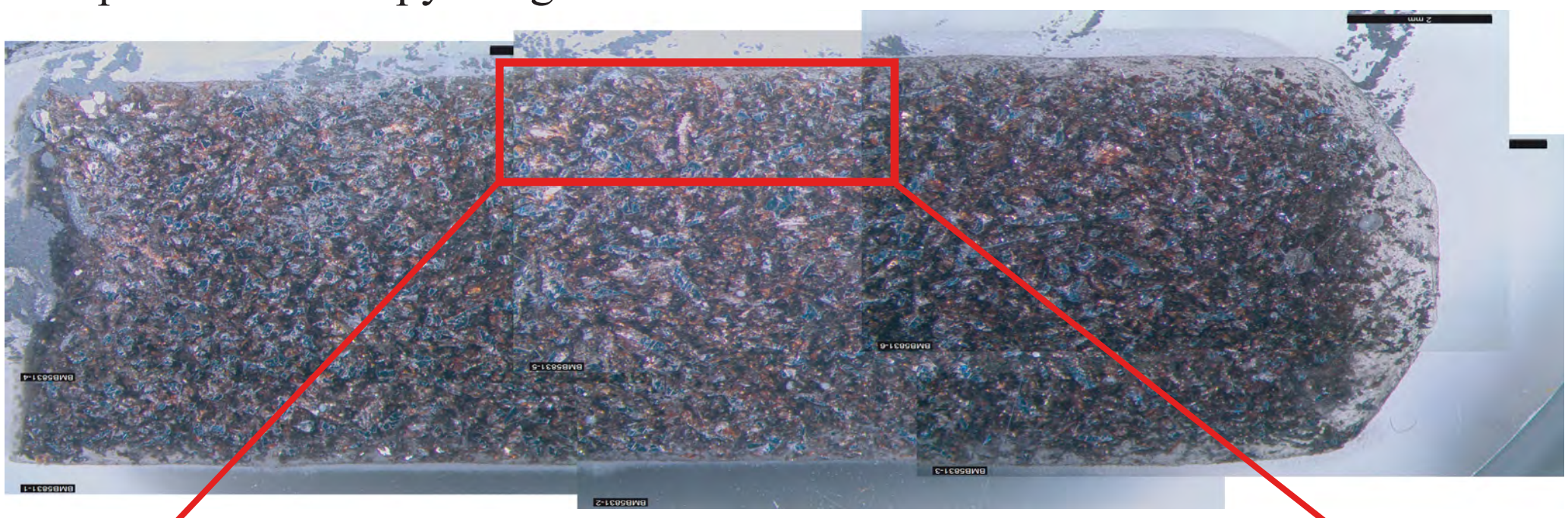
BSE image



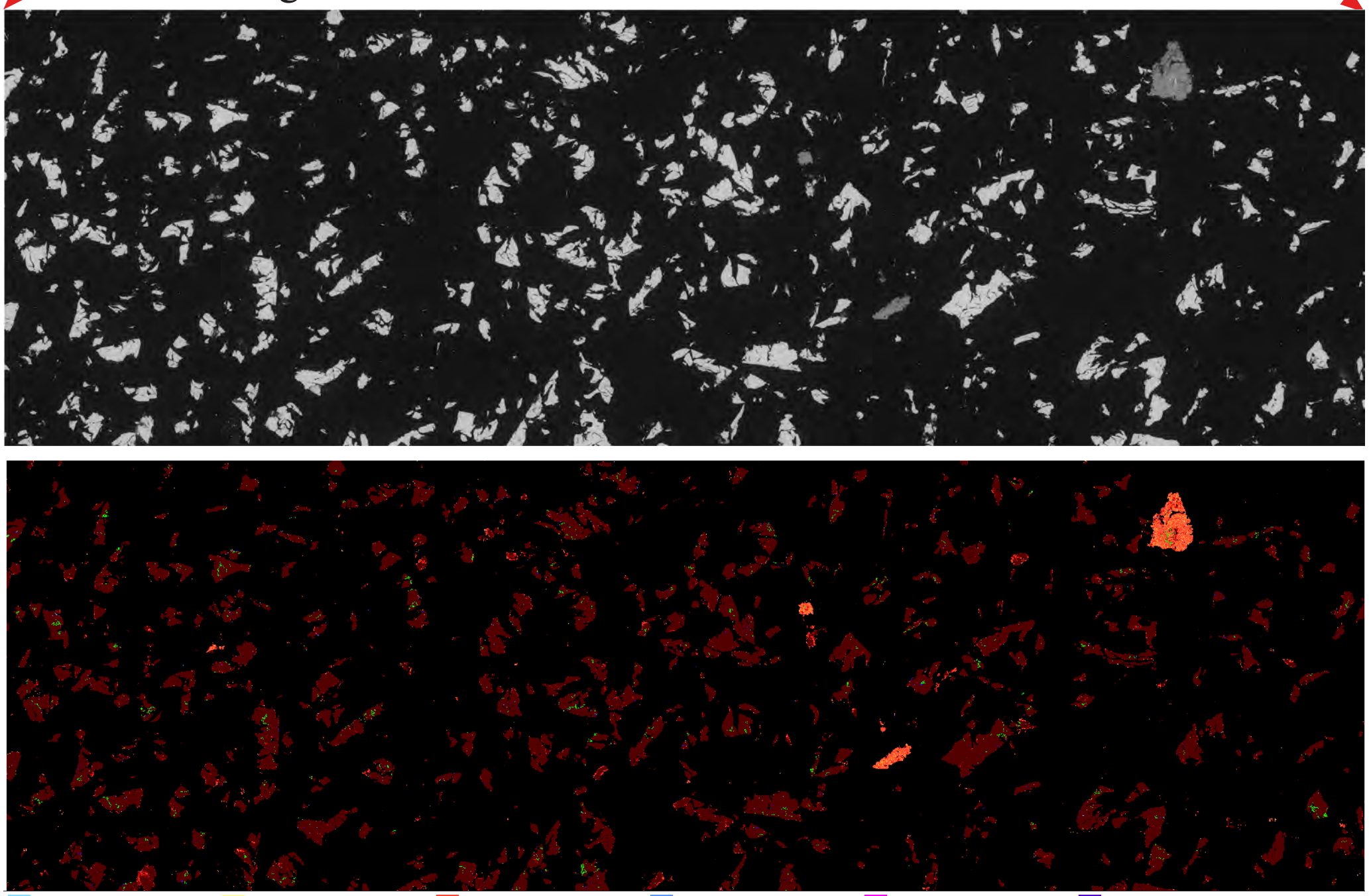
Mineral phases image

BMB5831

Optical microscopy image



BSE image

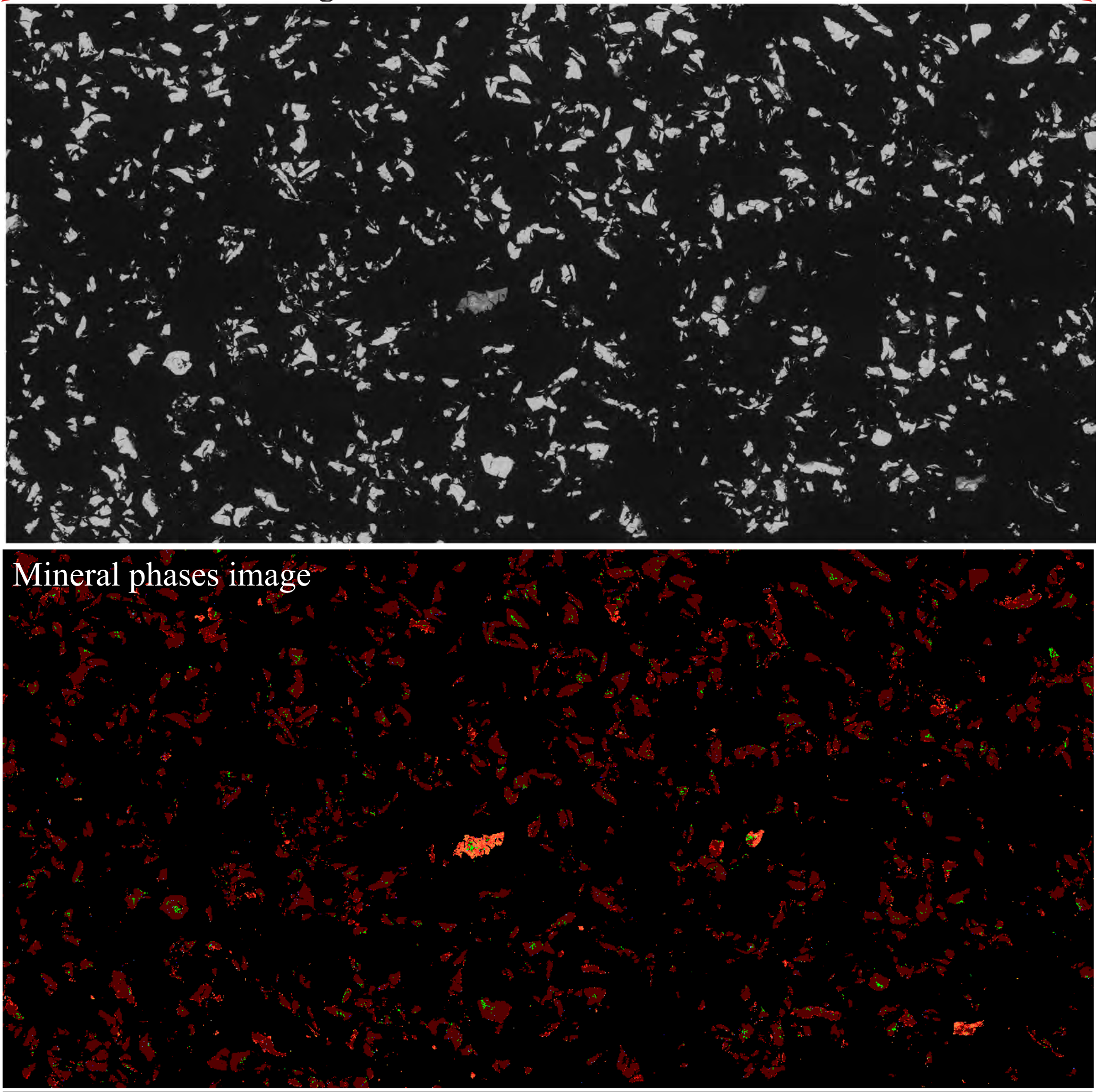


Mineral phases image

Optical microscopy image

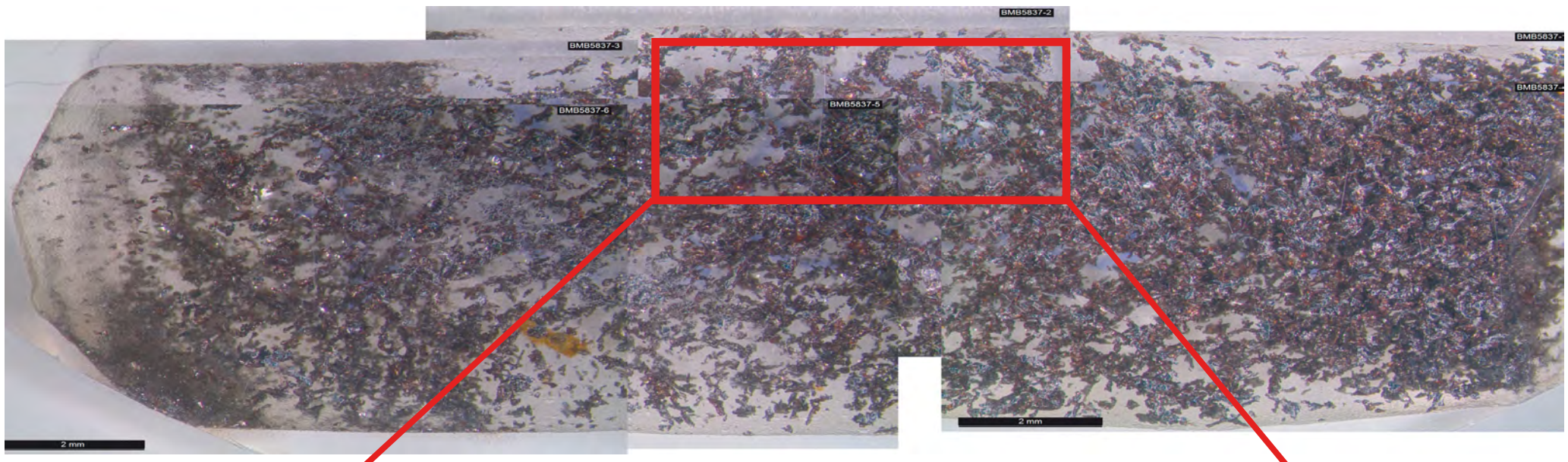
BMB5833

BSE image

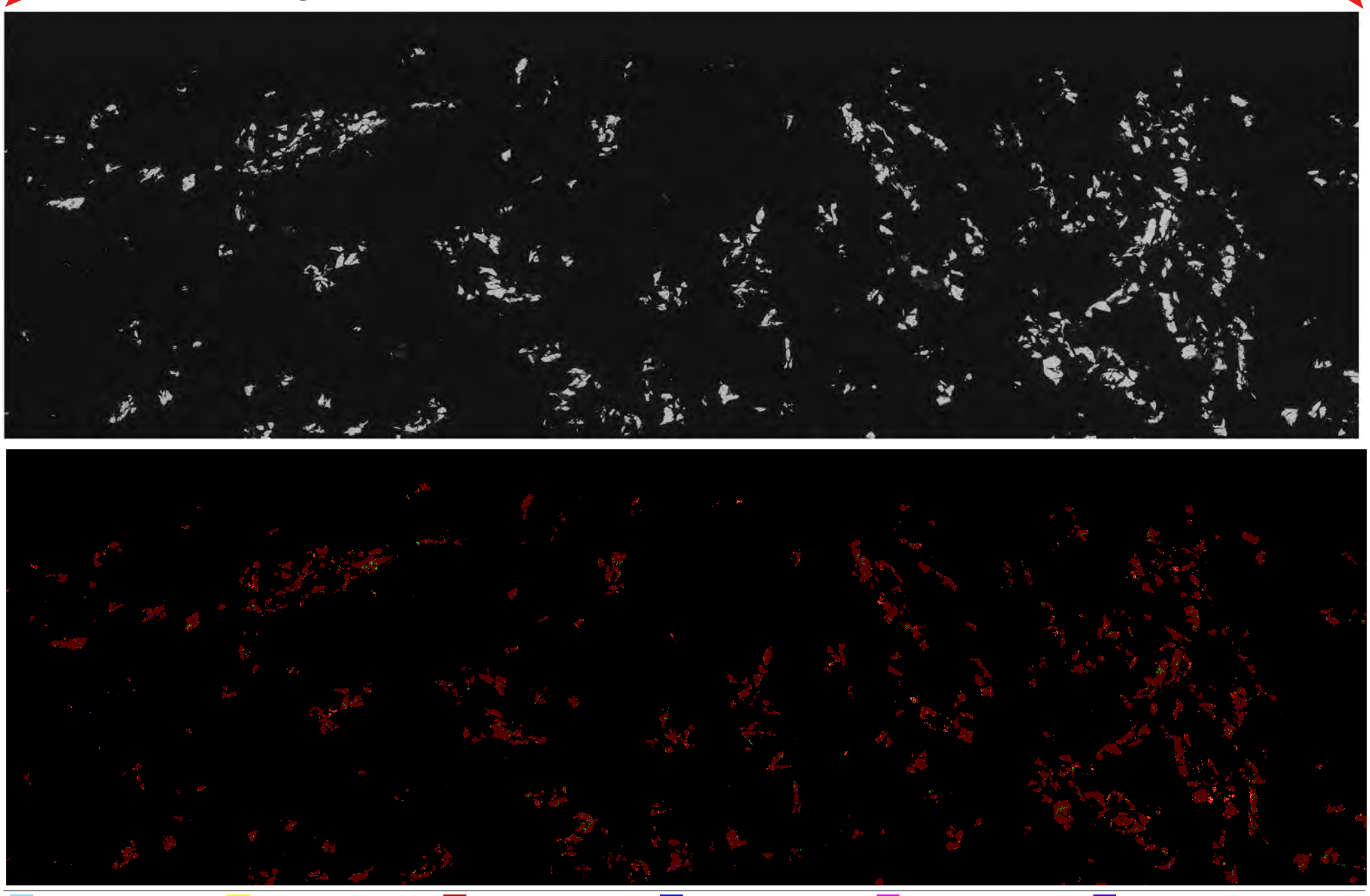


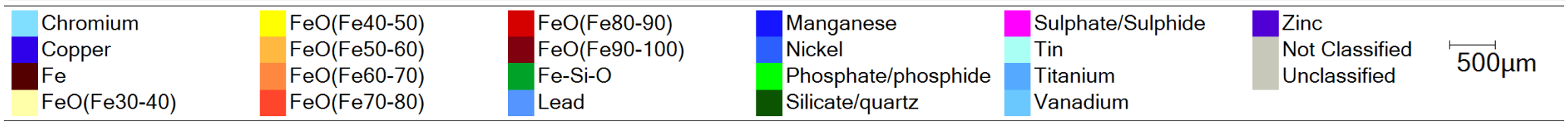
BMB5837

Optical microscopy image



BSE image

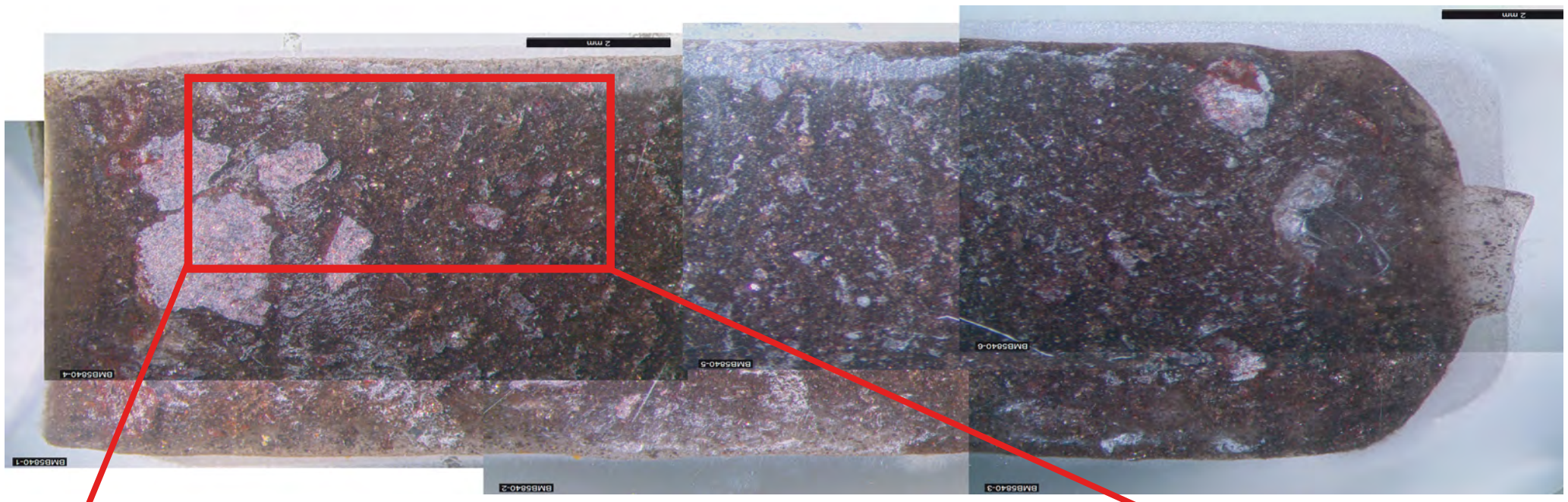




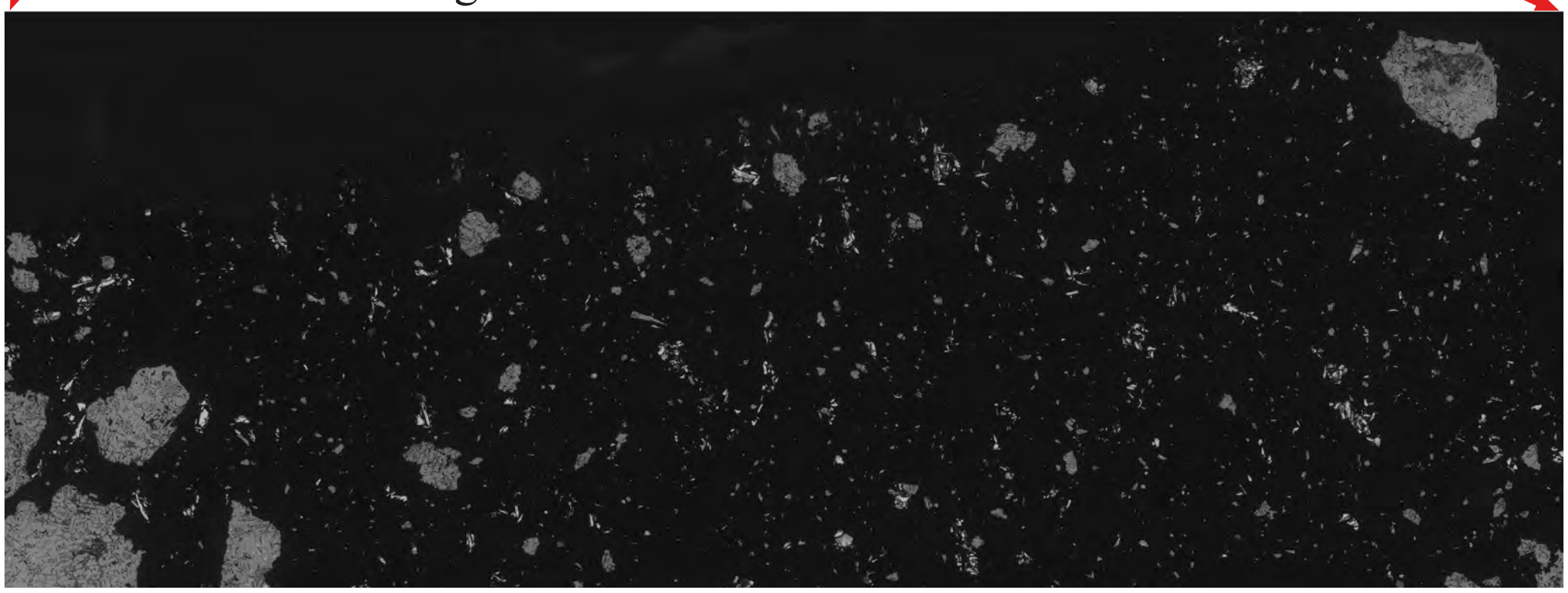
Mineral phases image

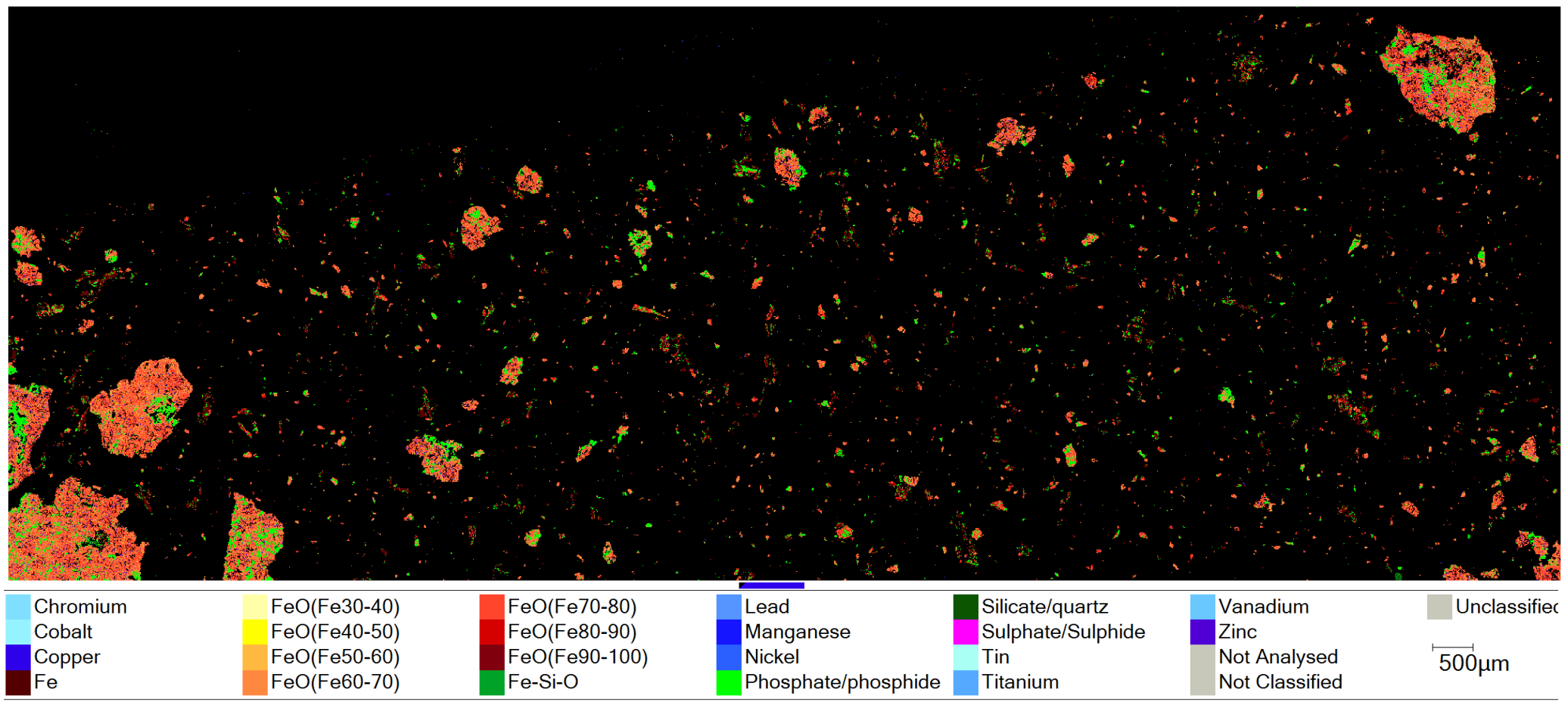
BMB5840

Optical microscopy image



BSE image

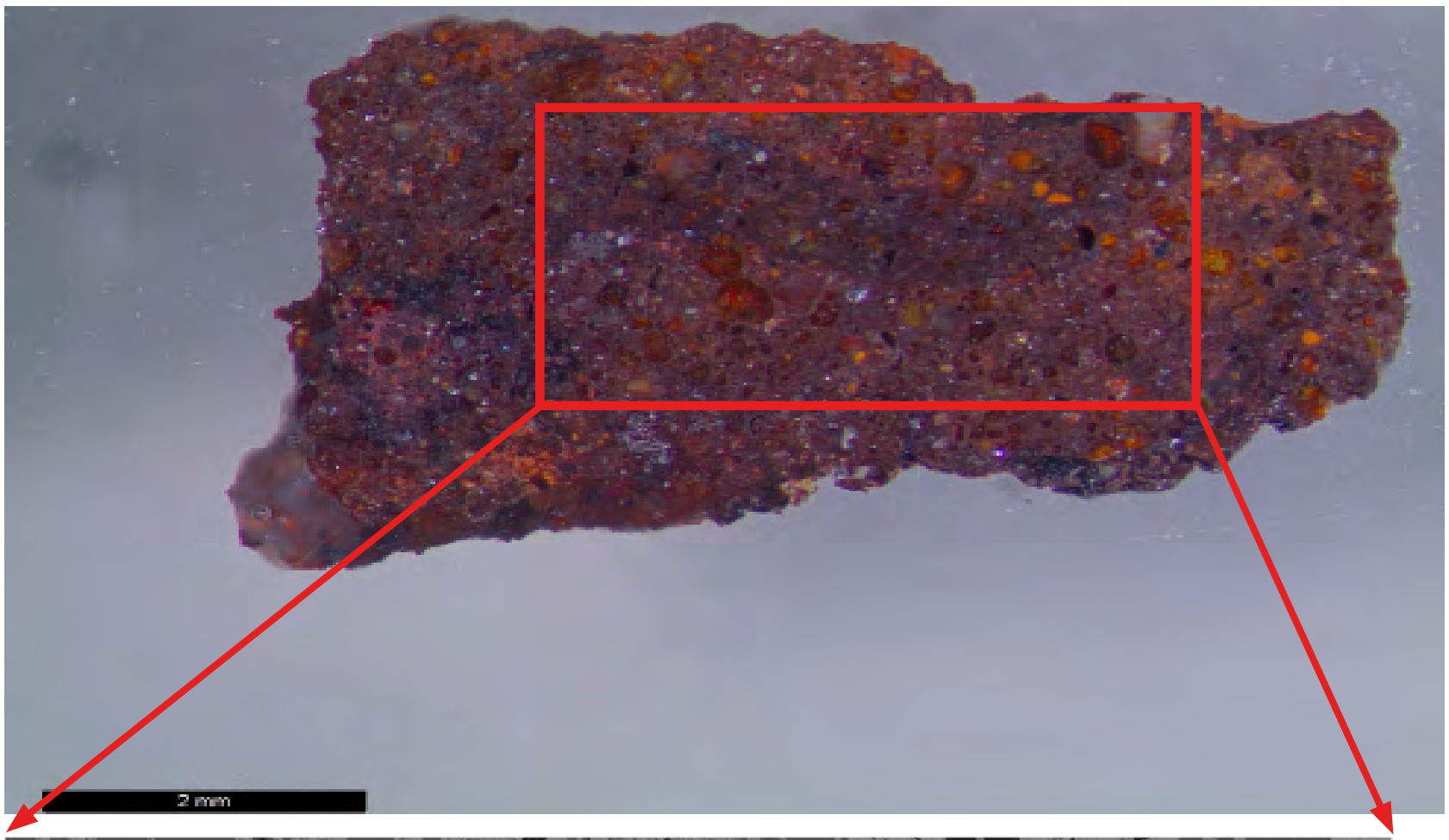




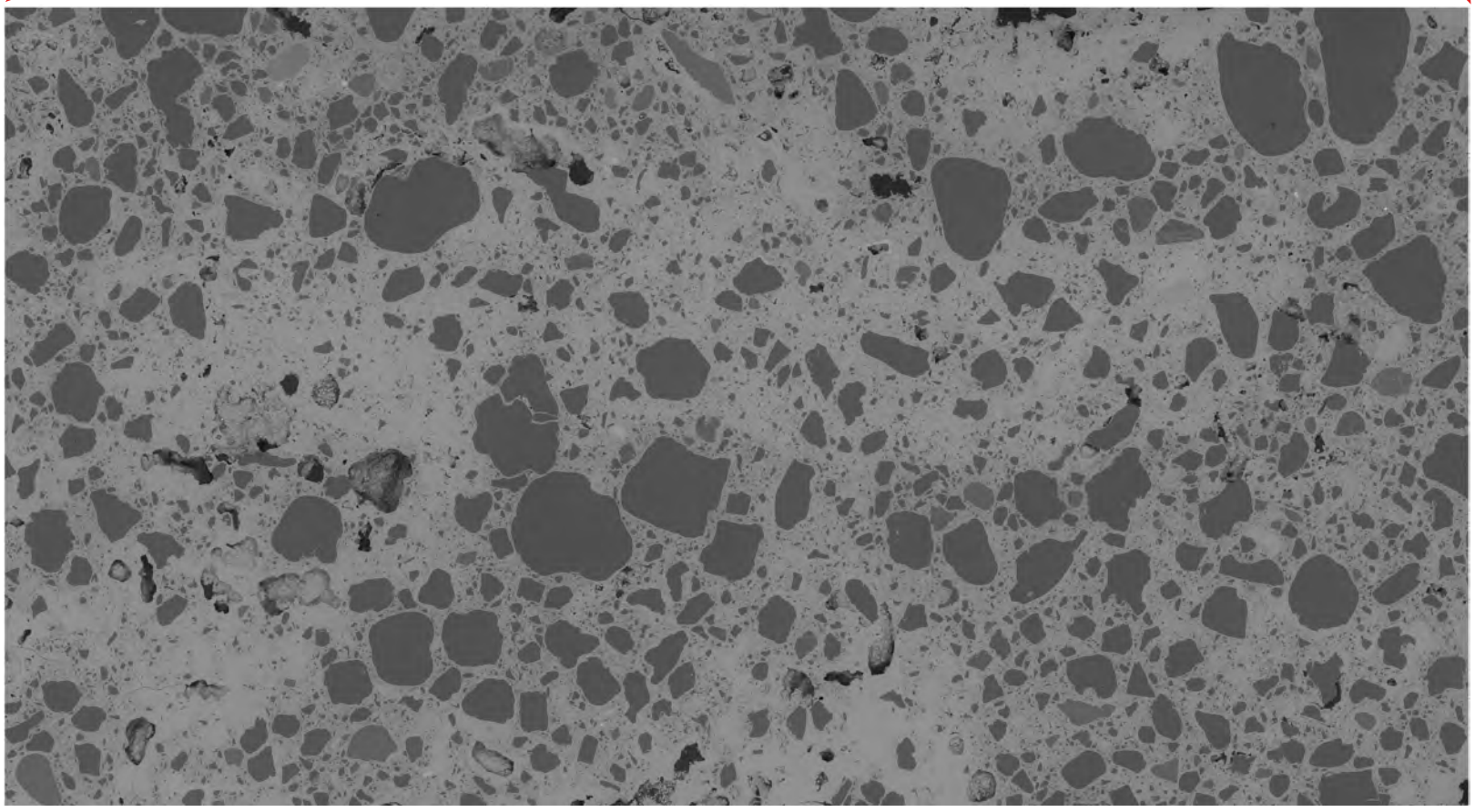
Mineral phases image

BMB5843

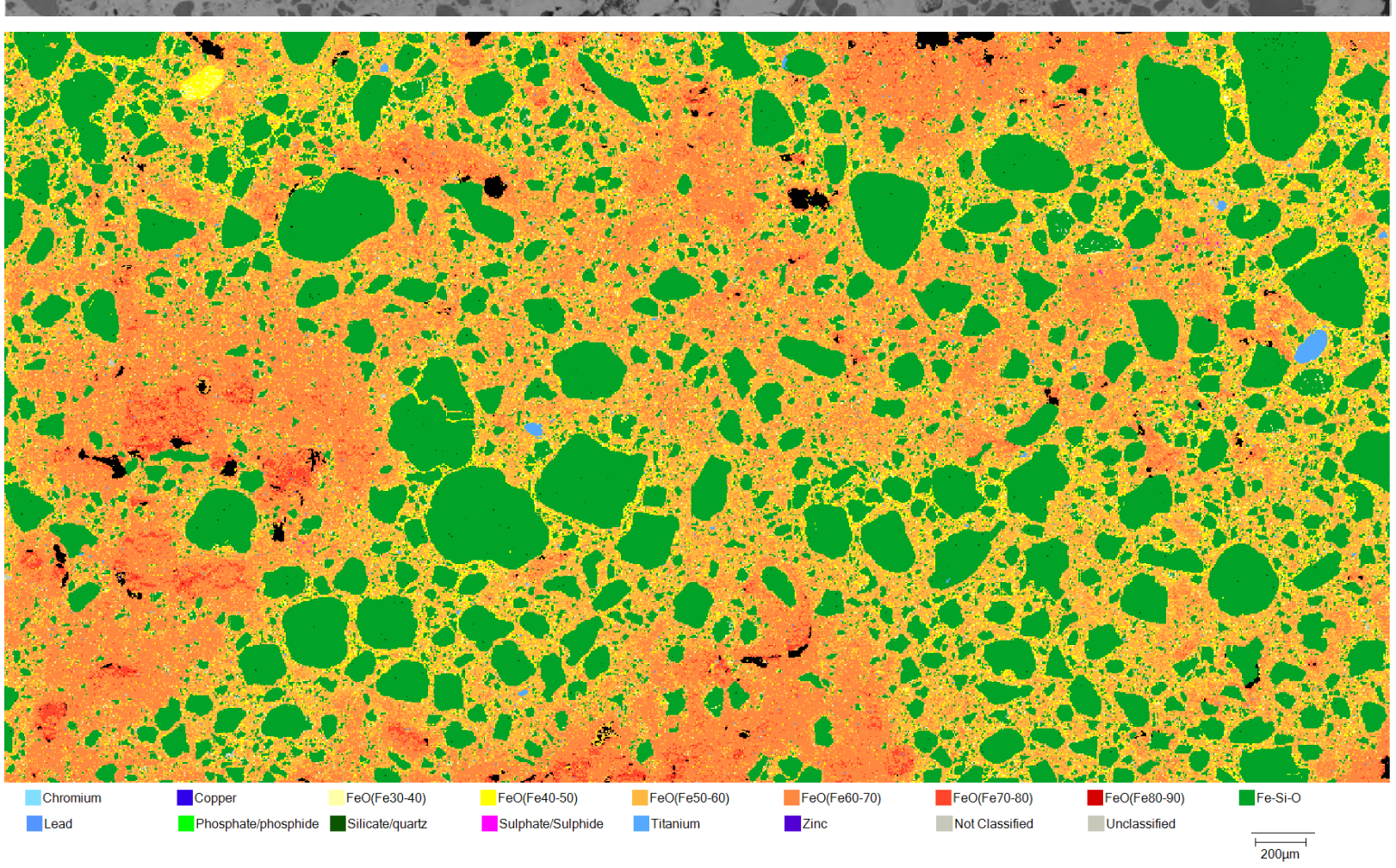
Optical microscopy image



BSE image

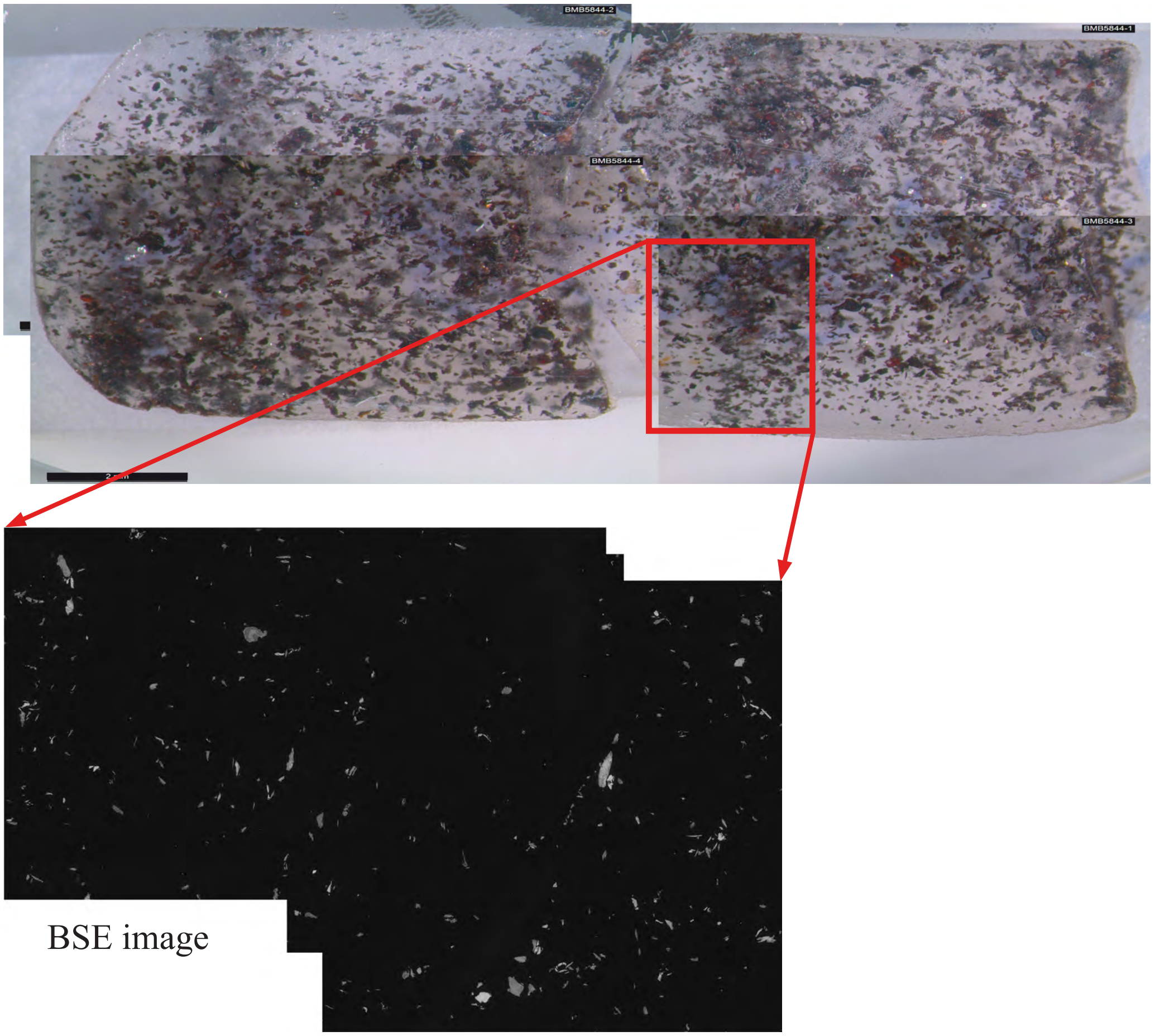


Mineral phases image

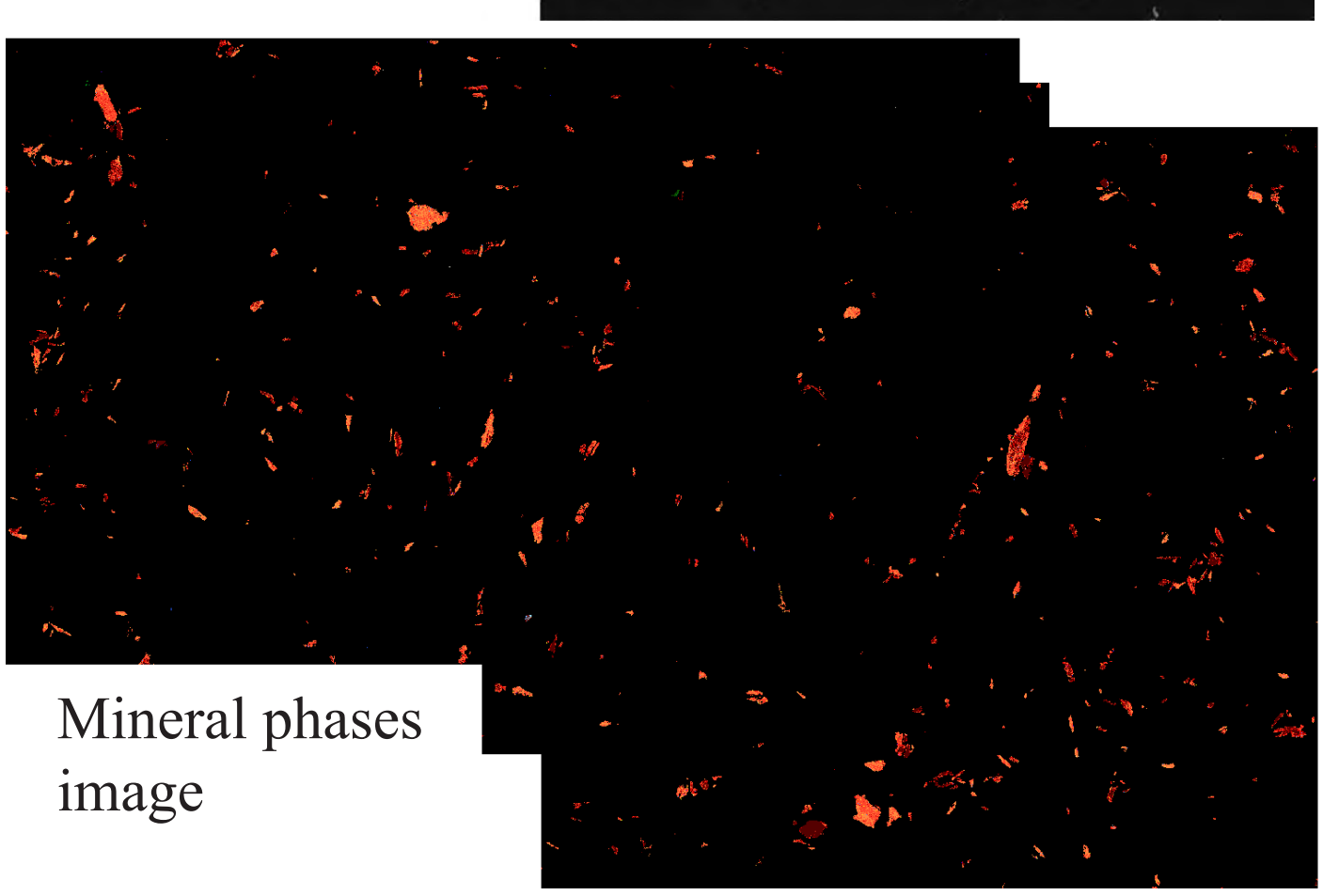


BMB5844

Optical microscopy image



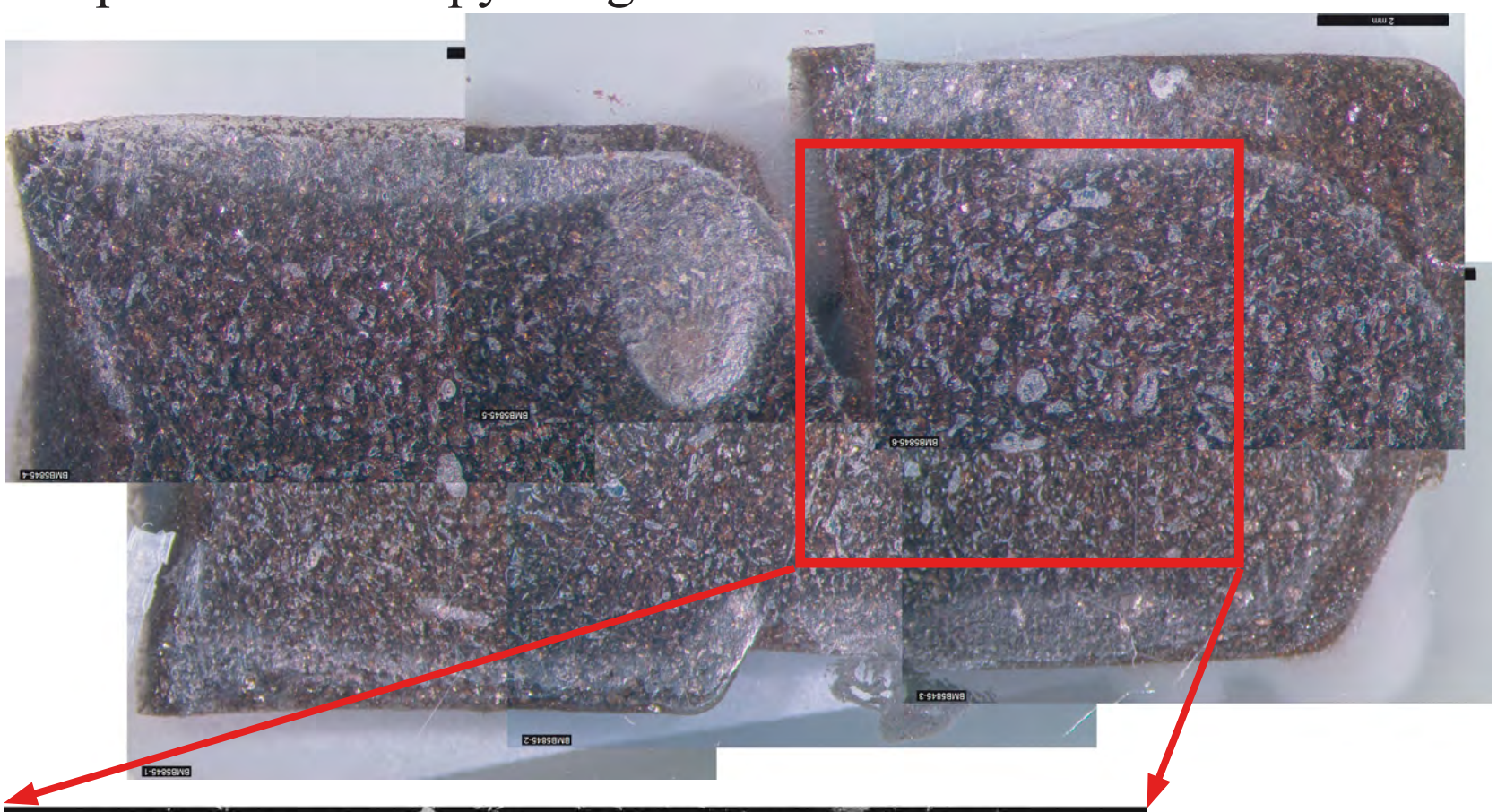
BSE image



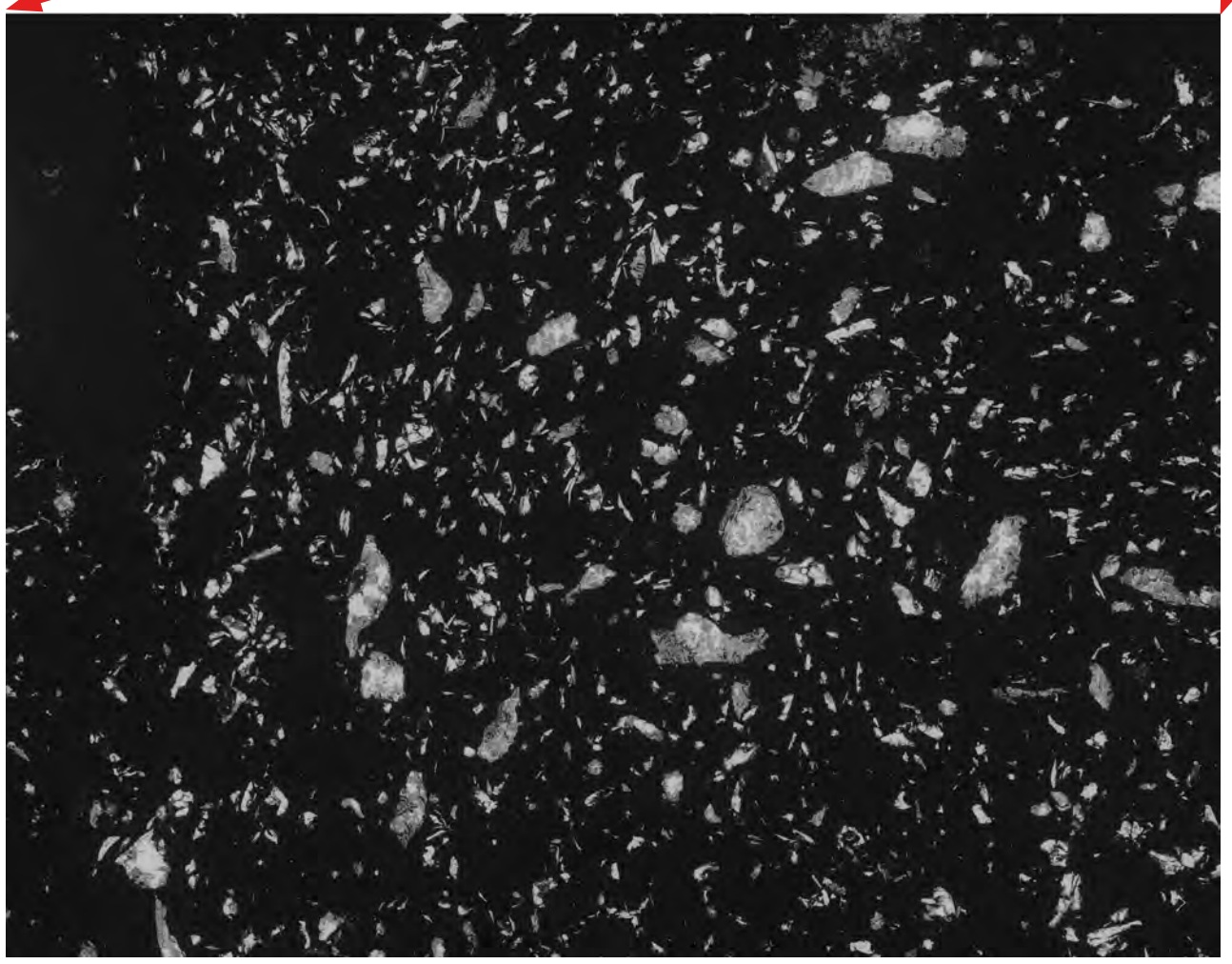
Mineral phases image

BMB5845

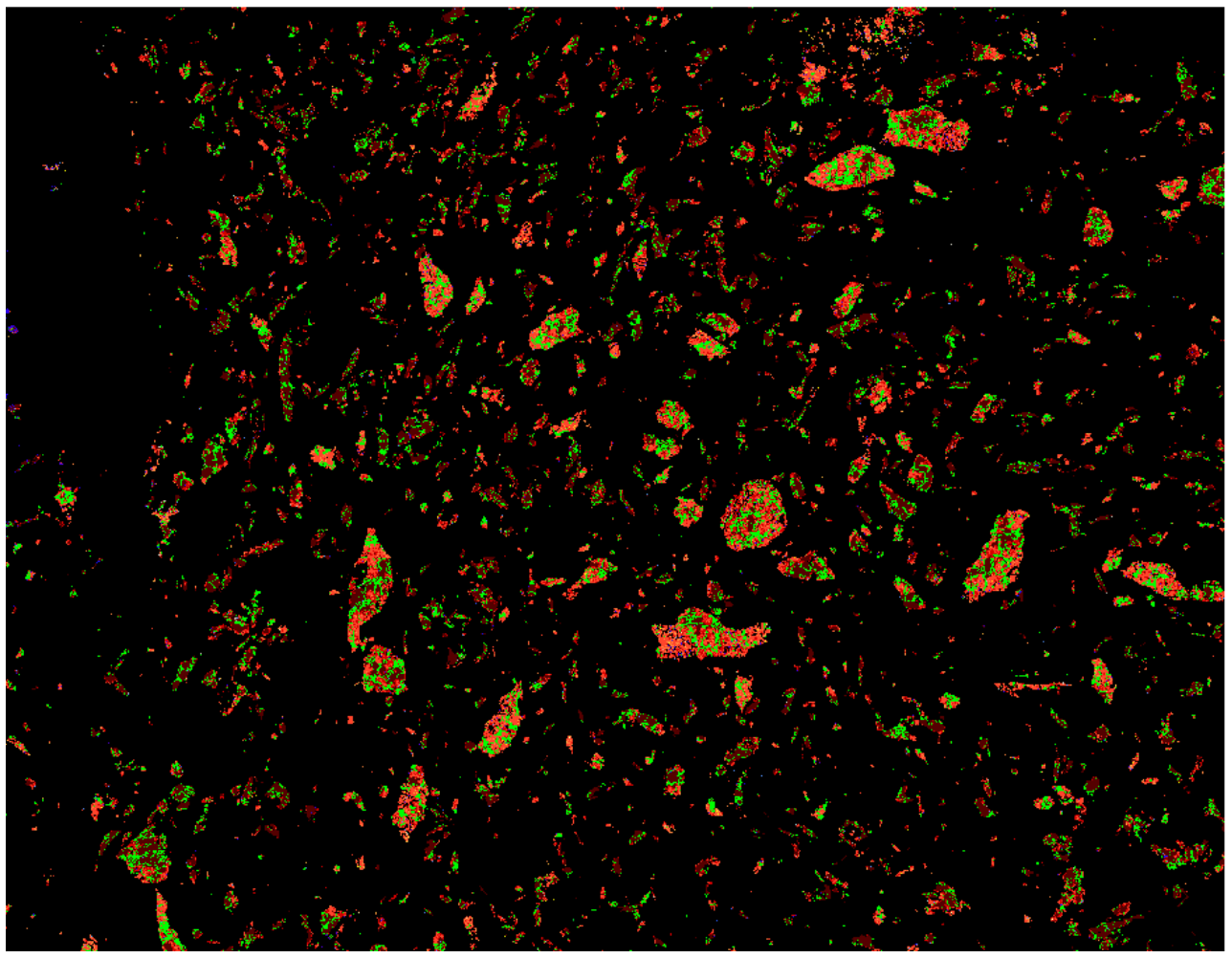
Optical microscopy image



BSE image



Mineral phases image

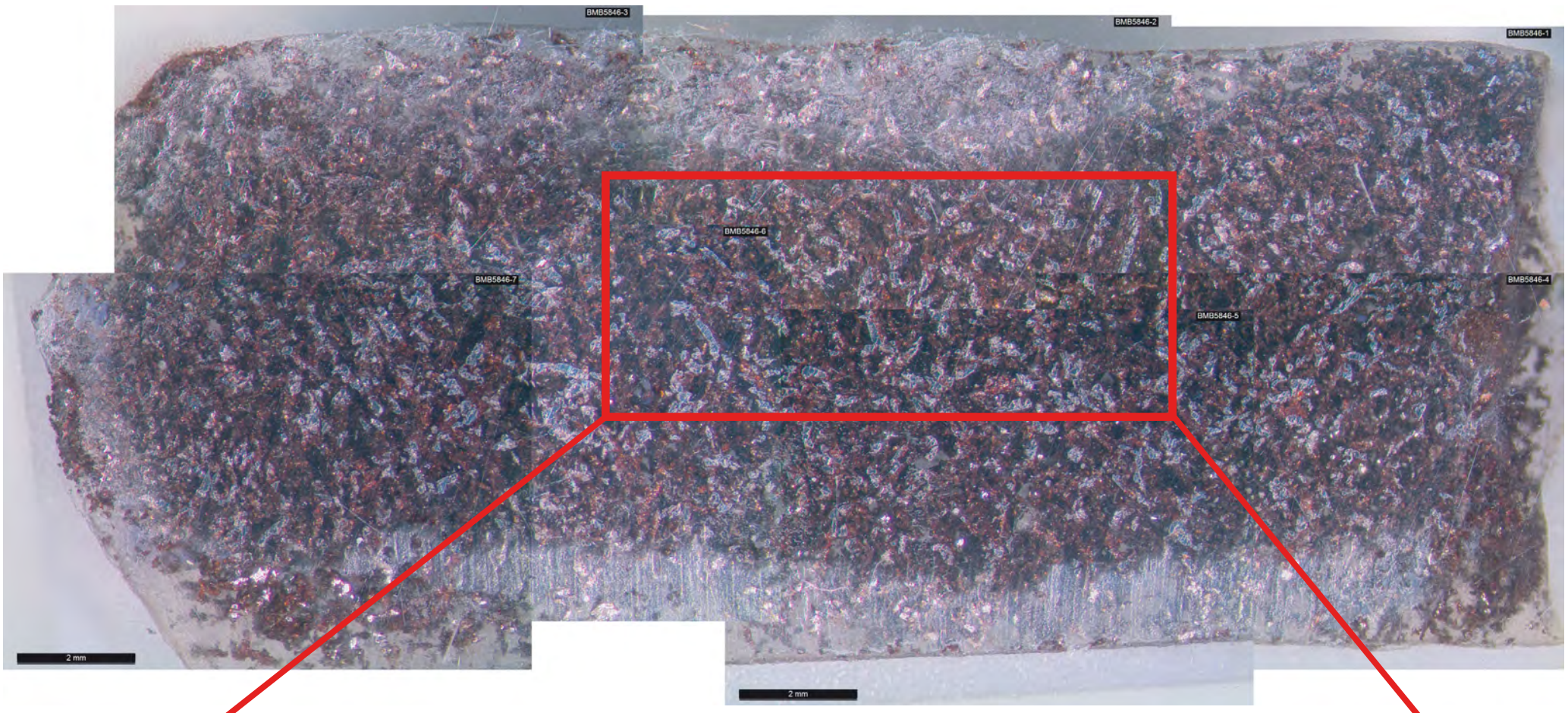


Chromium	FeO(Fe30-40)
Cobalt	FeO(Fe40-50)
Copper	FeO(Fe50-60)
Fe	FeO(Fe60-70)
FeO(Fe70-80)	Lead
FeO(Fe80-90)	Manganese
FeO(Fe90-100)	Nickel
Fe-Si-O	Phosphate/phosphide
Silicate/quartz	Zinc
Sulphate/Sulphide	Not Analysed
Tin	Not Classified
Titanium	Unclassified

500µm

BMB5846

Optical microscopy image



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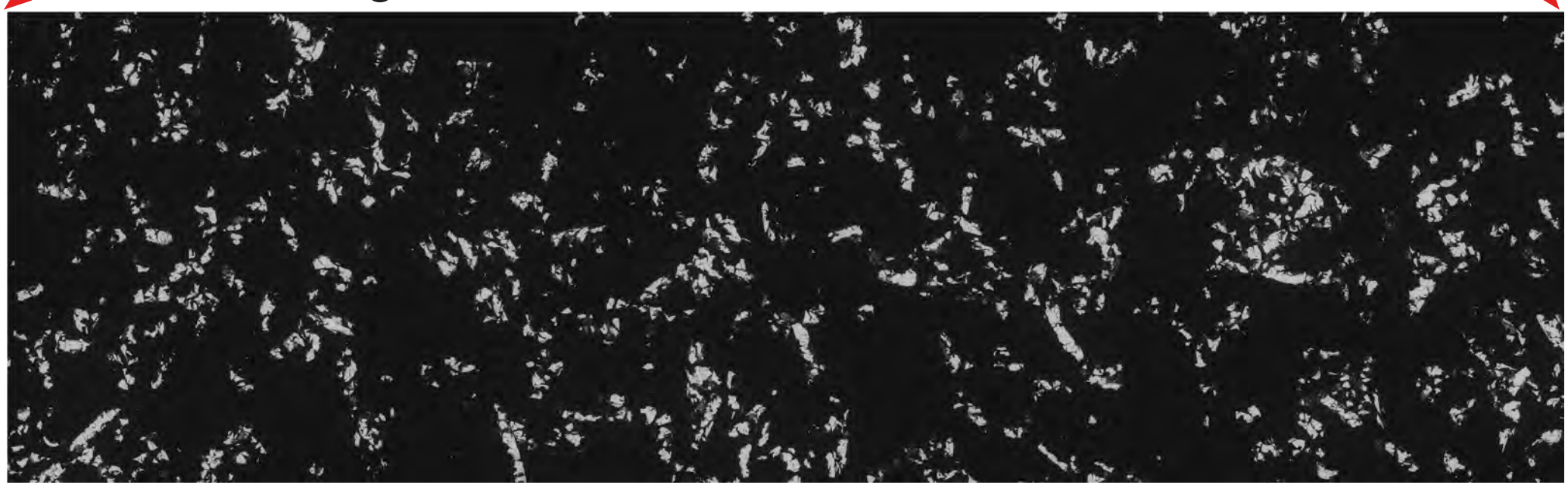
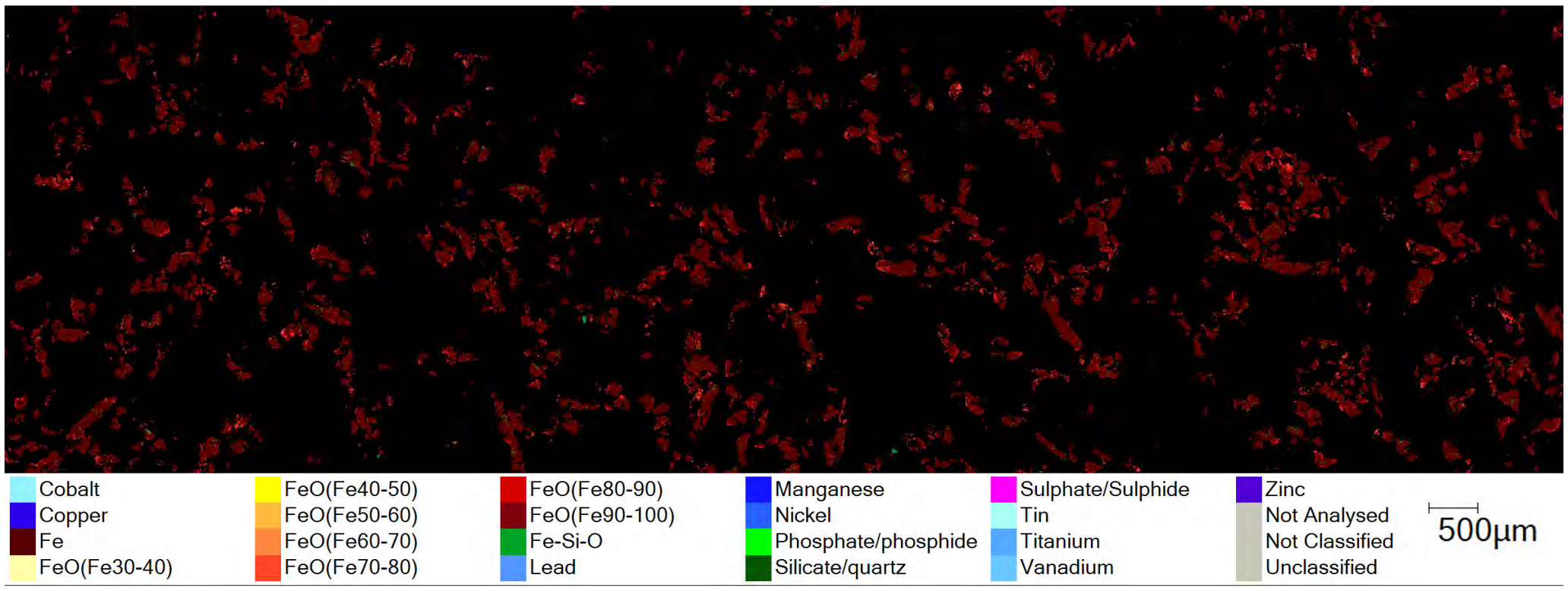
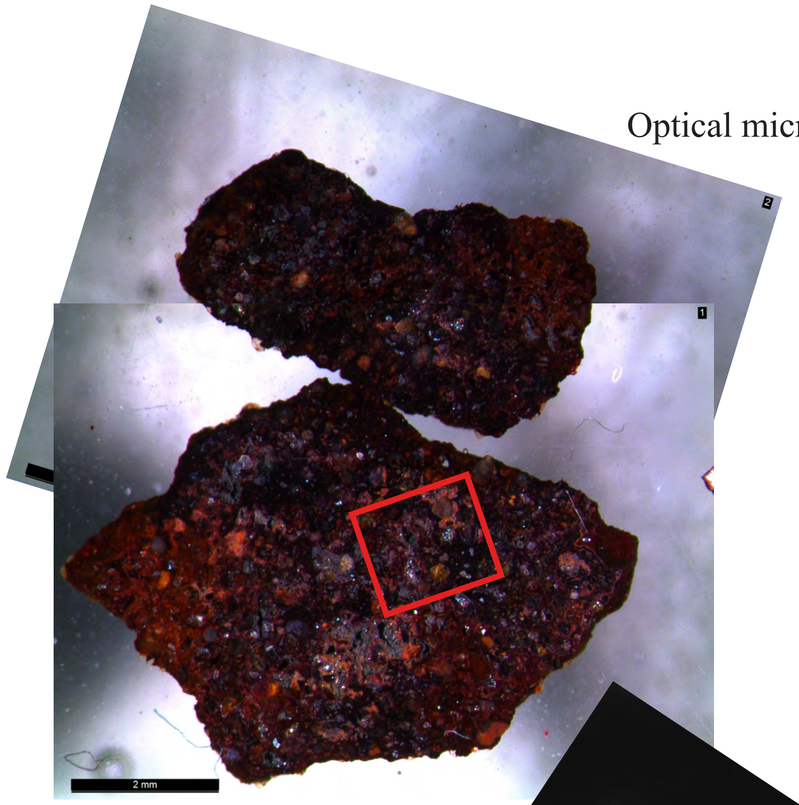


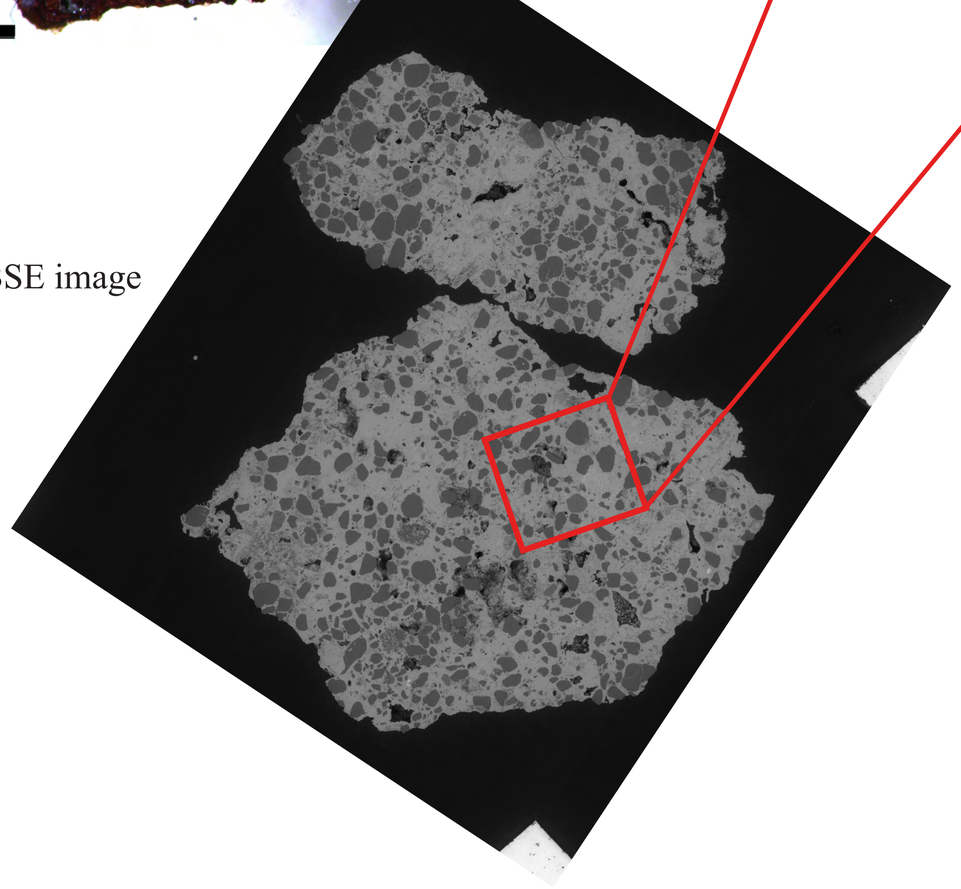


Mineral phases image

BMB5847



Optical microscopy image



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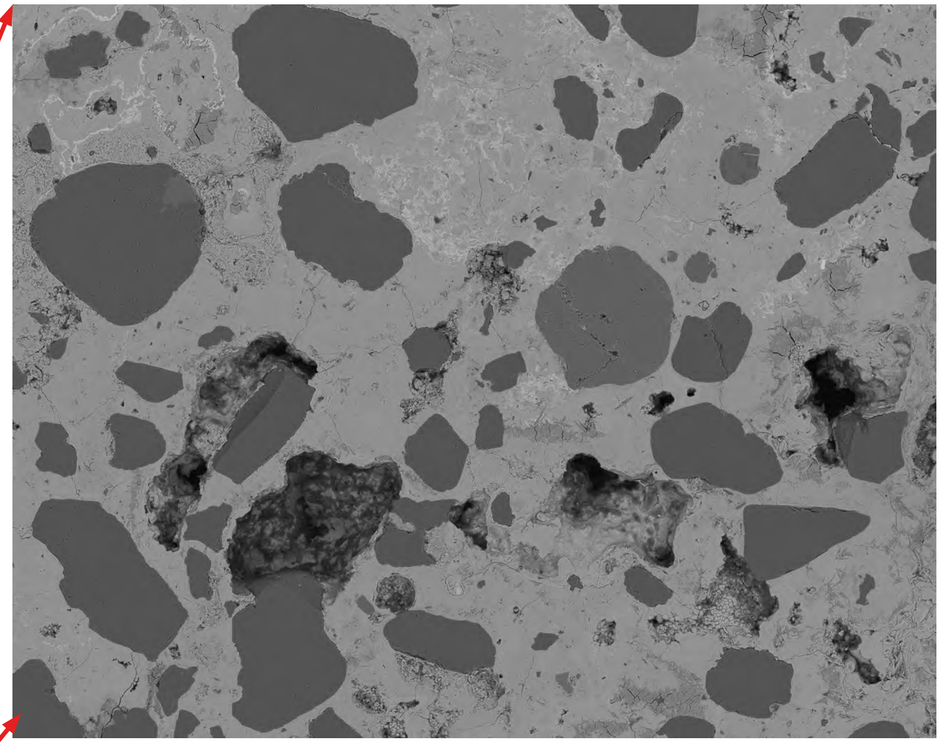

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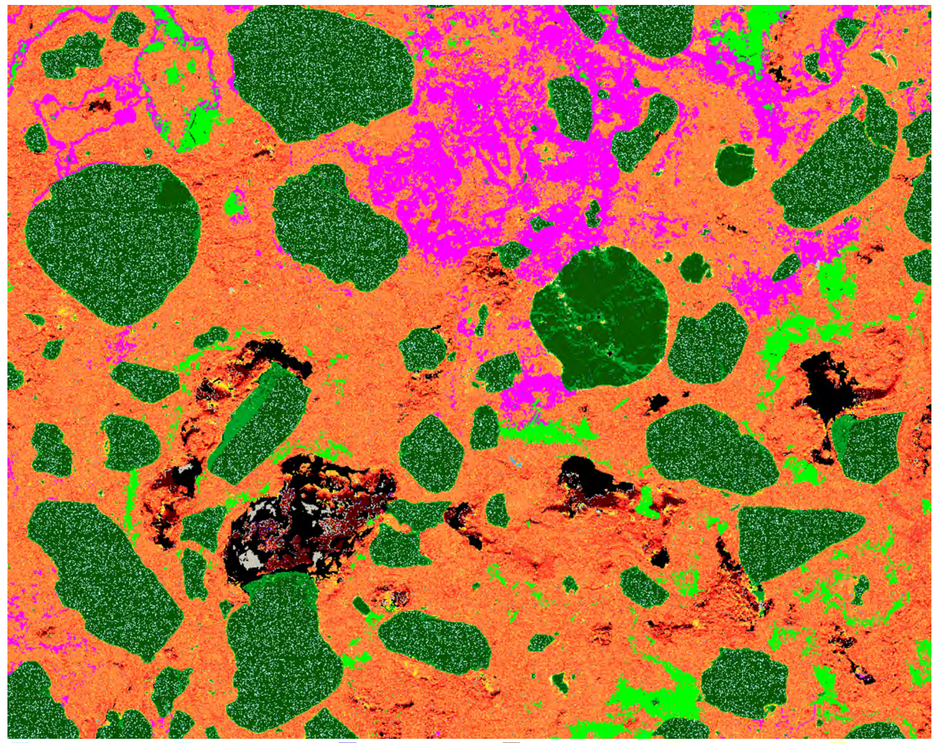
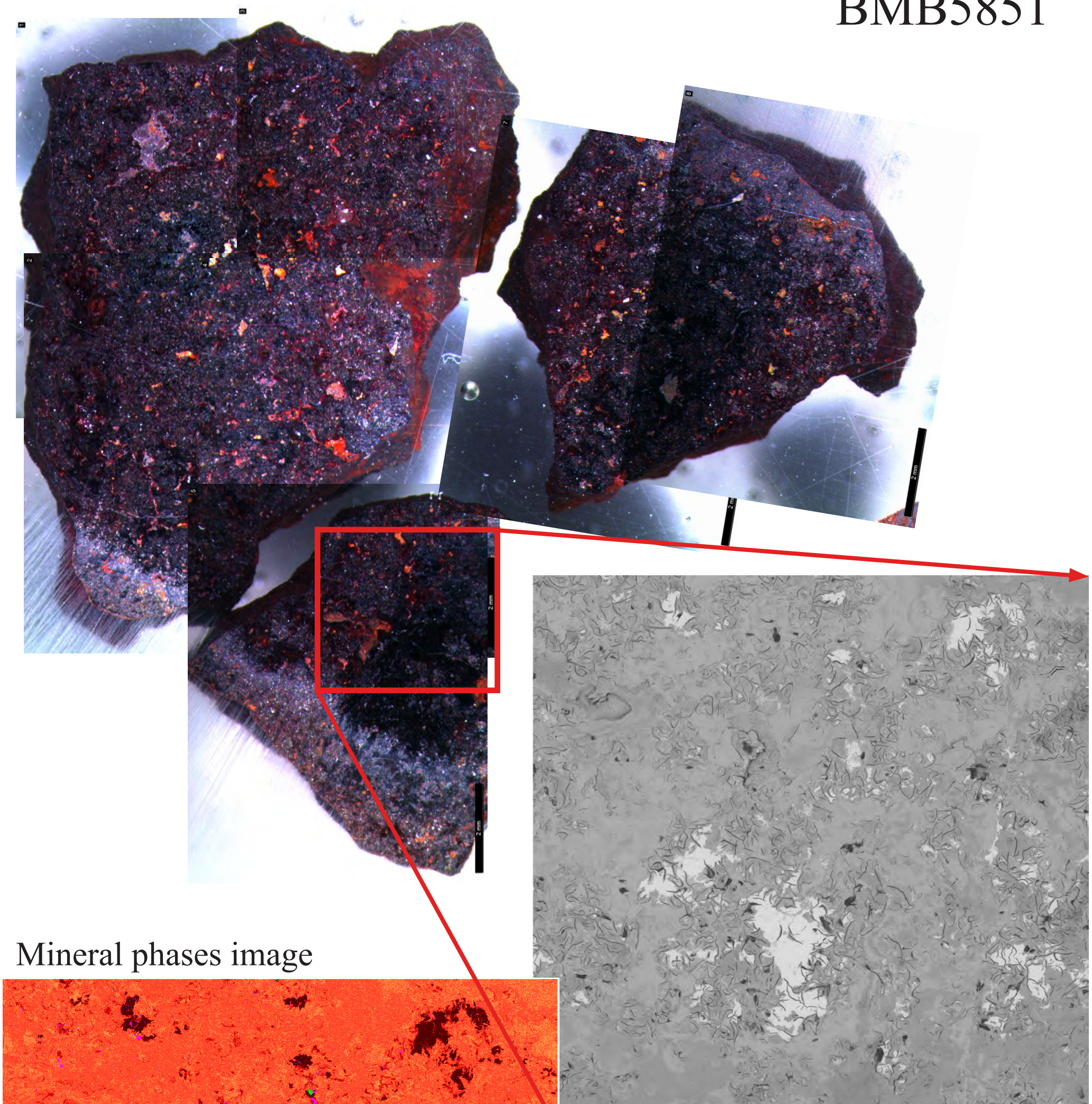


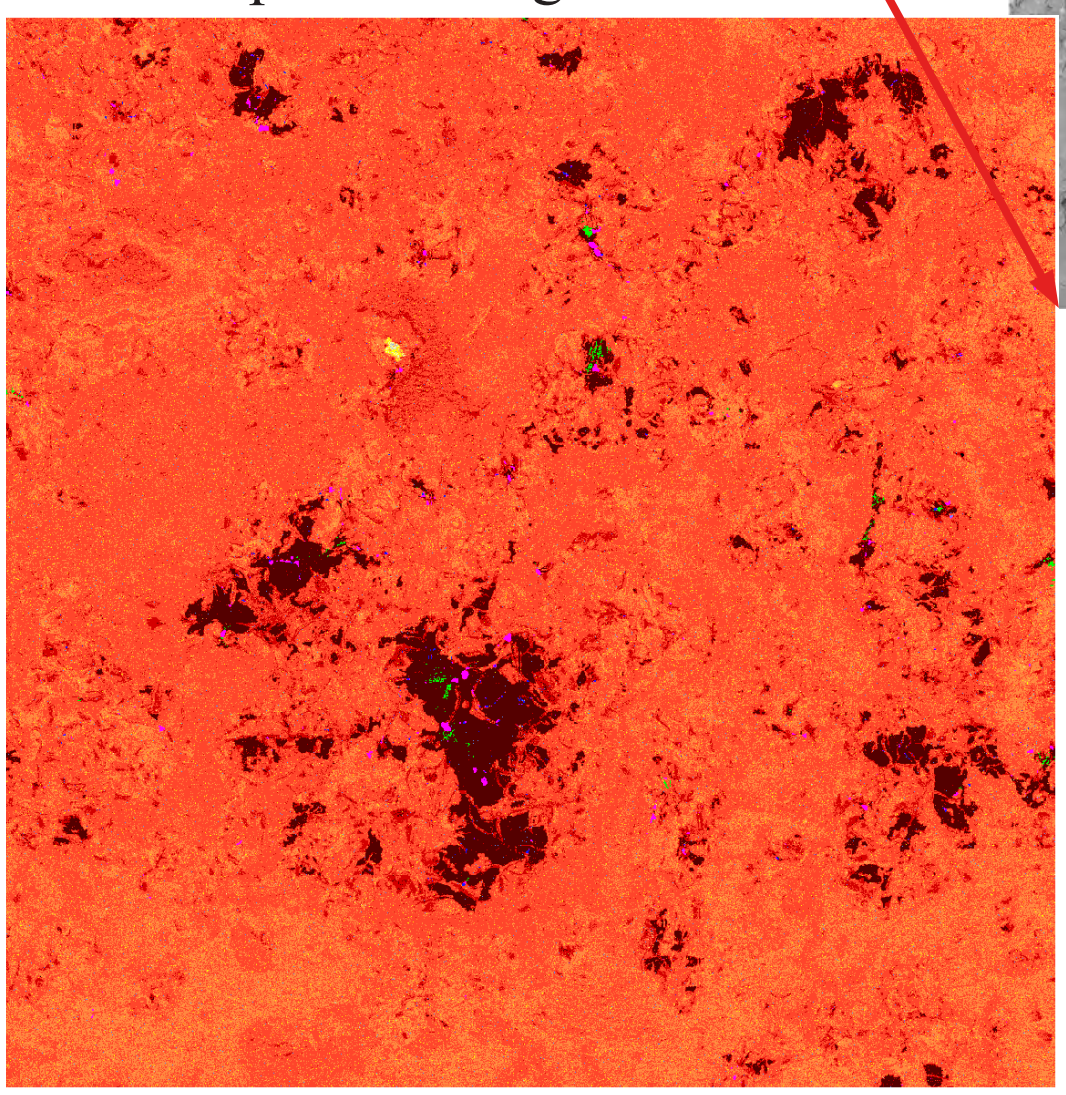
Mineral phases image

Optical microscopy image

BMB5851



Mineral phases image



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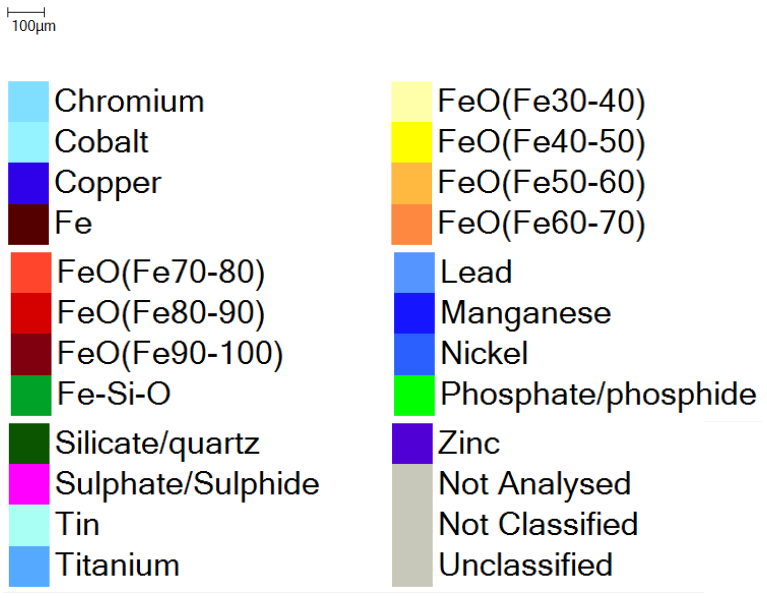

BMB5852

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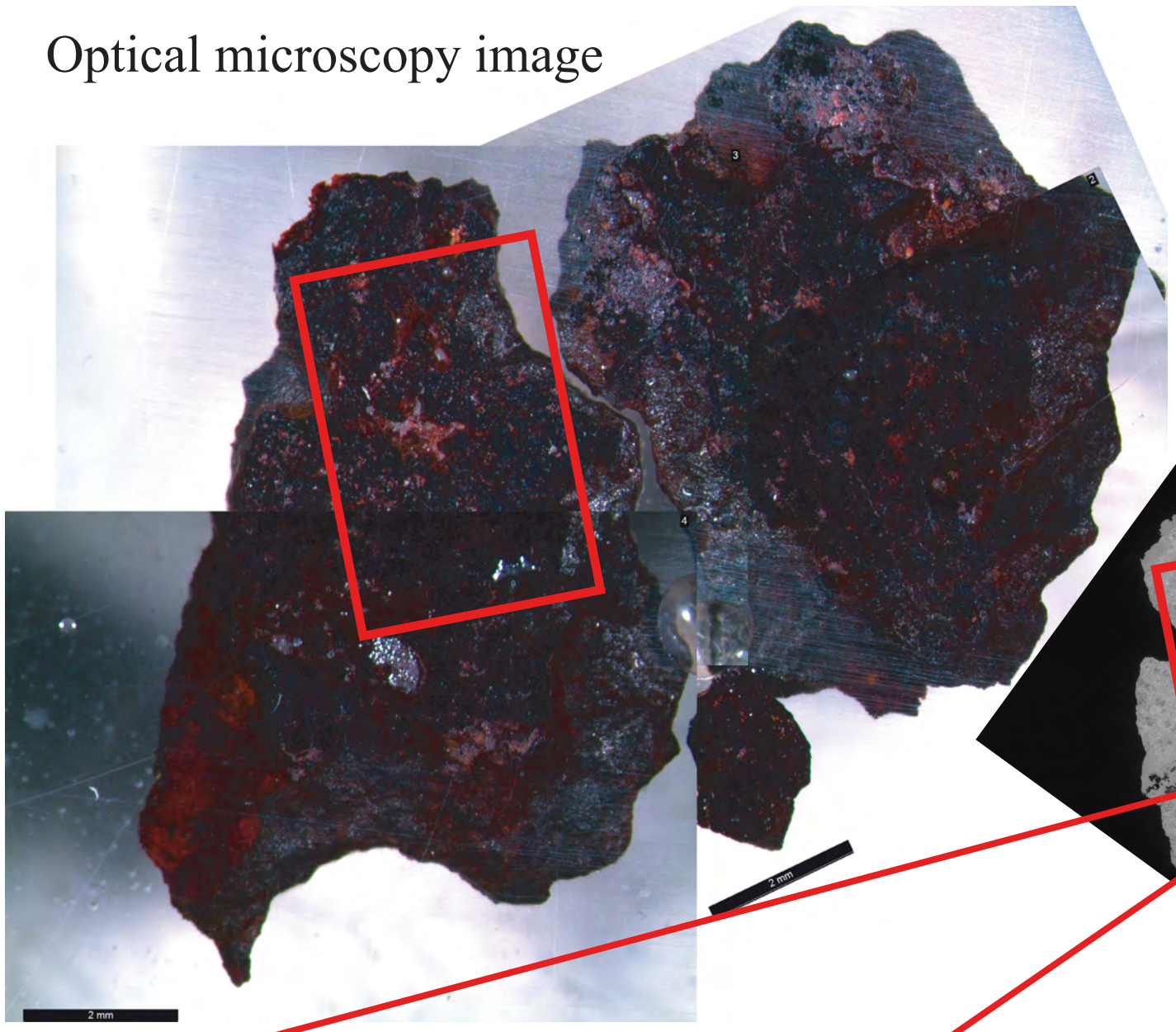

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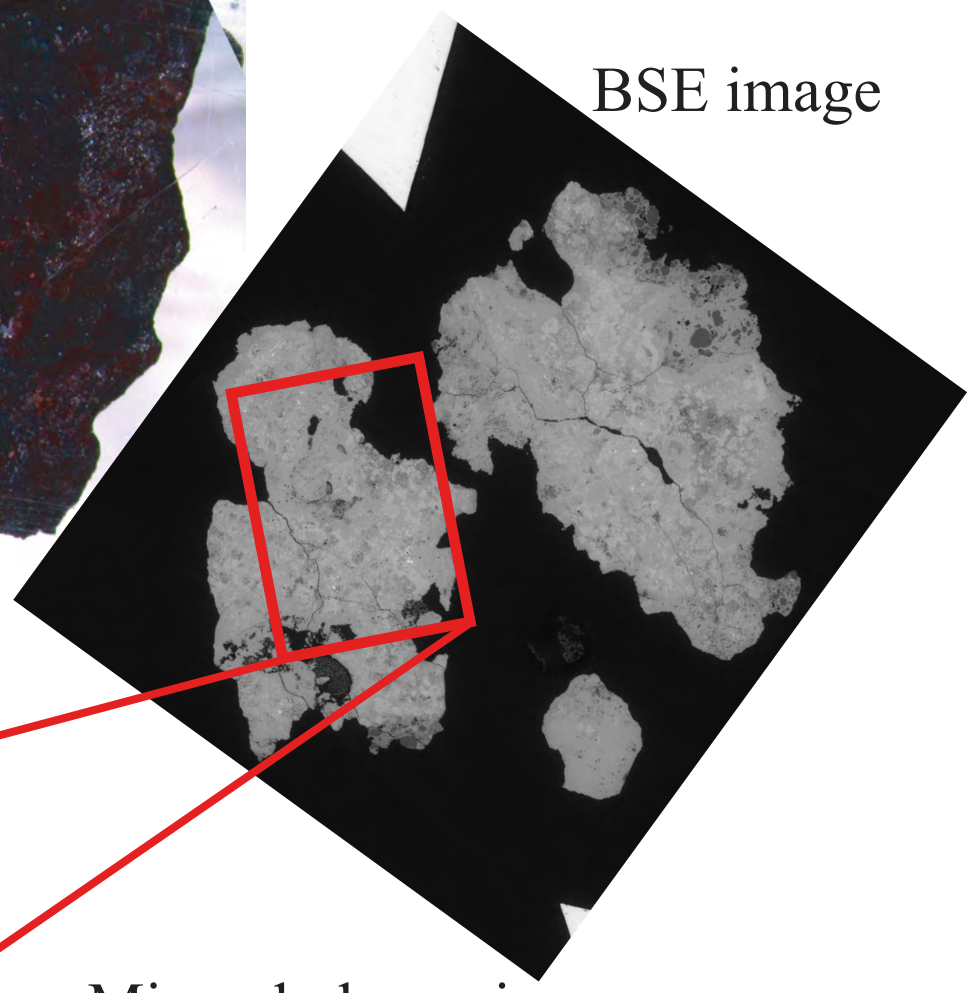

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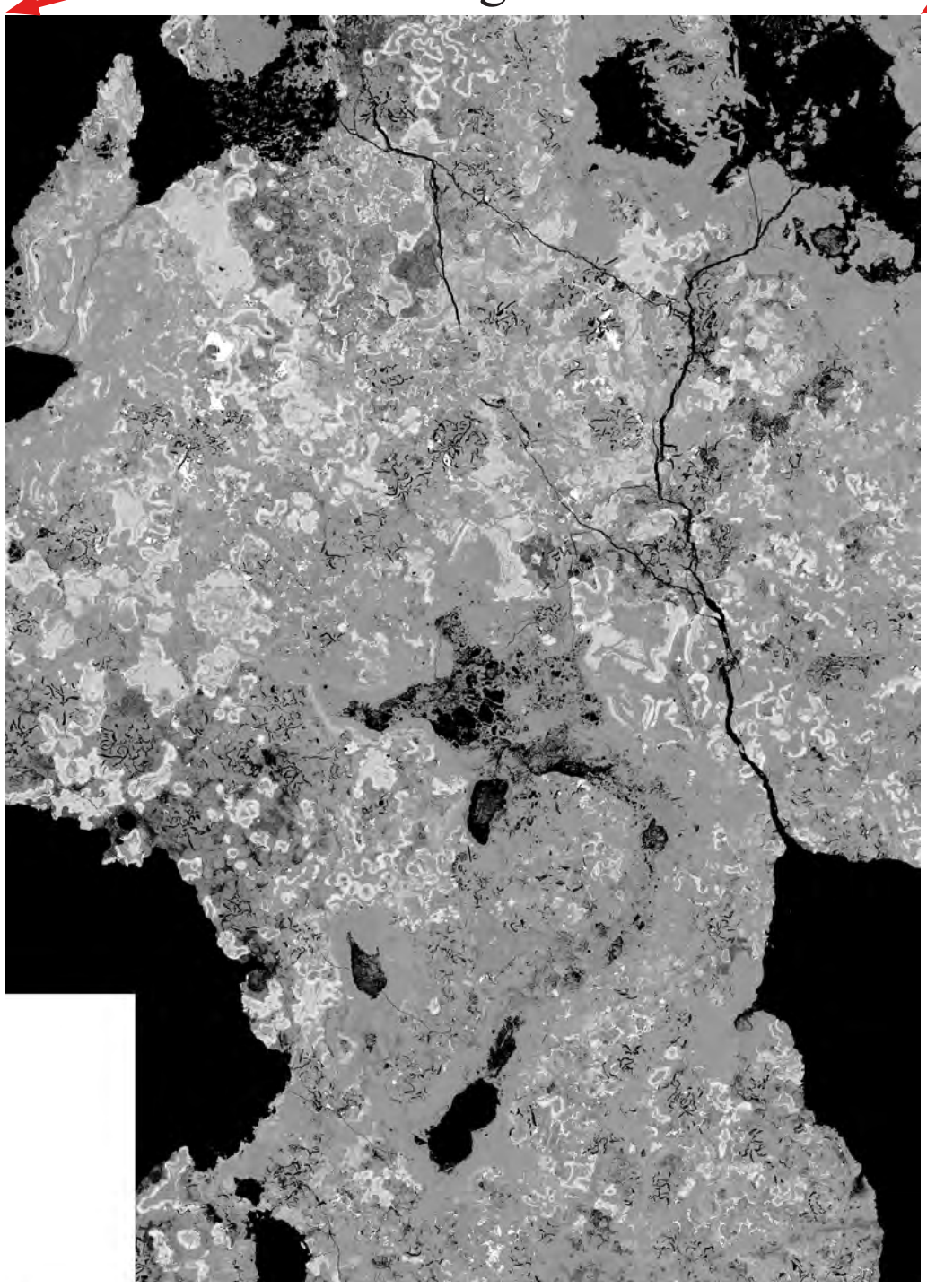
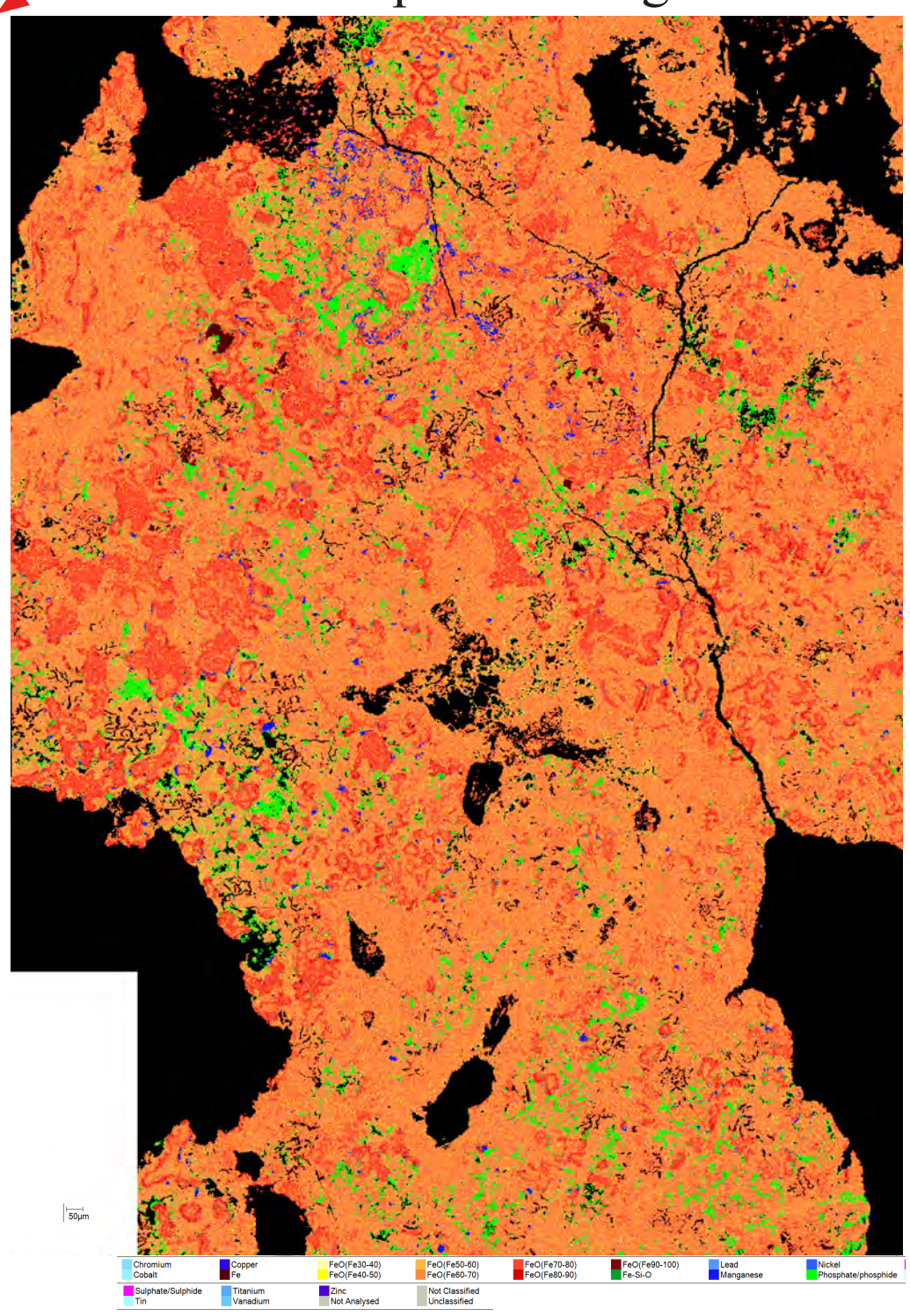
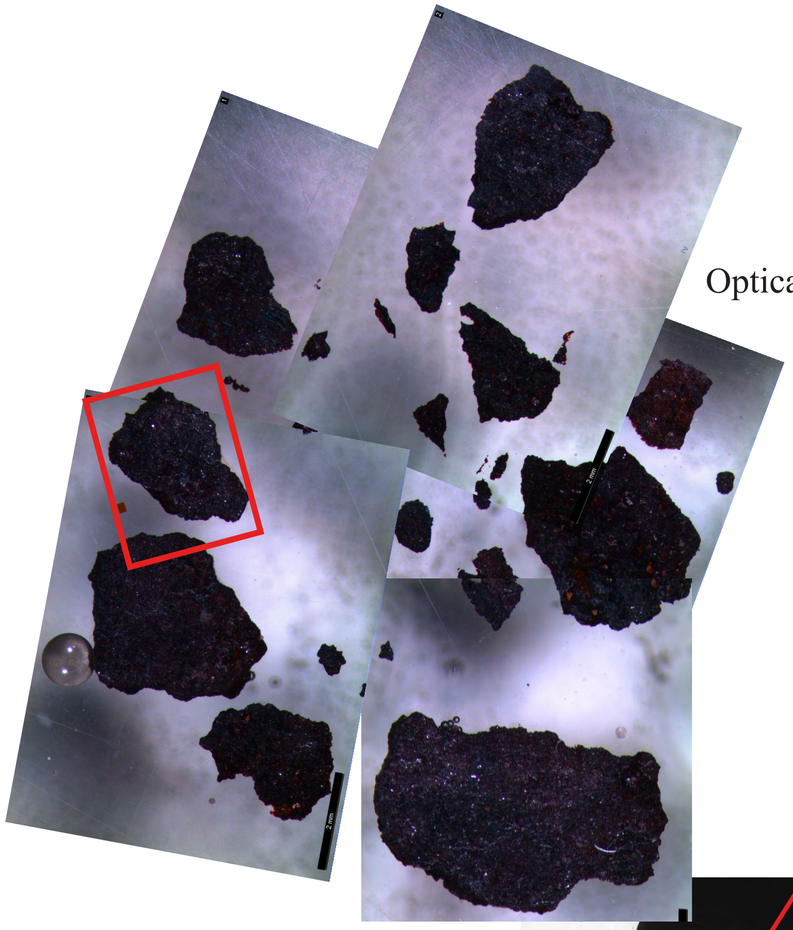


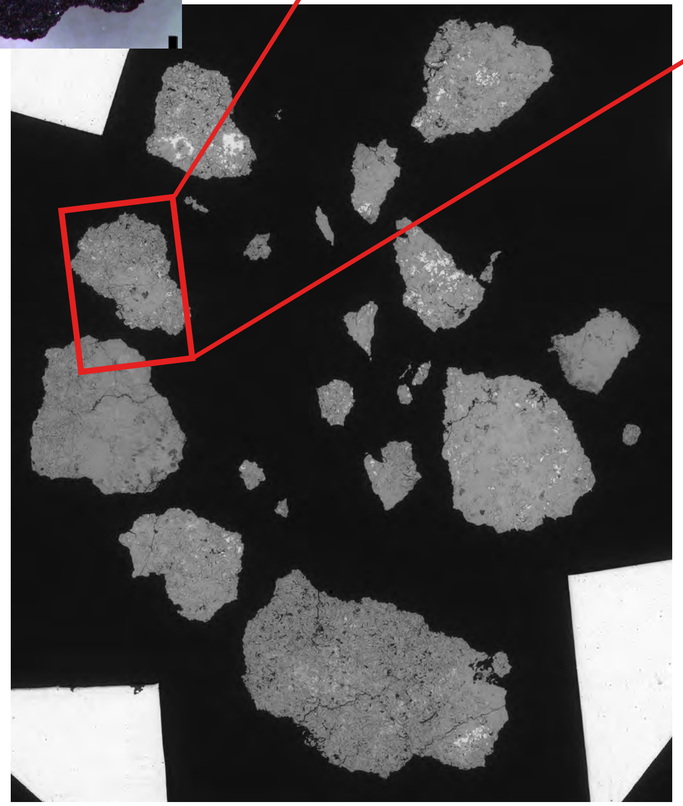
Mineral phases image



BMB5855



Optical microscopy image



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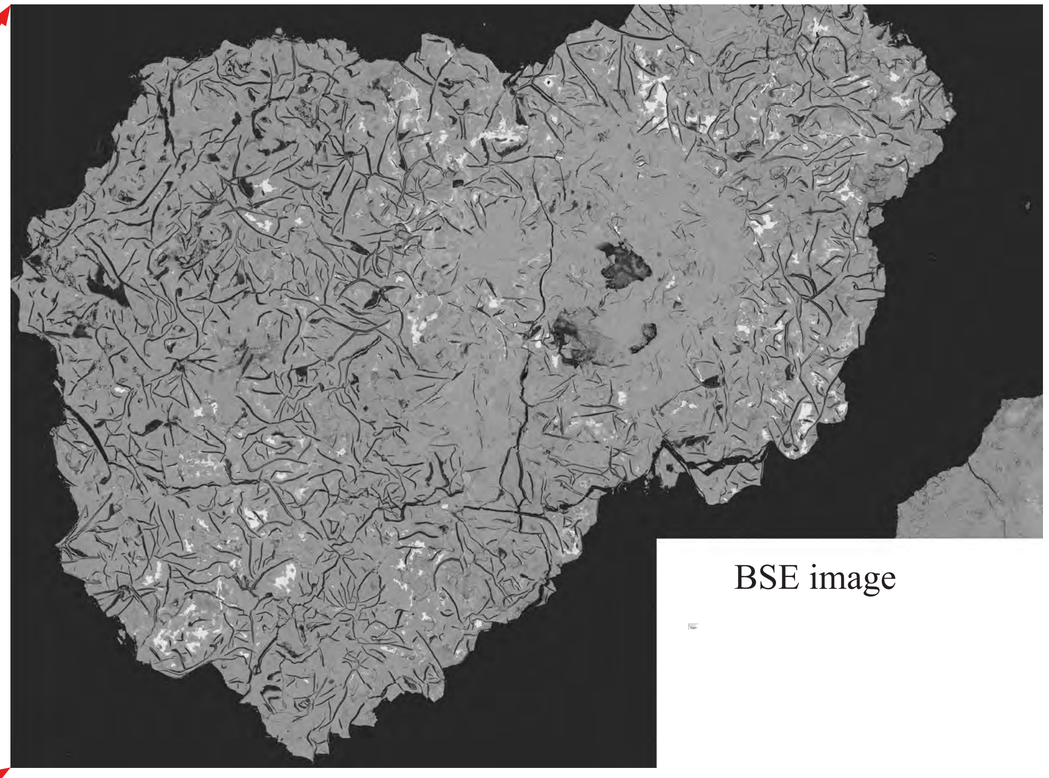
BMB5855



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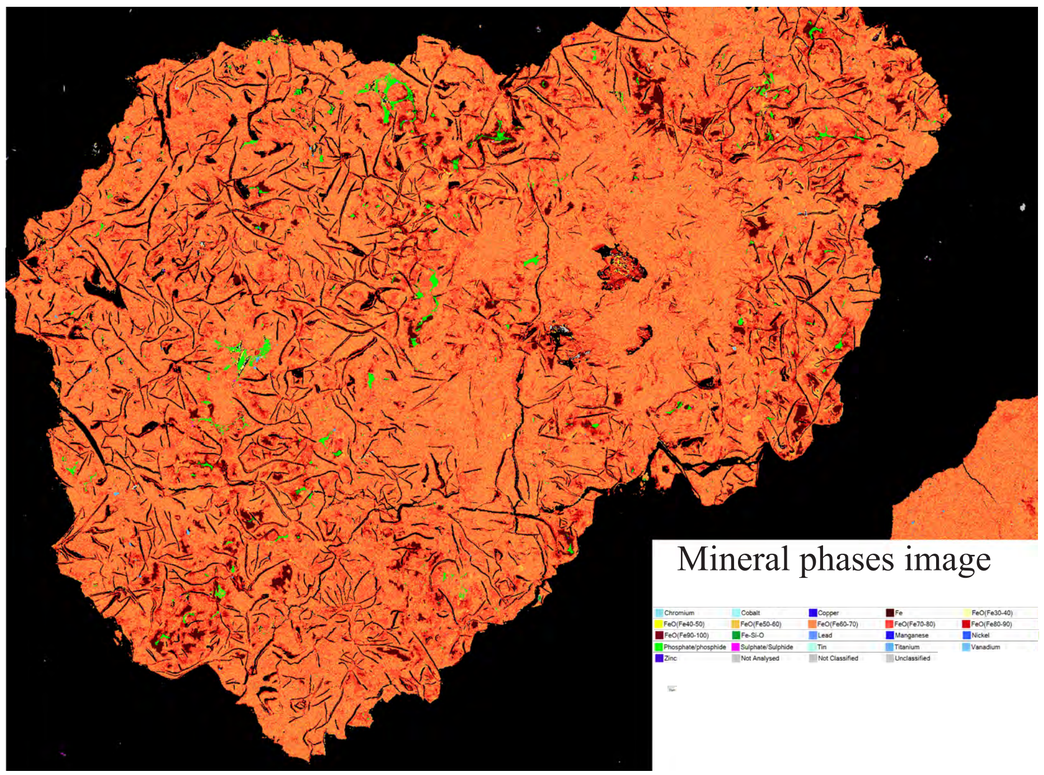

BMB5857

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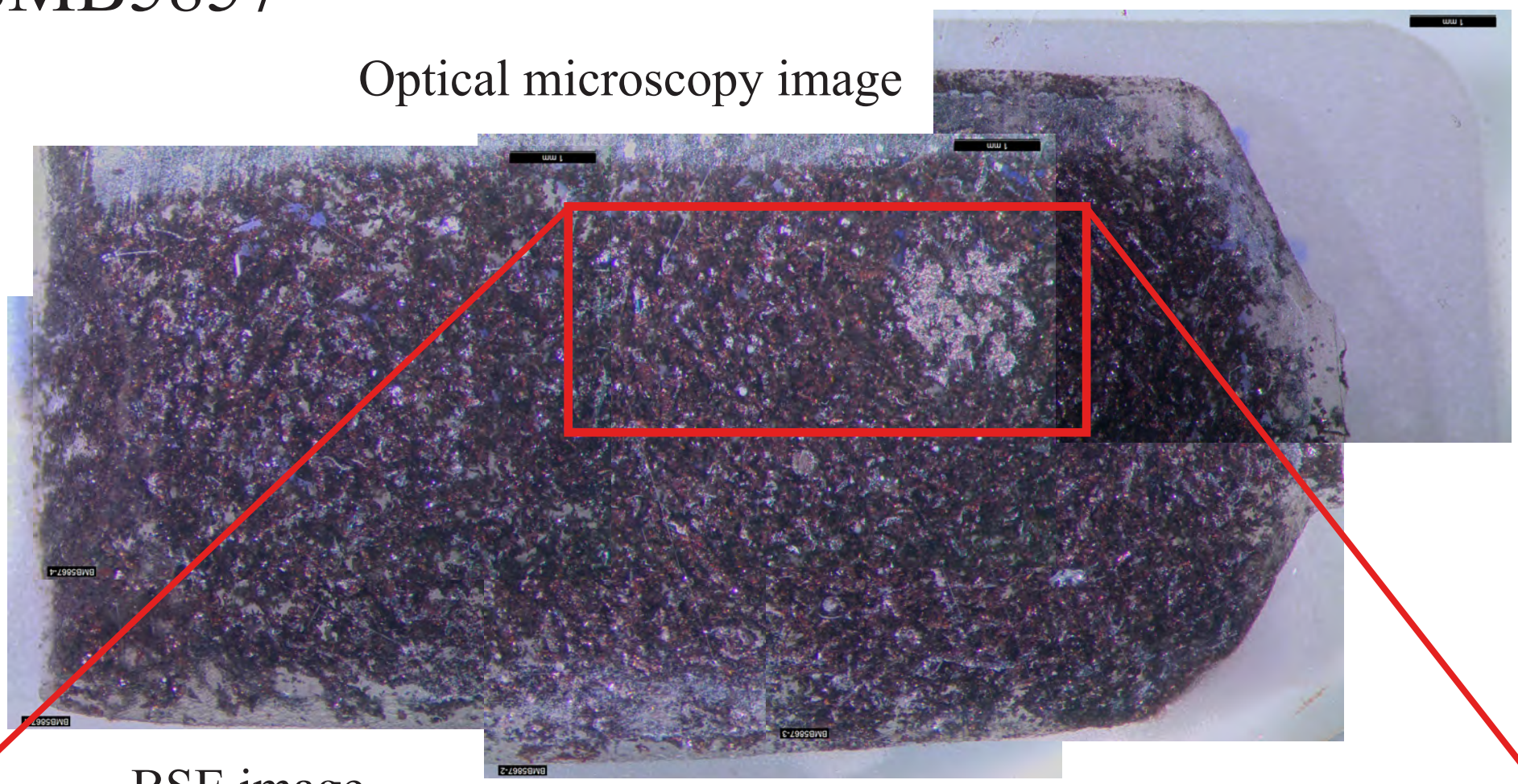

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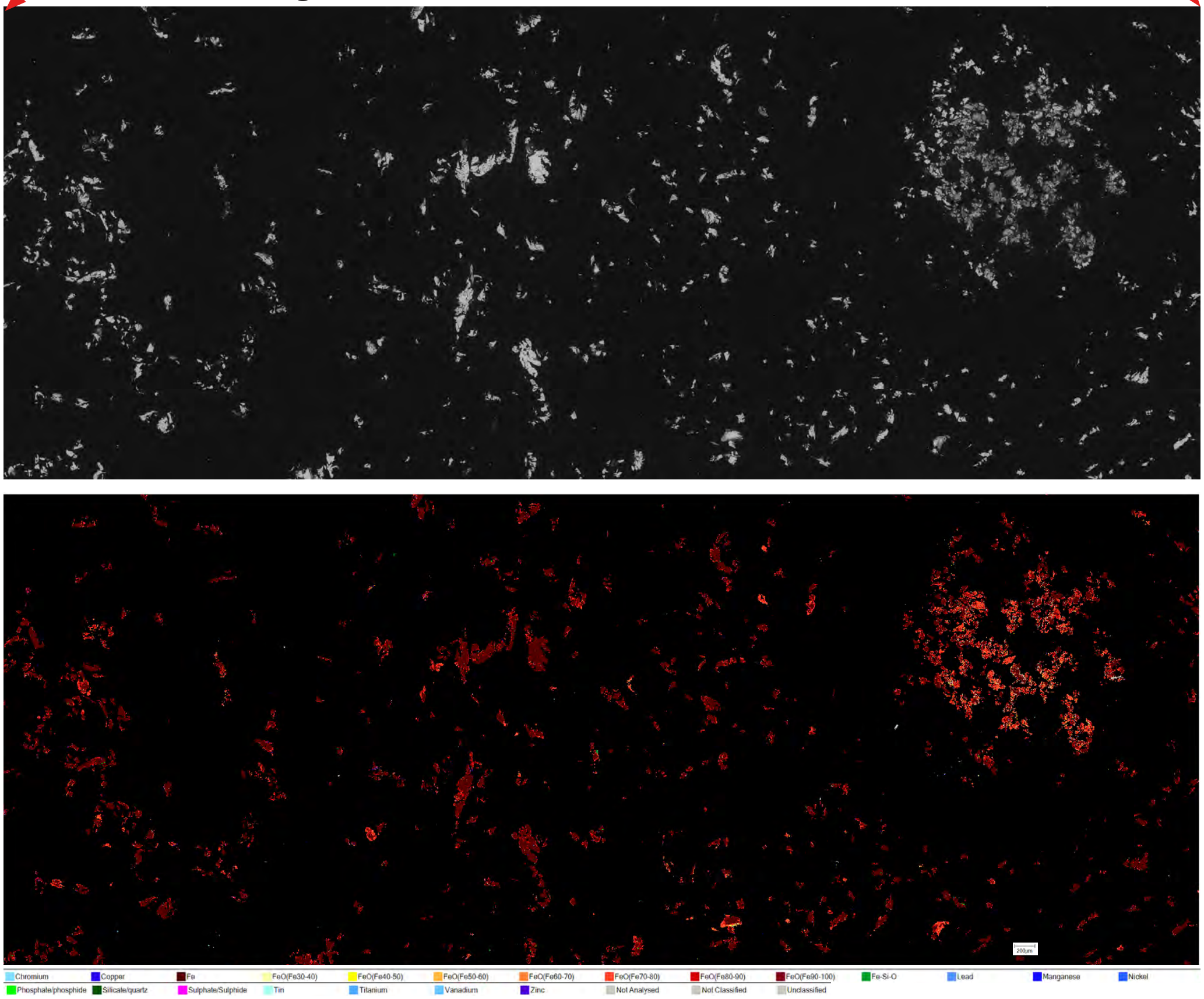
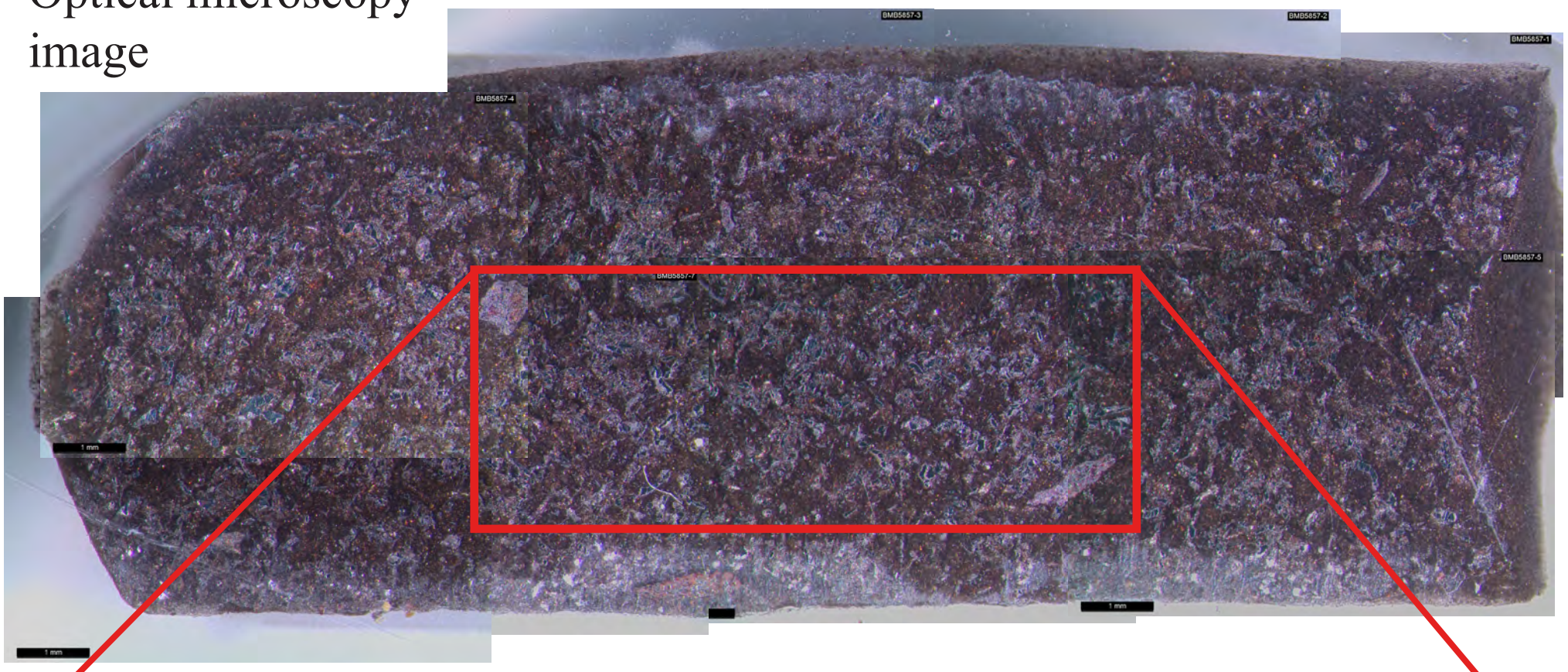


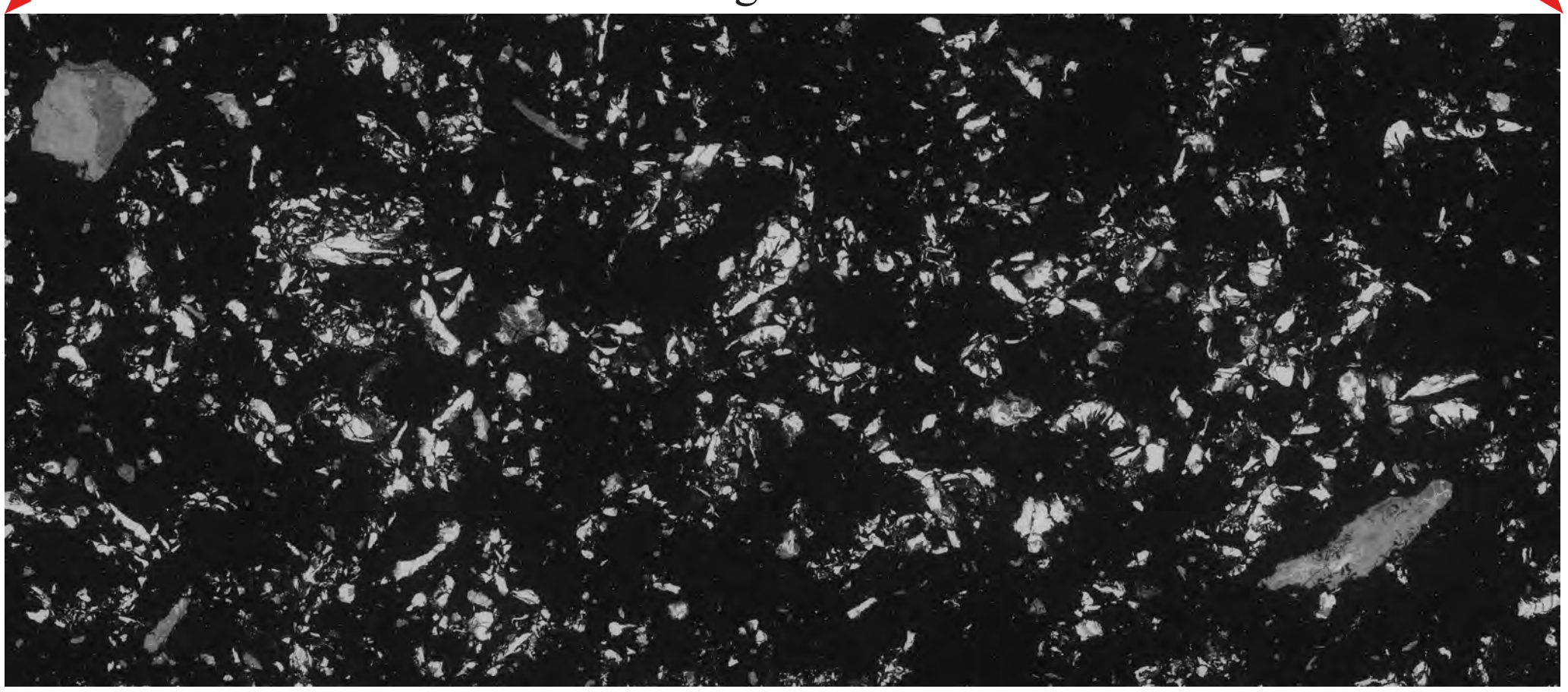
Mineral phases image

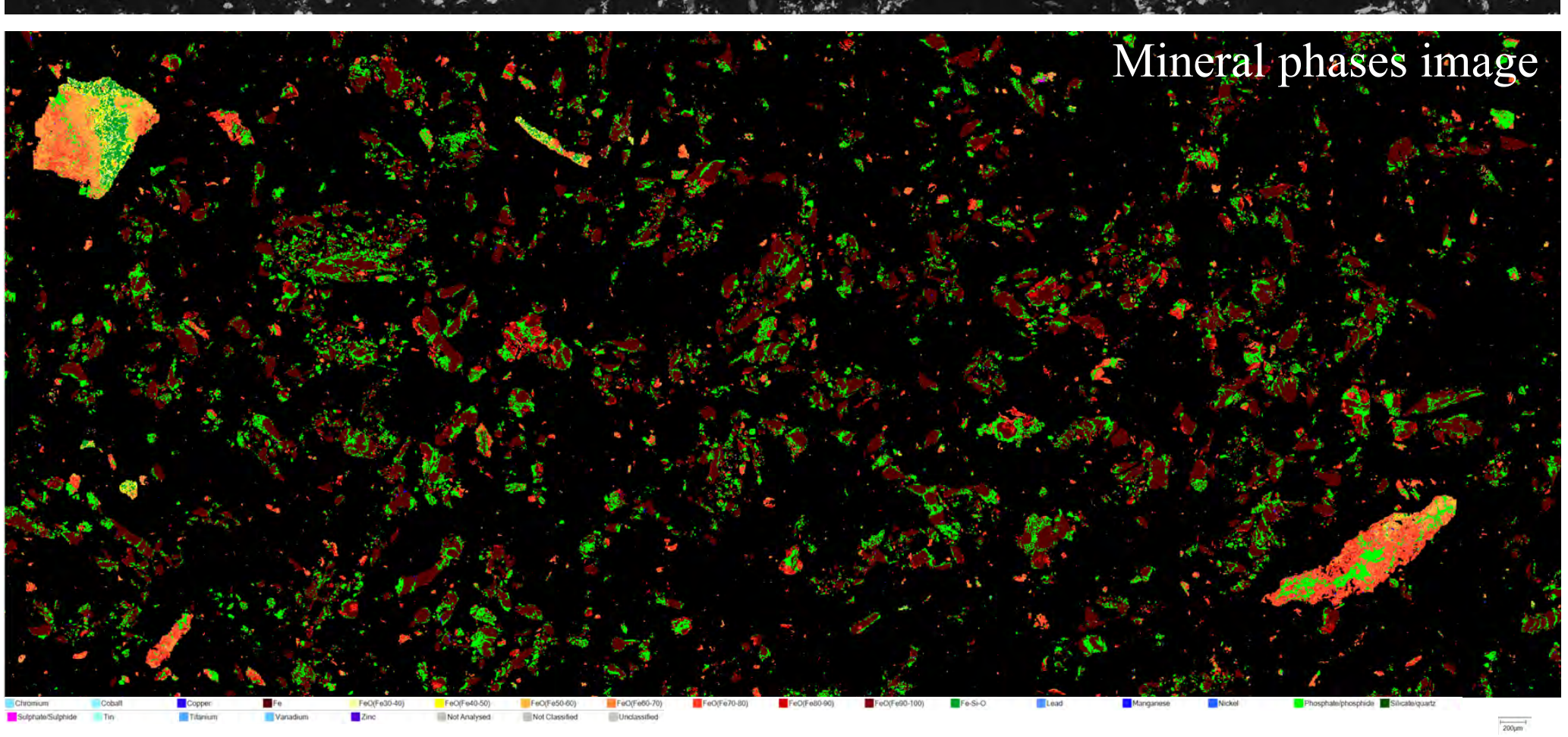
BMB5867

Optical microscopy image



BSE image





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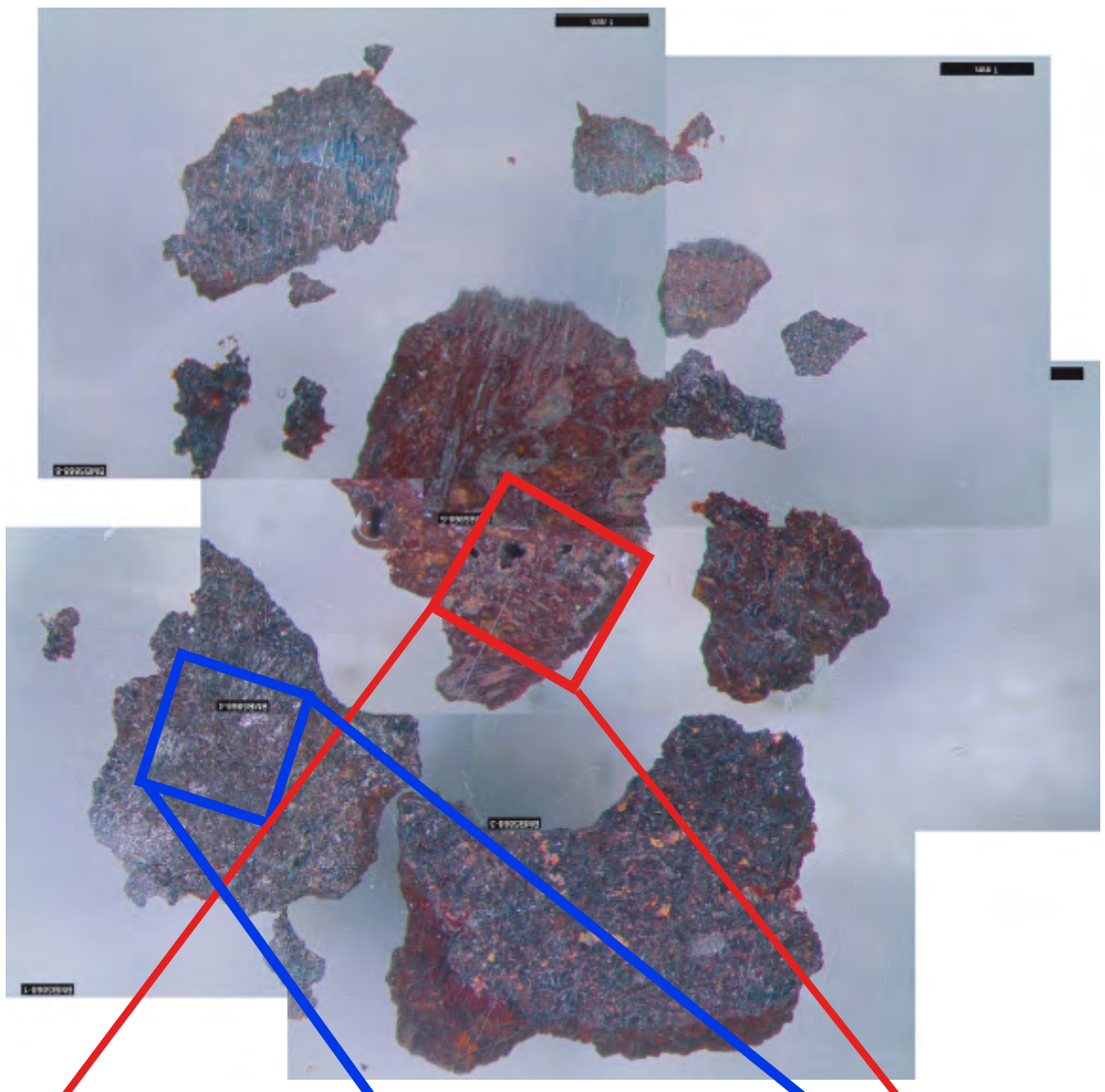
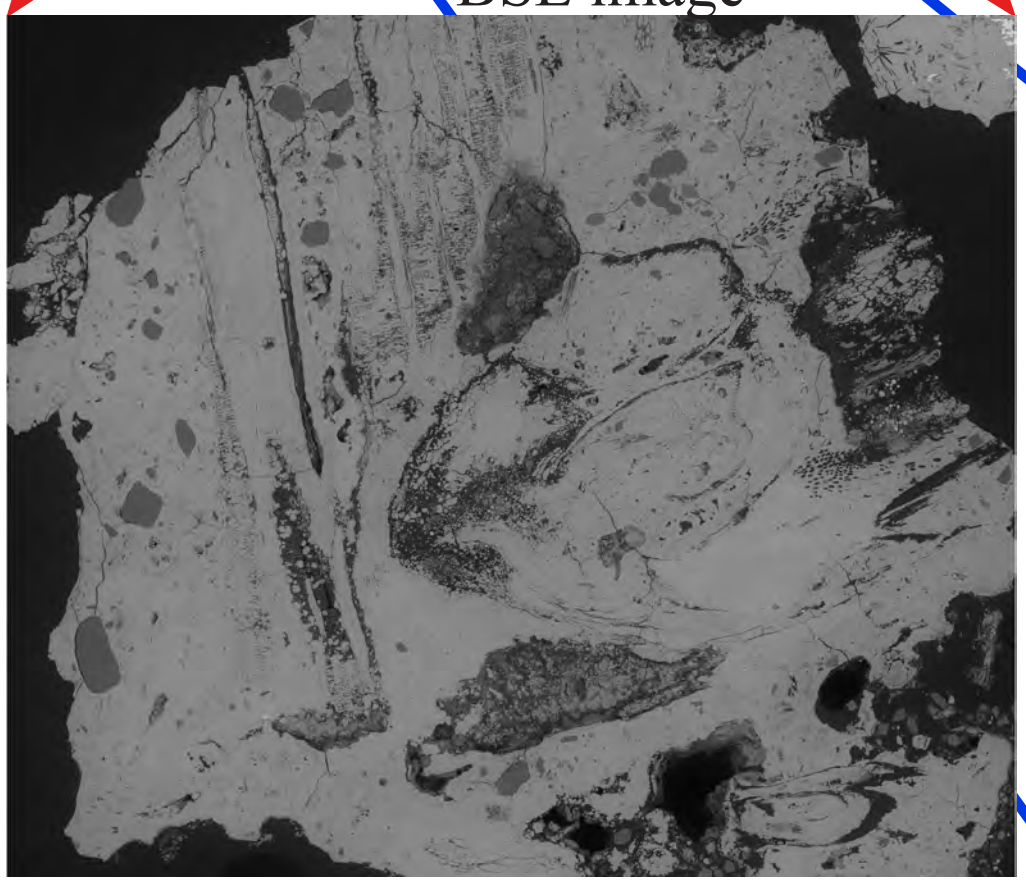
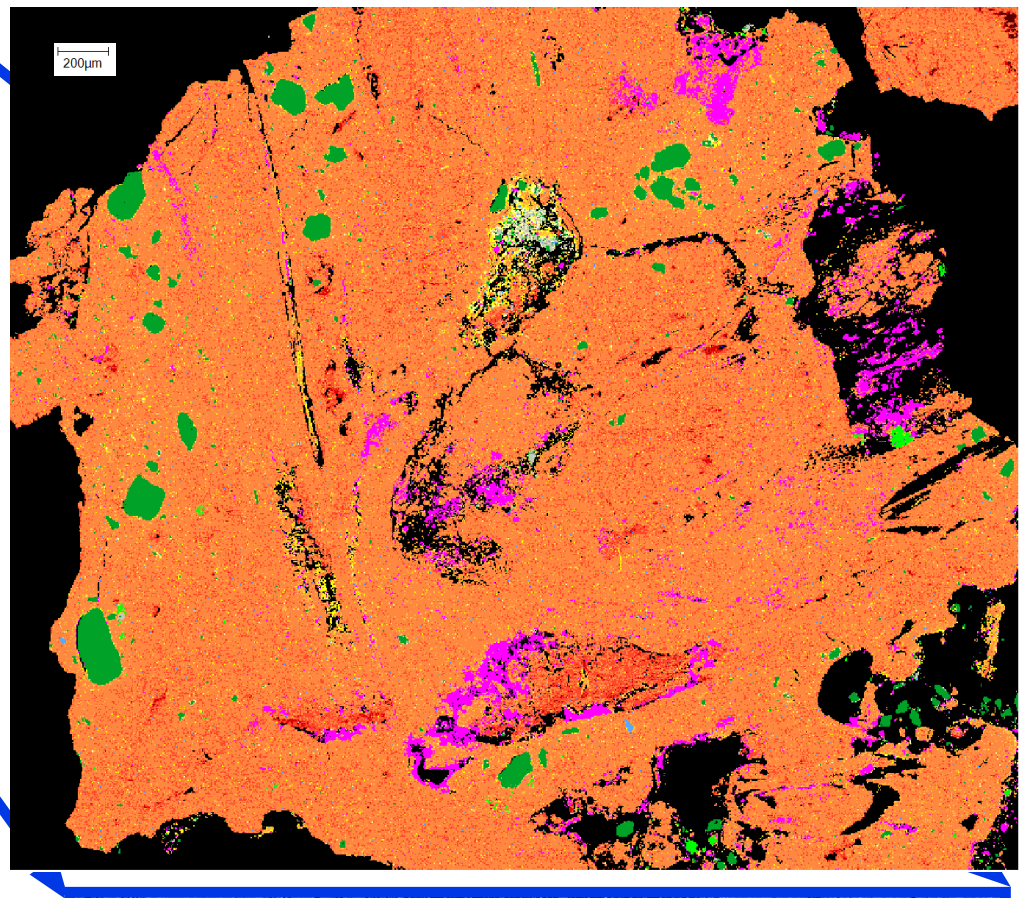


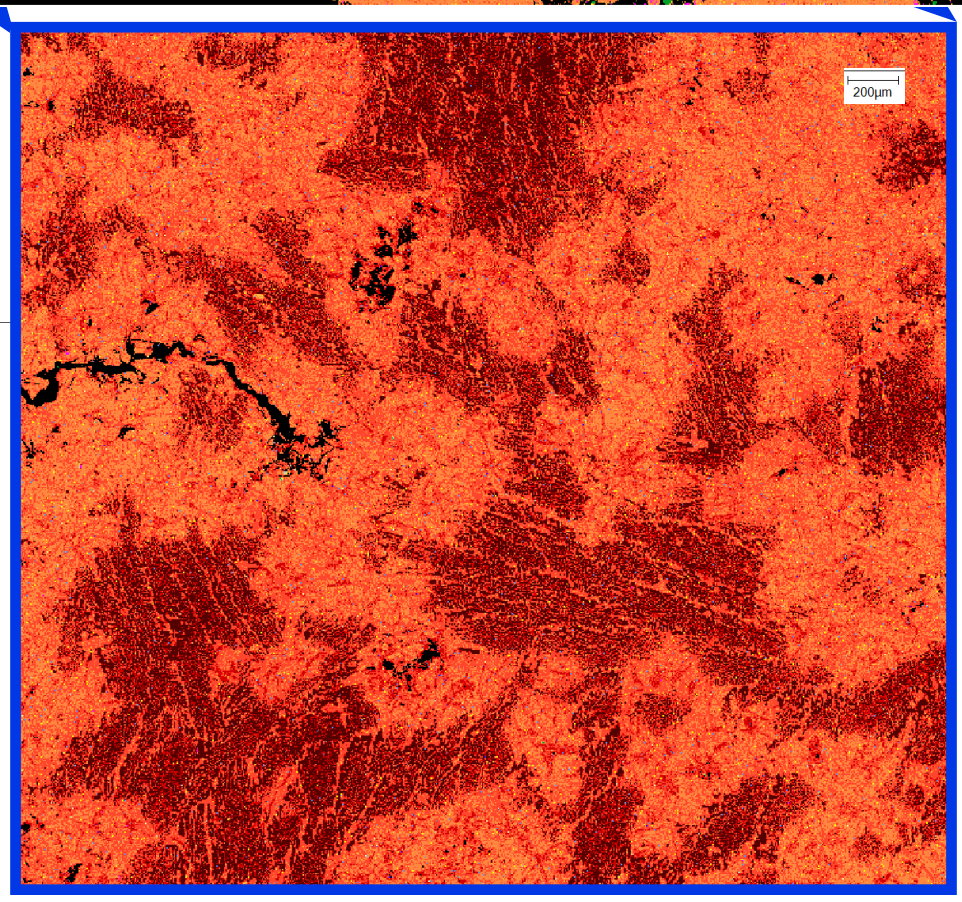
Optical microscopy image

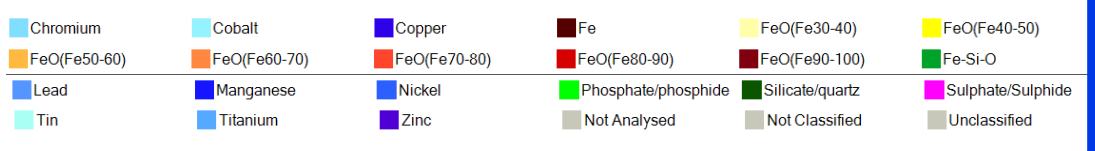
BSE image



Mineral phases images







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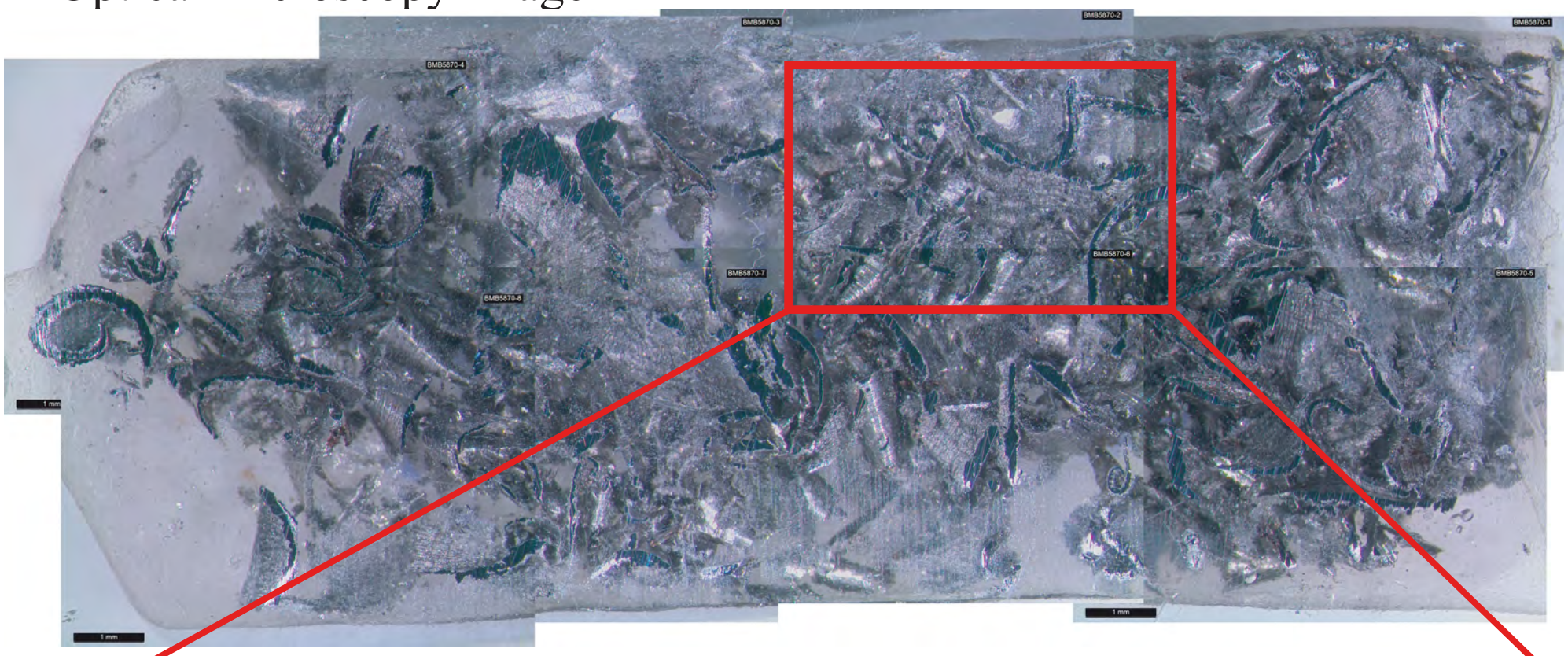

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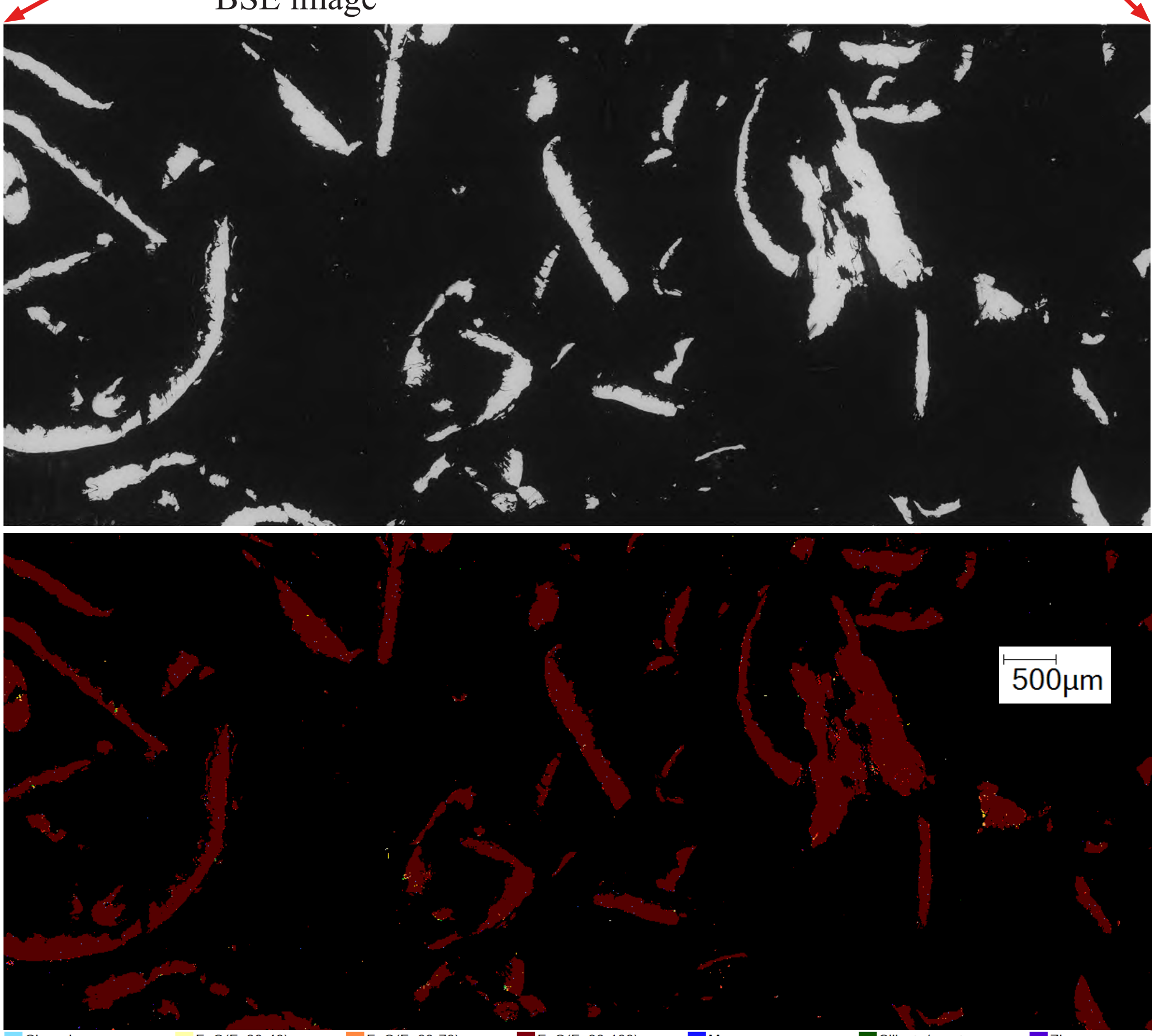

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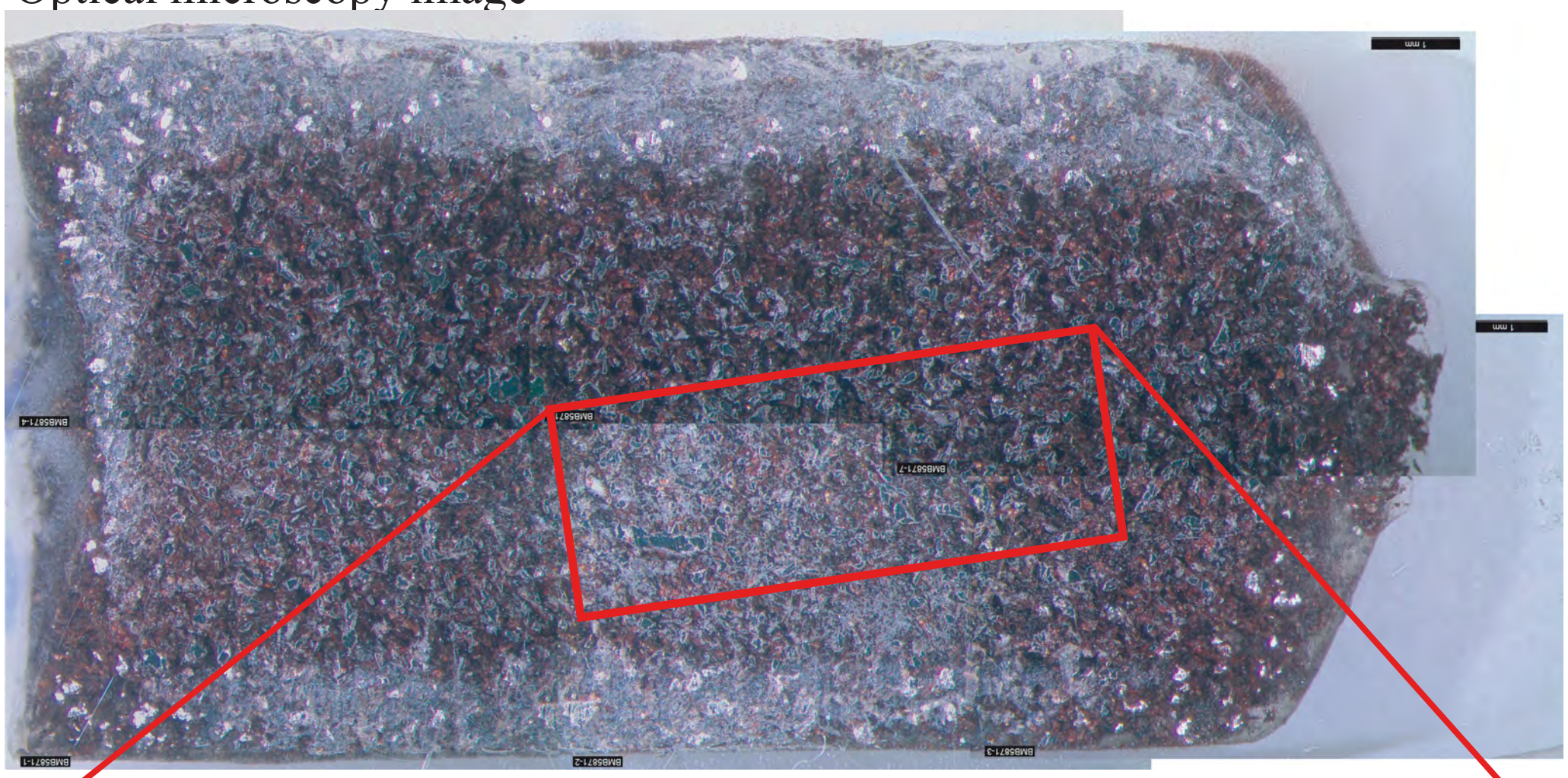

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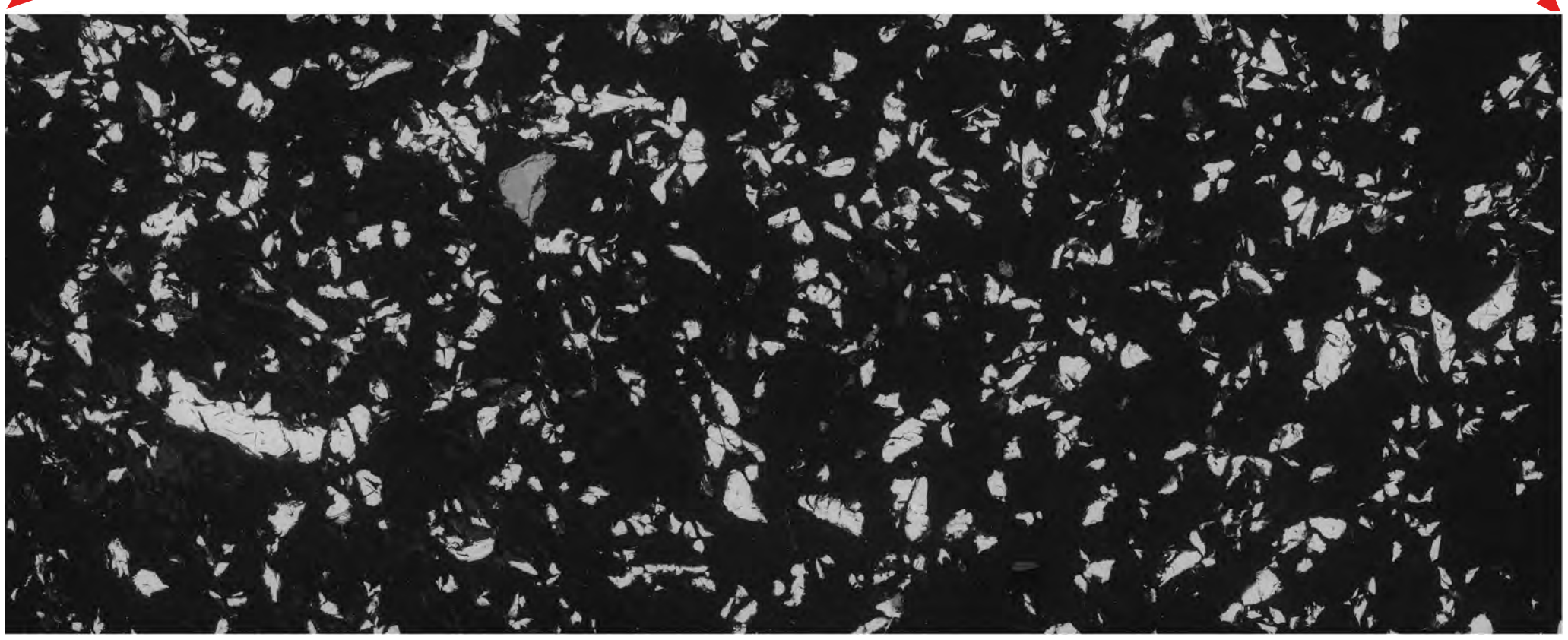

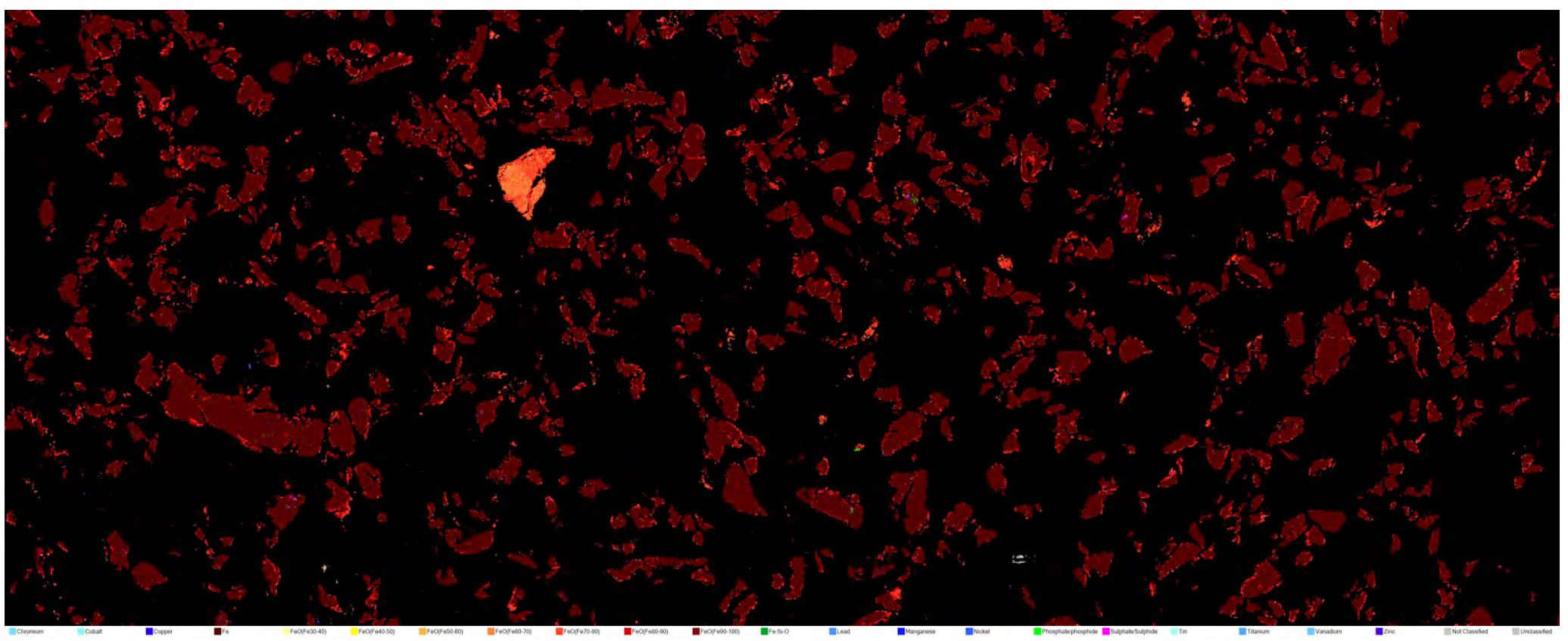

Mineral phases image

Optical microscopy image

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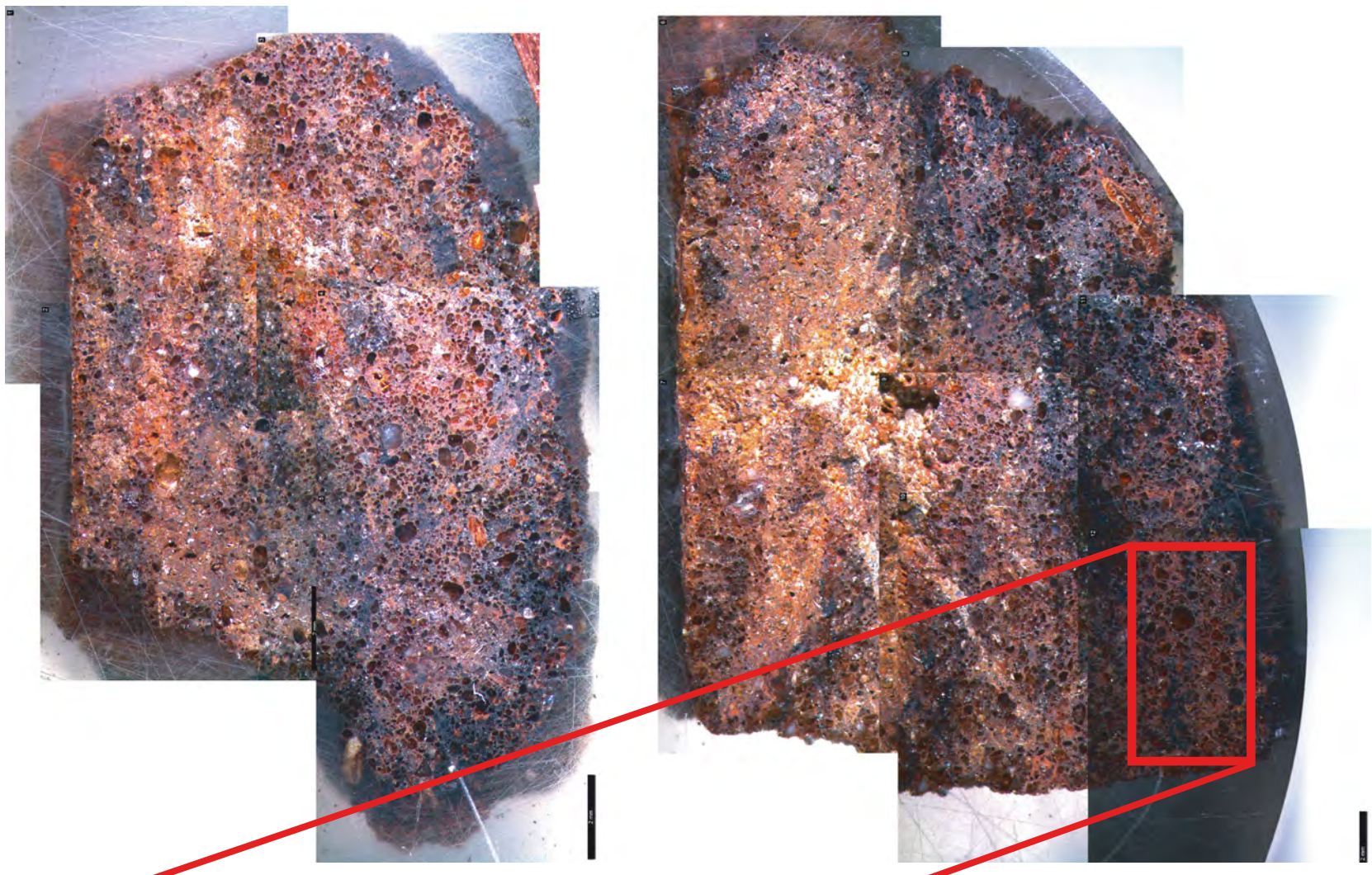

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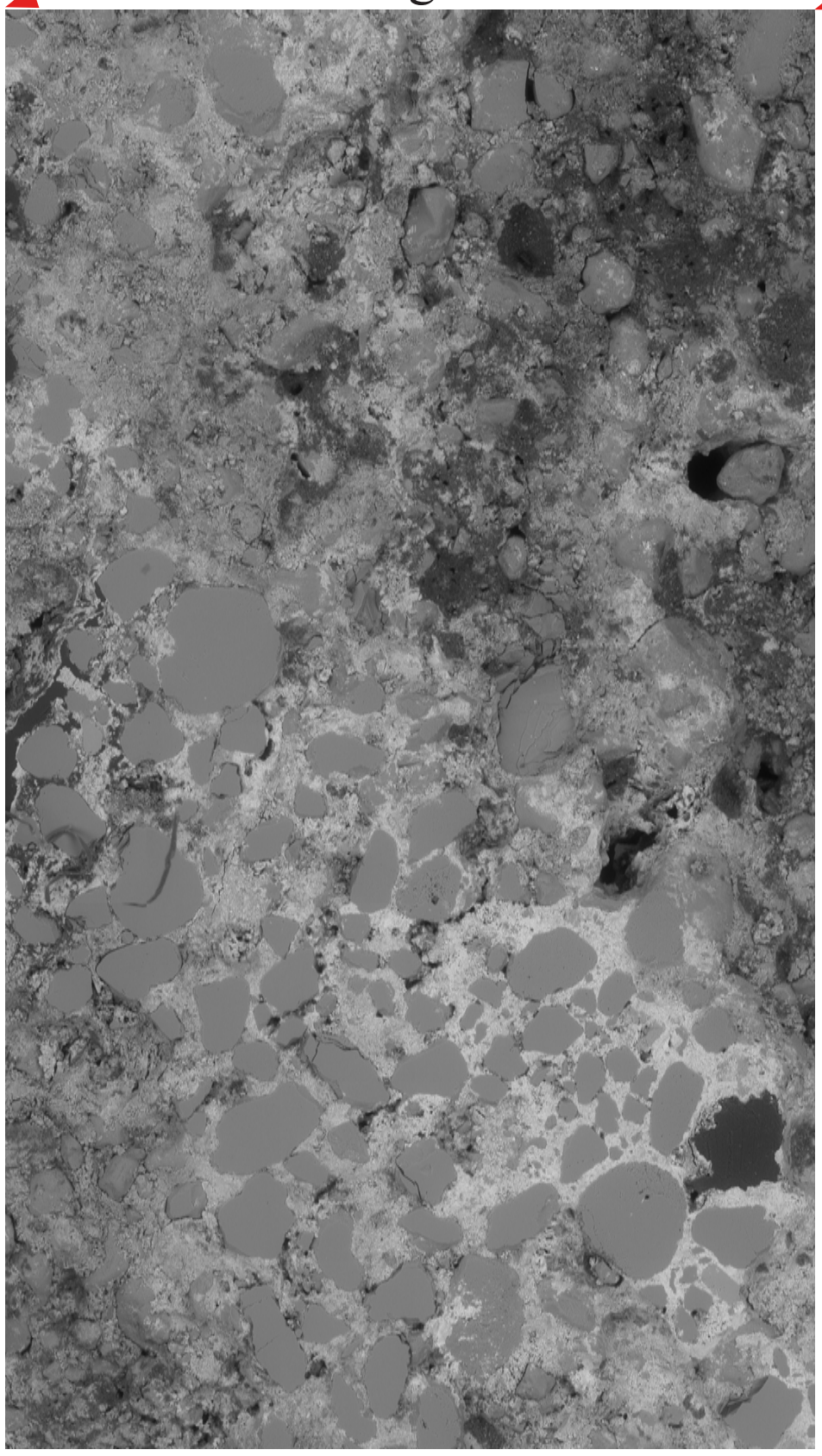
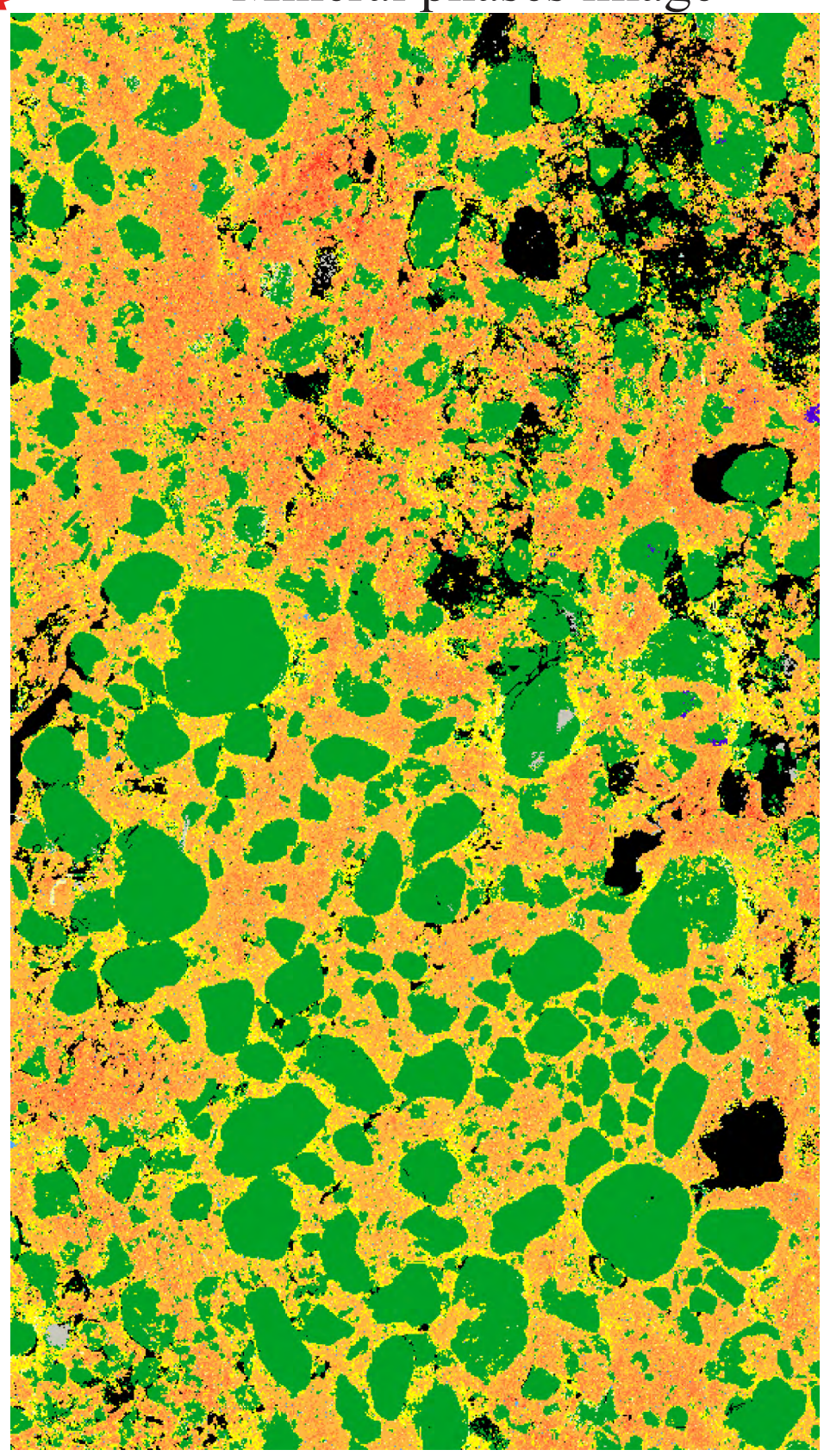
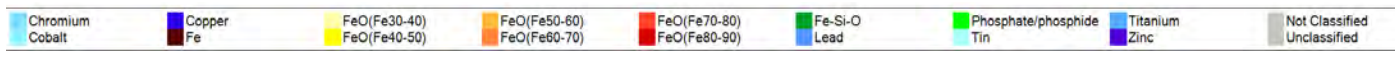


Mineral phases image





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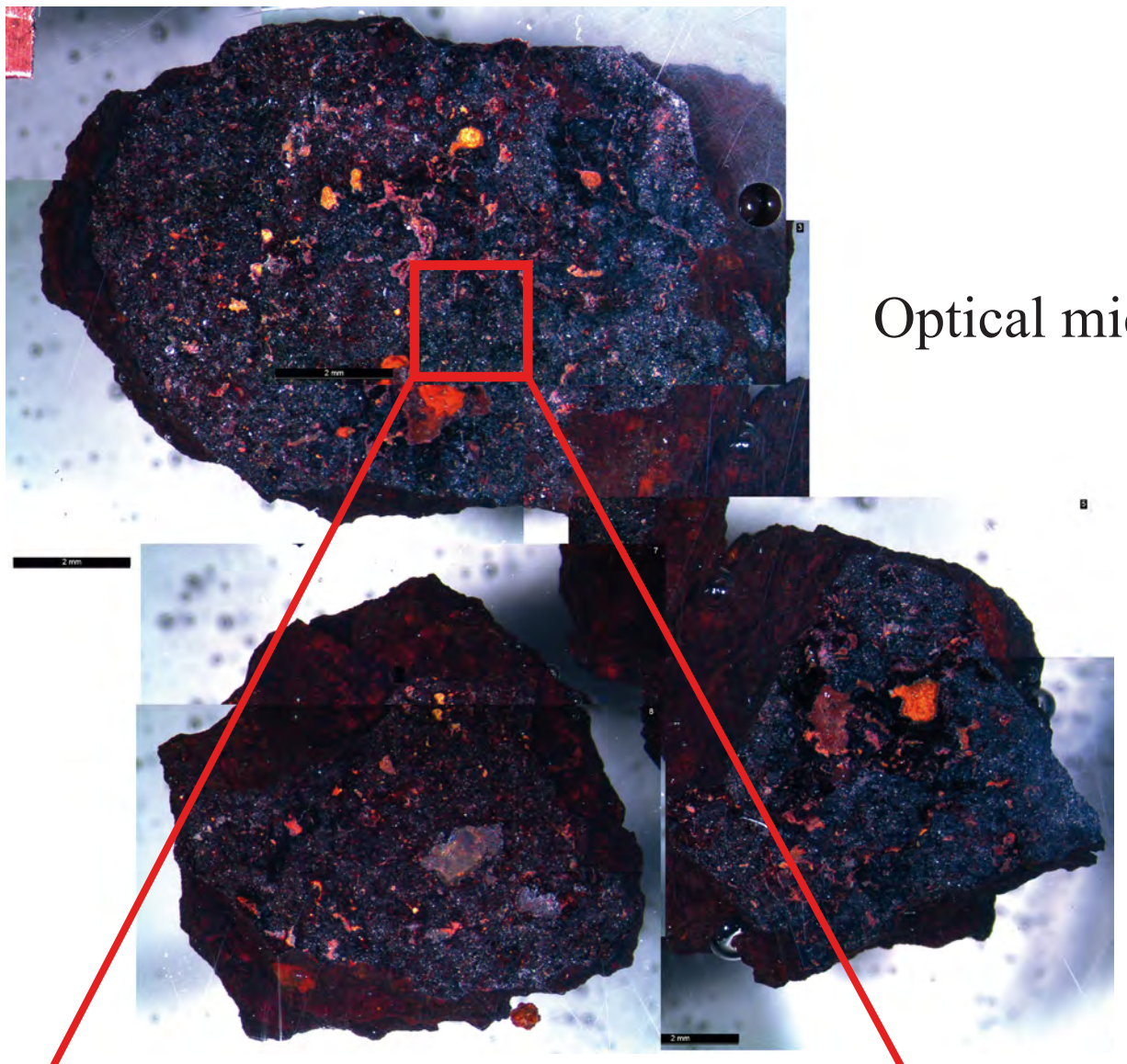

Optical microscopy image

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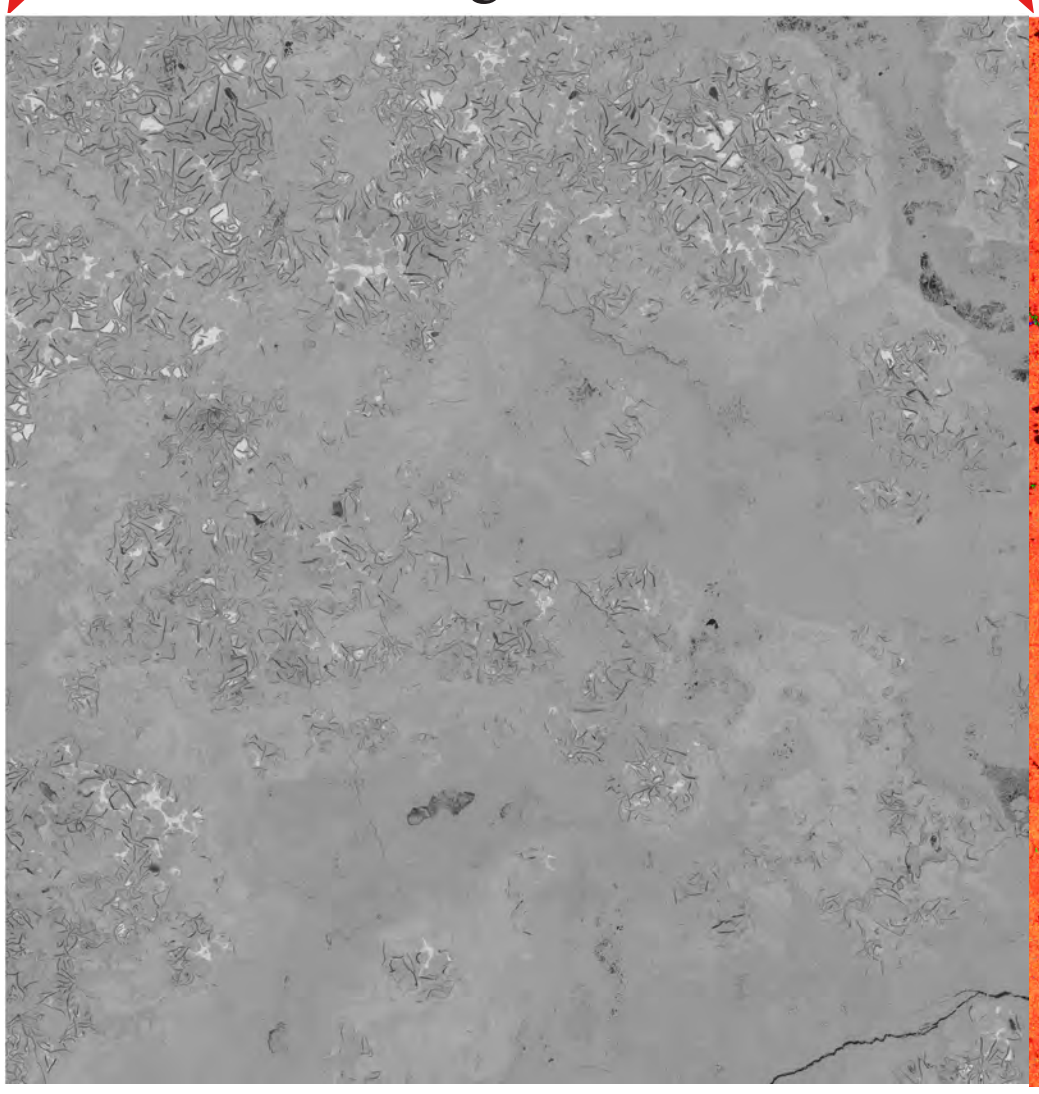

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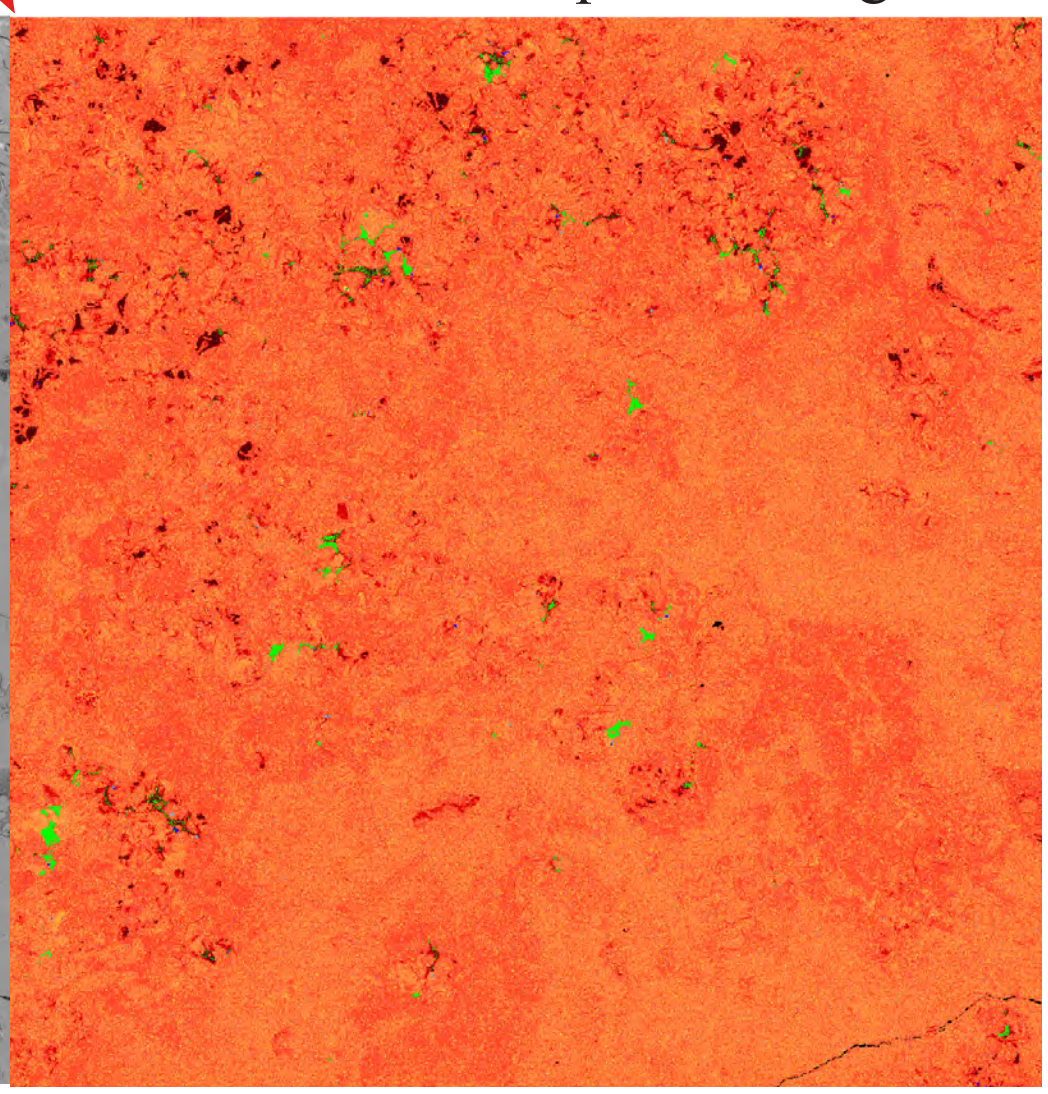

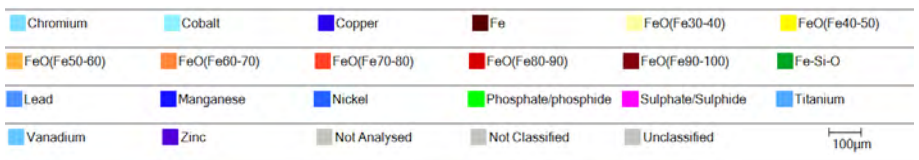

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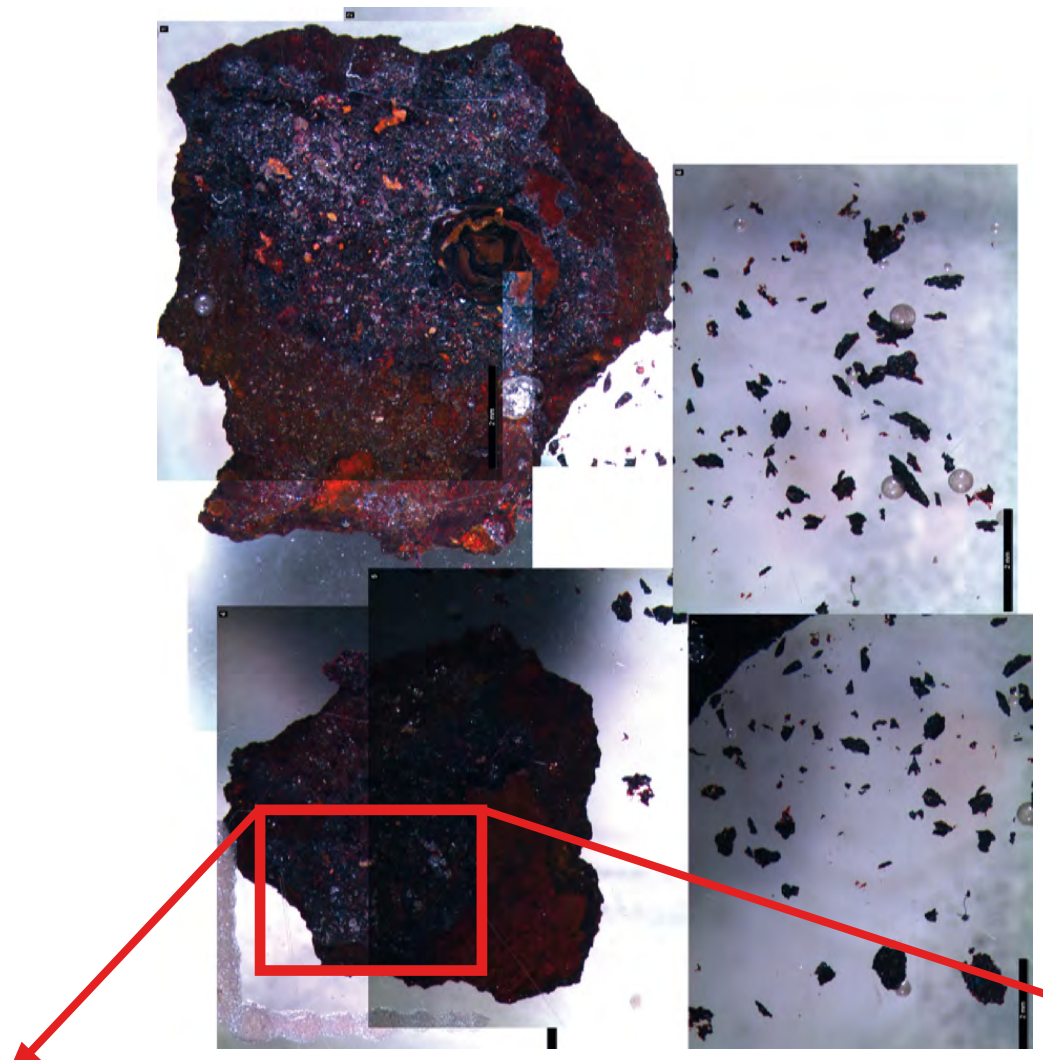
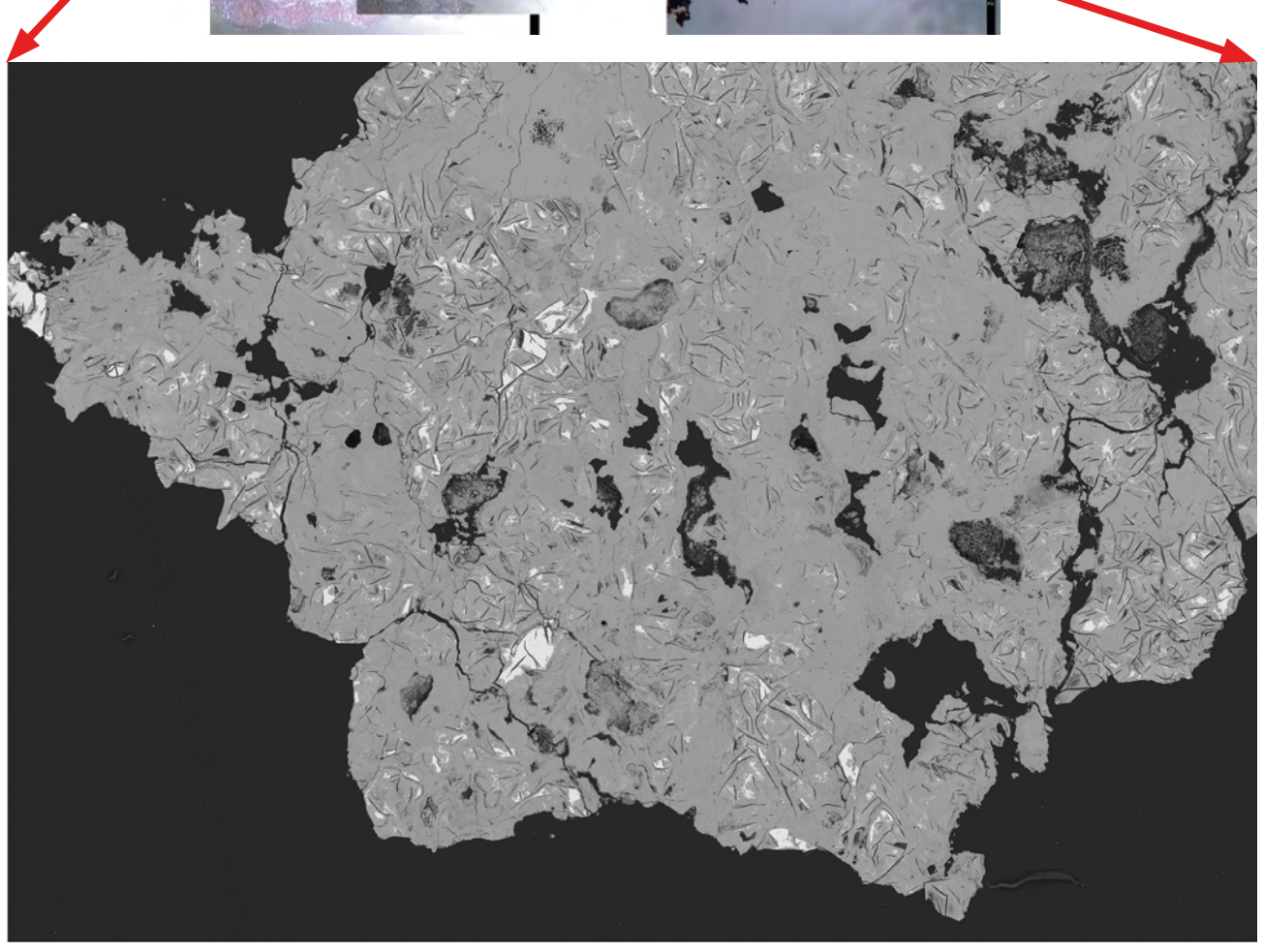


Optical microscopy image



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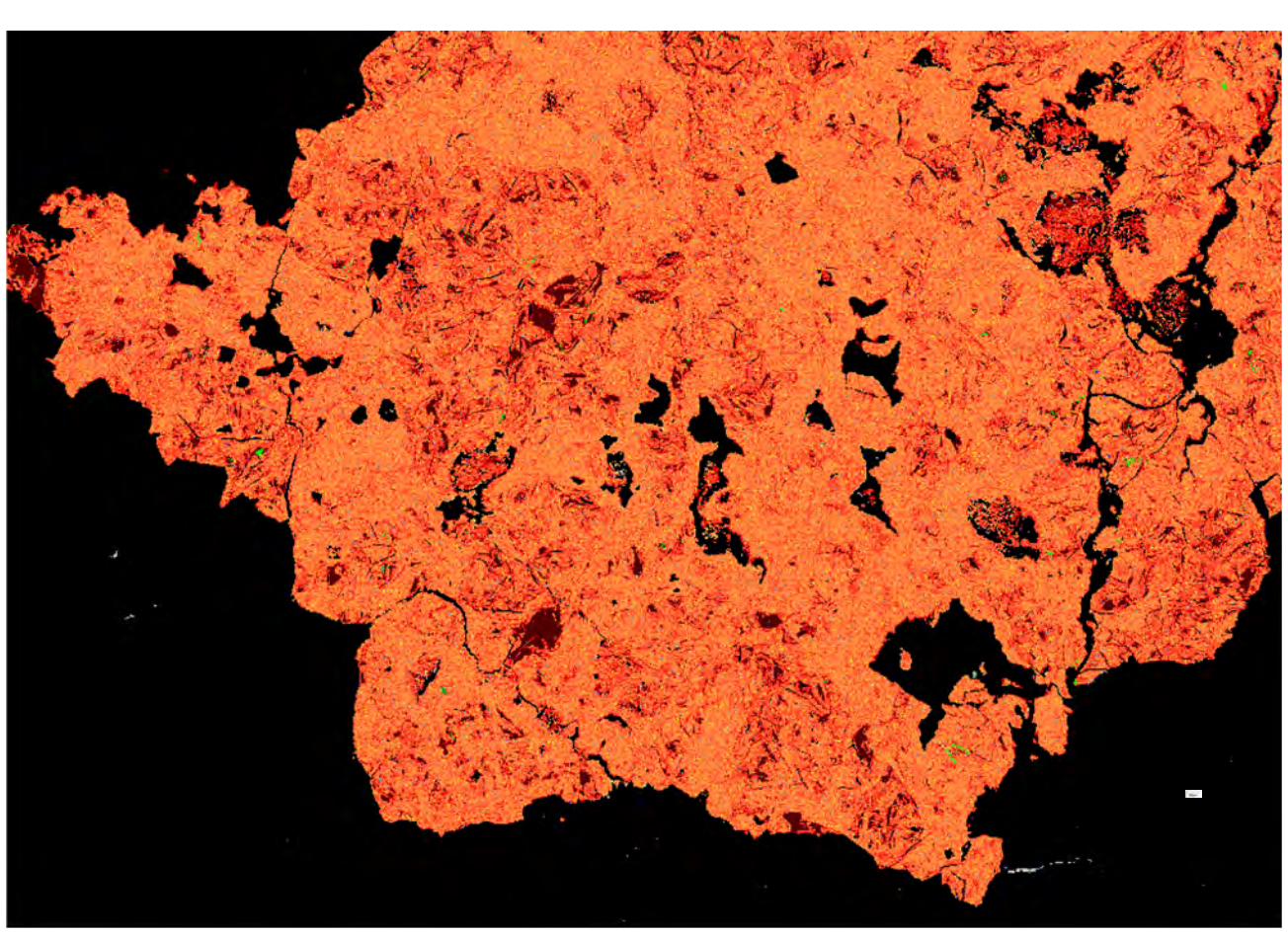

Mineral phases image

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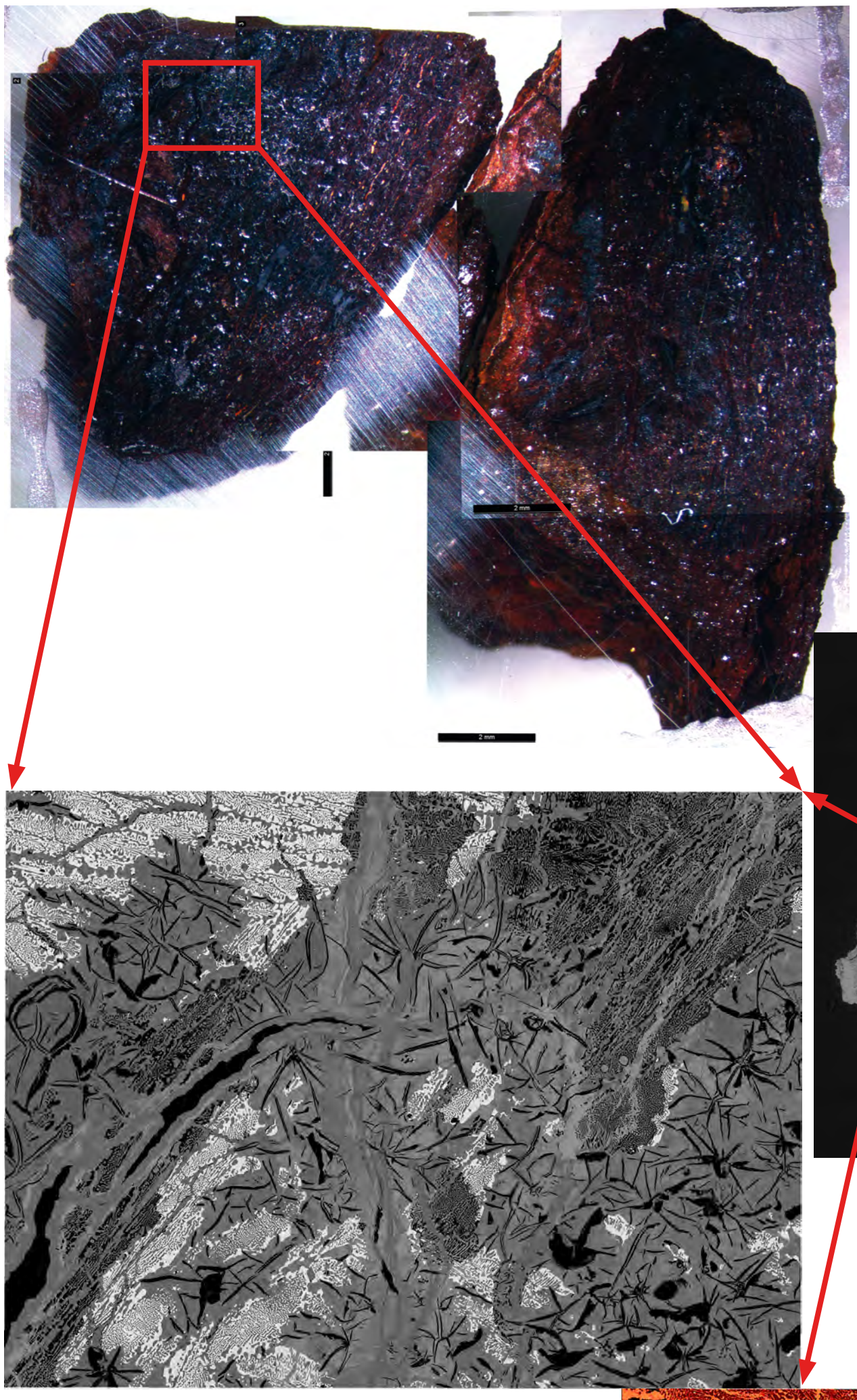
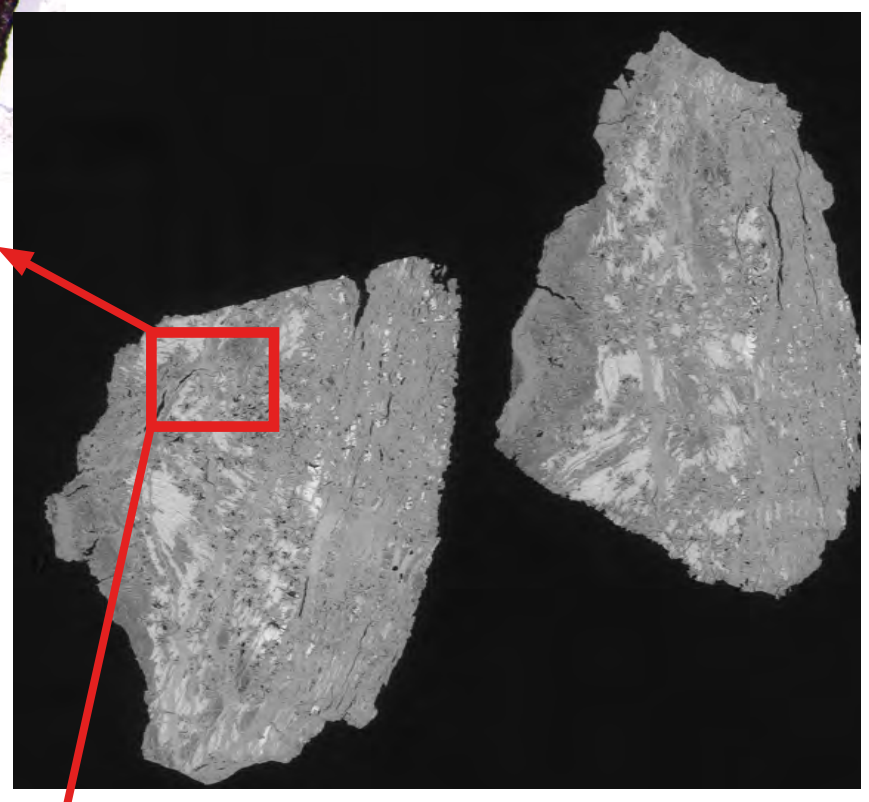
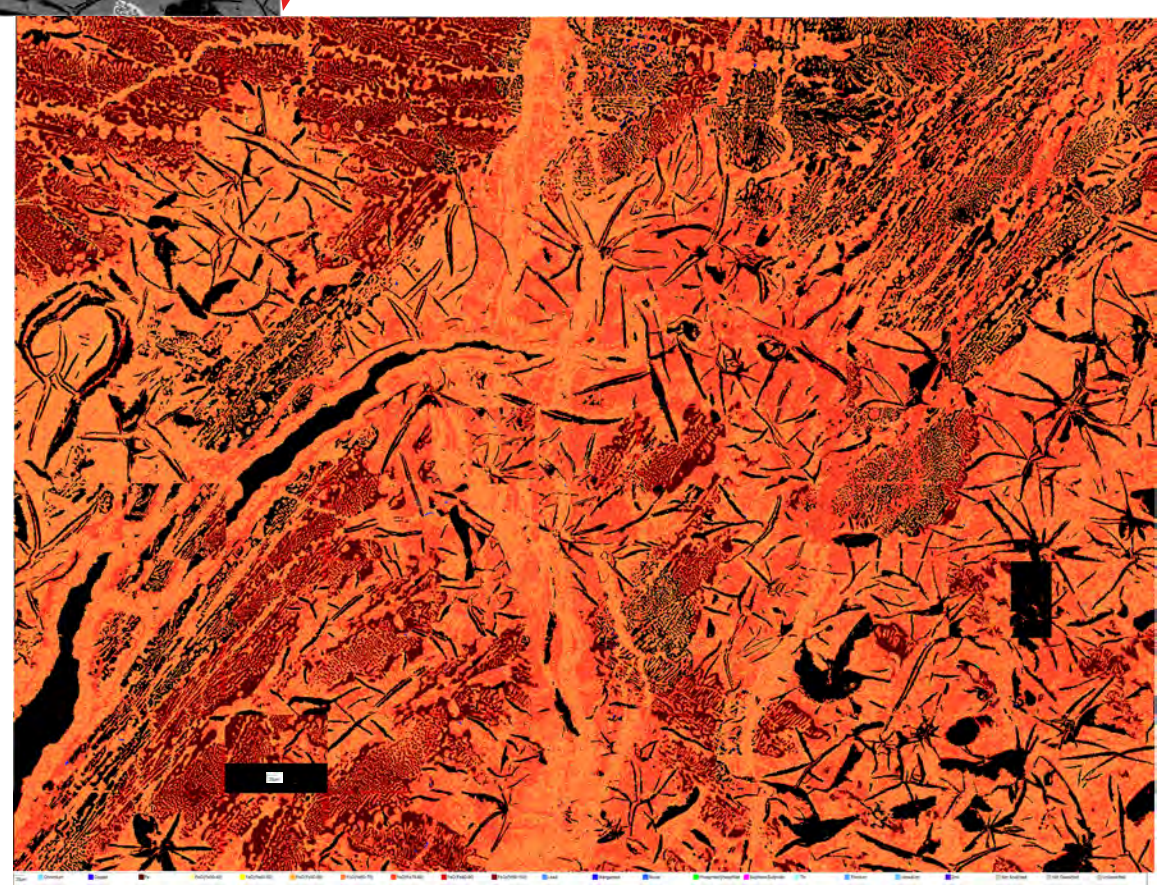


Optical microscopy image



BSE images

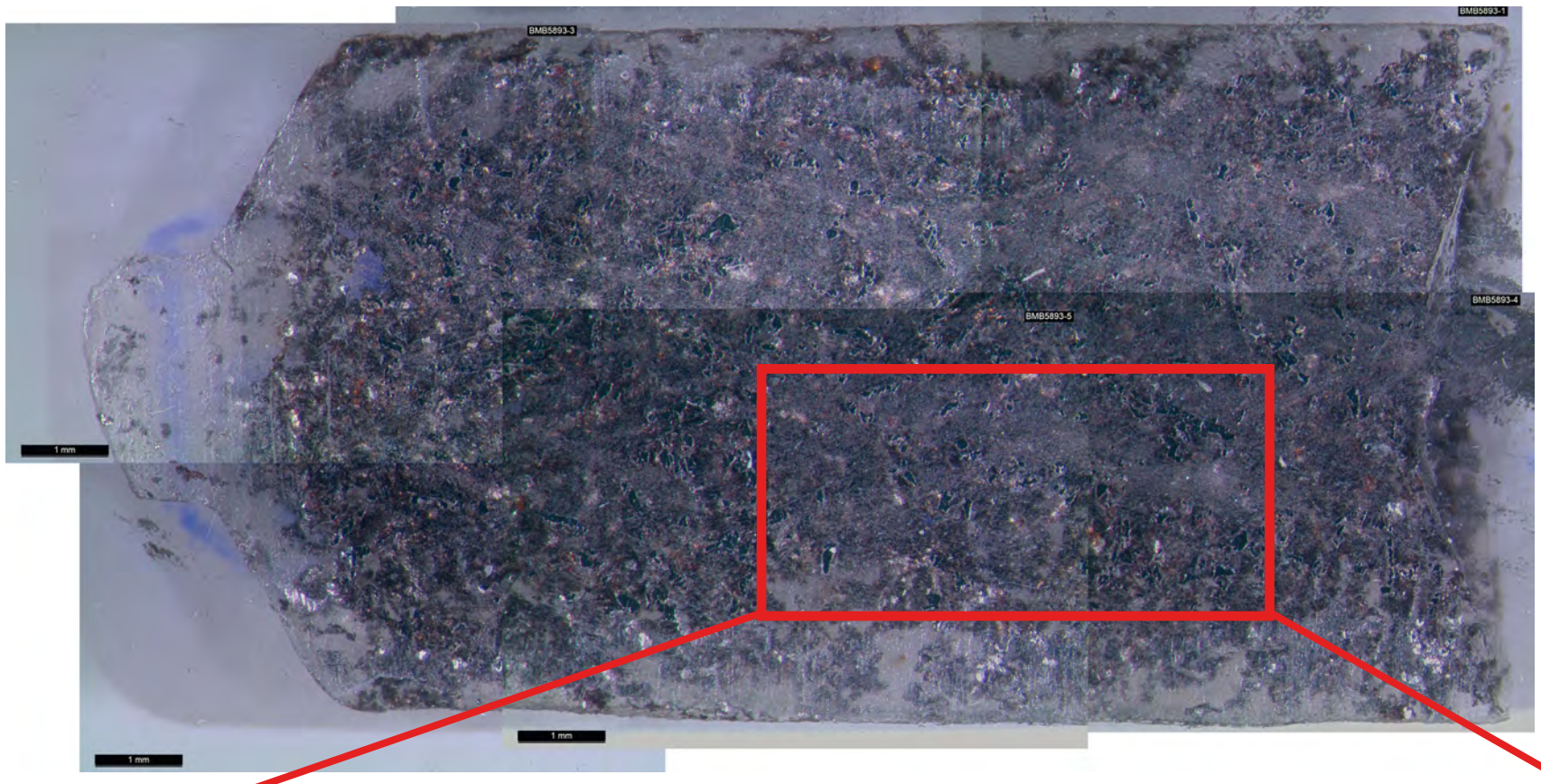
Mineral phases image



Chromium	Copper	Fe	FeO(Fe30-40)	FeO(Fe40-50)
FeO(Fe60-70)	FeO(Fe70-80)	FeO(Fe80-90)	FeO(Fe90-100)	Lead
Manganese	Nickel	Phosphate/phosphide	Sulphate/Sulphide	Tin
Titanium	Vanadium	Zinc	Not Analysed	Not Classified

BMB5893

Optical microscopy image



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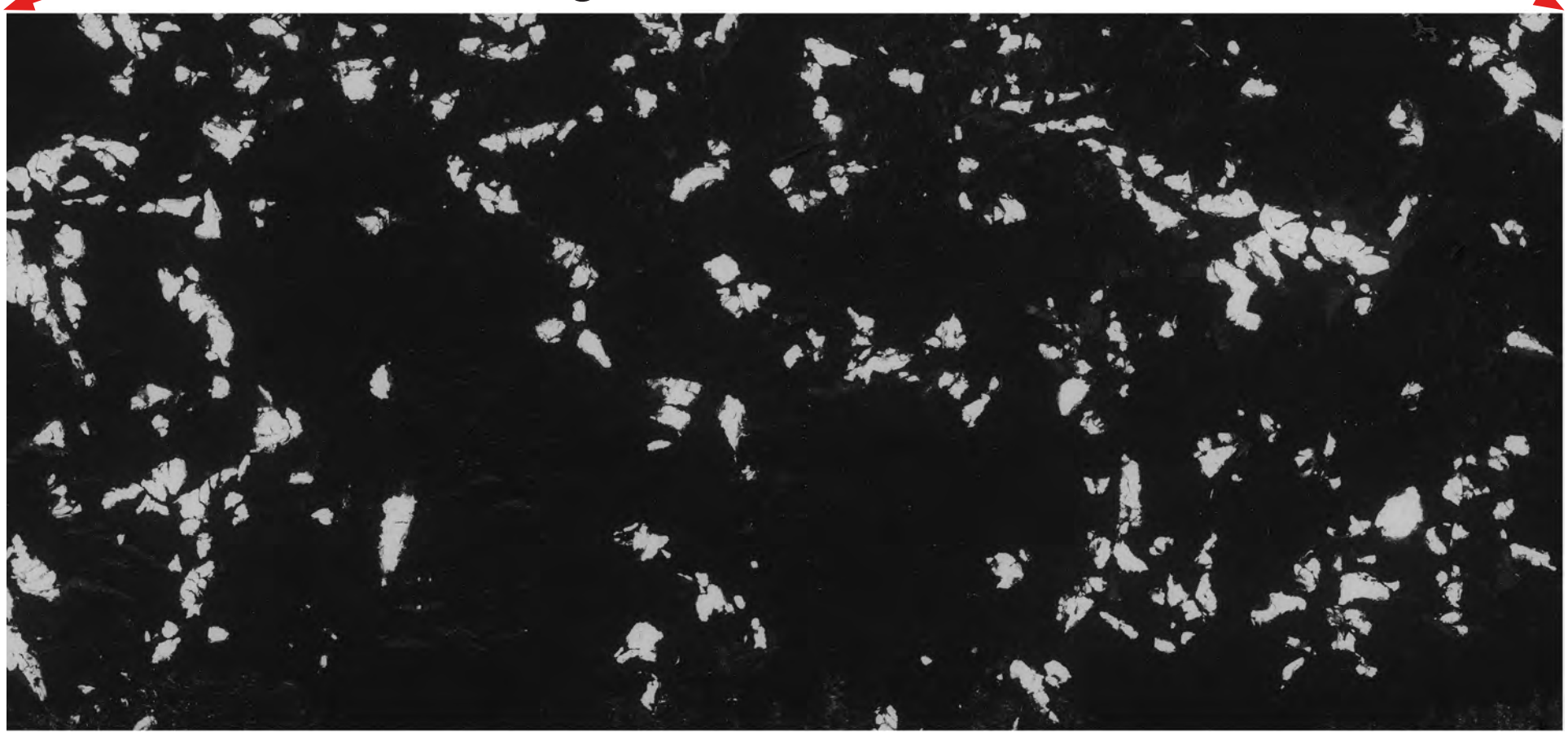

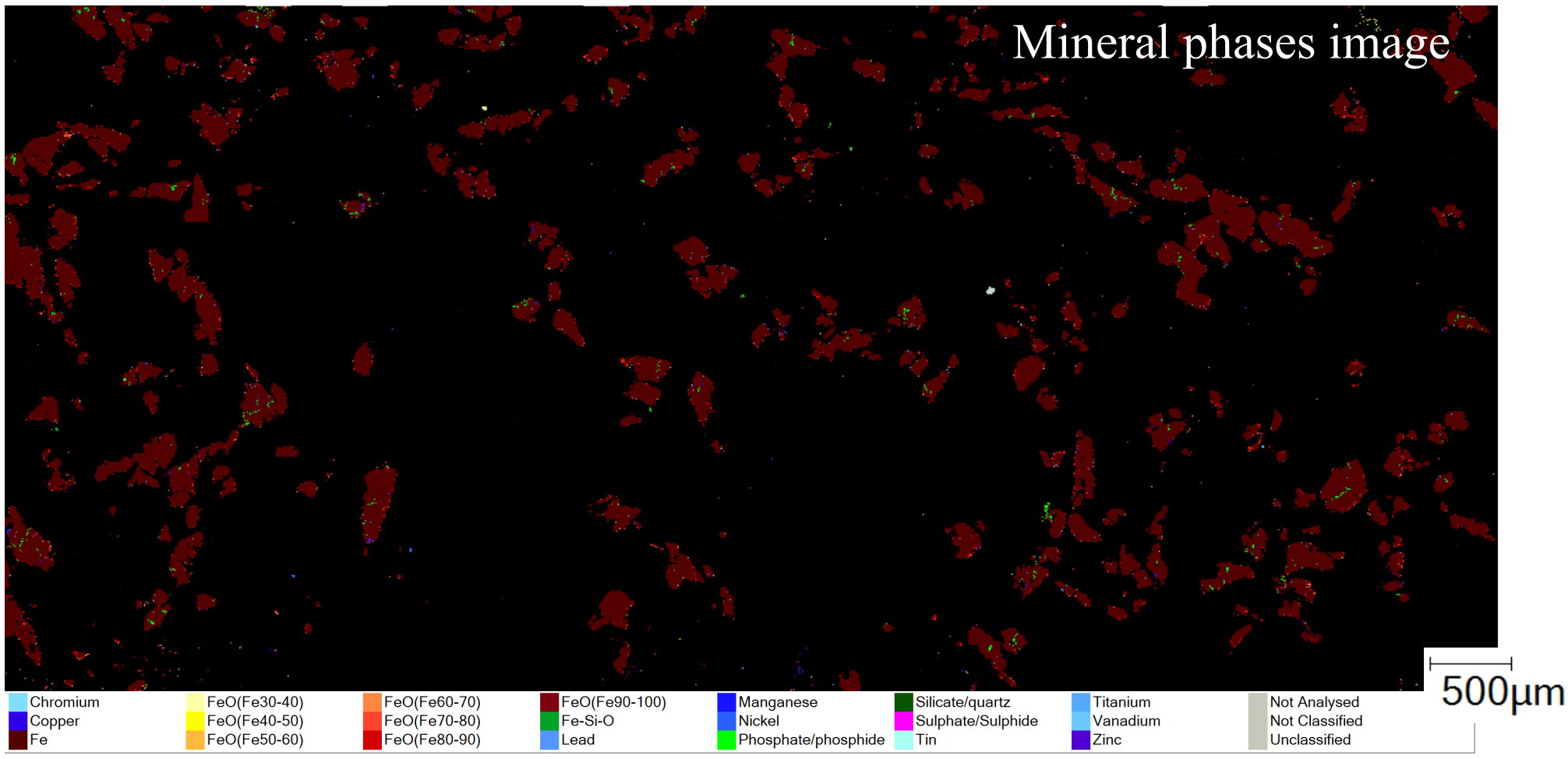

BMB5894

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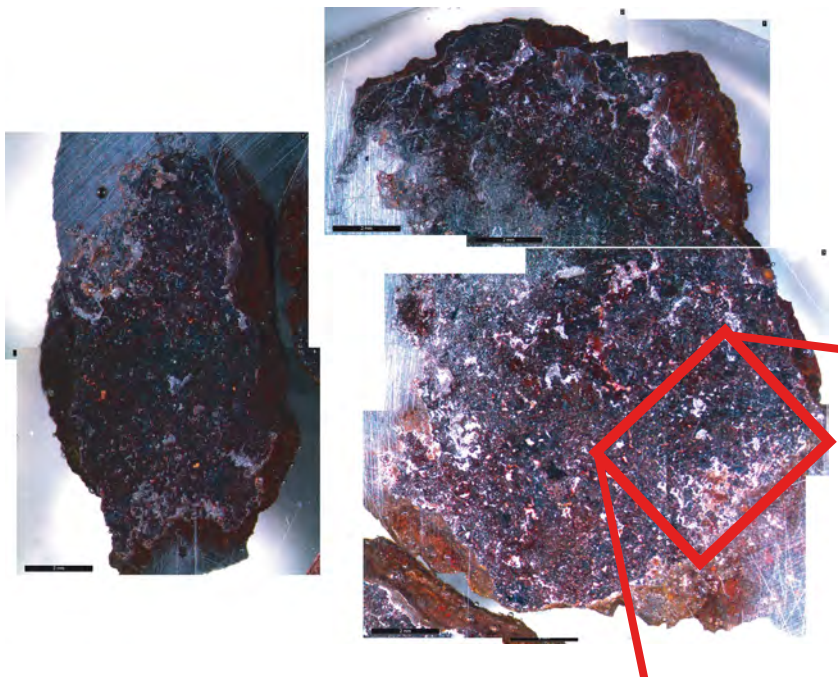

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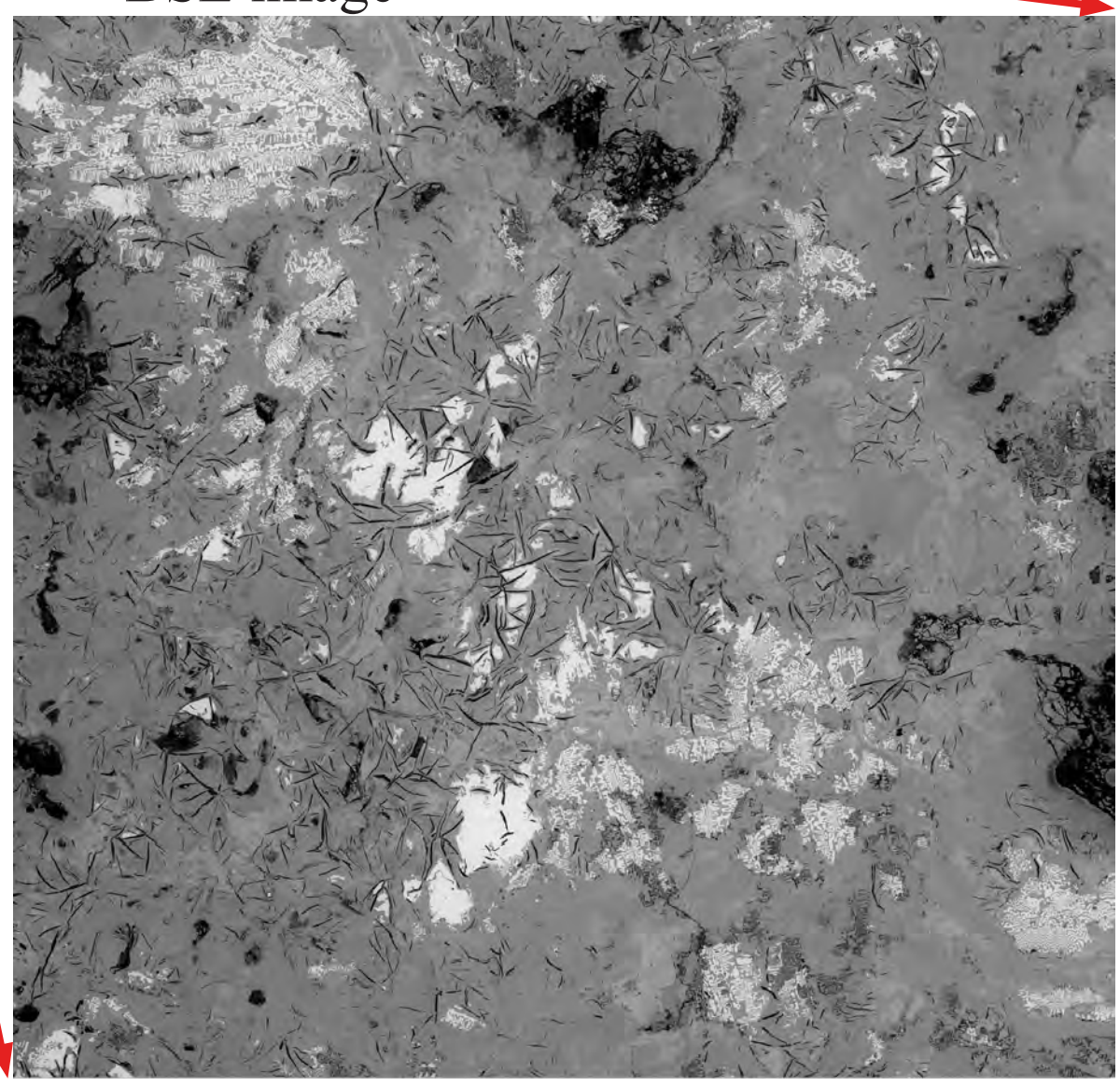
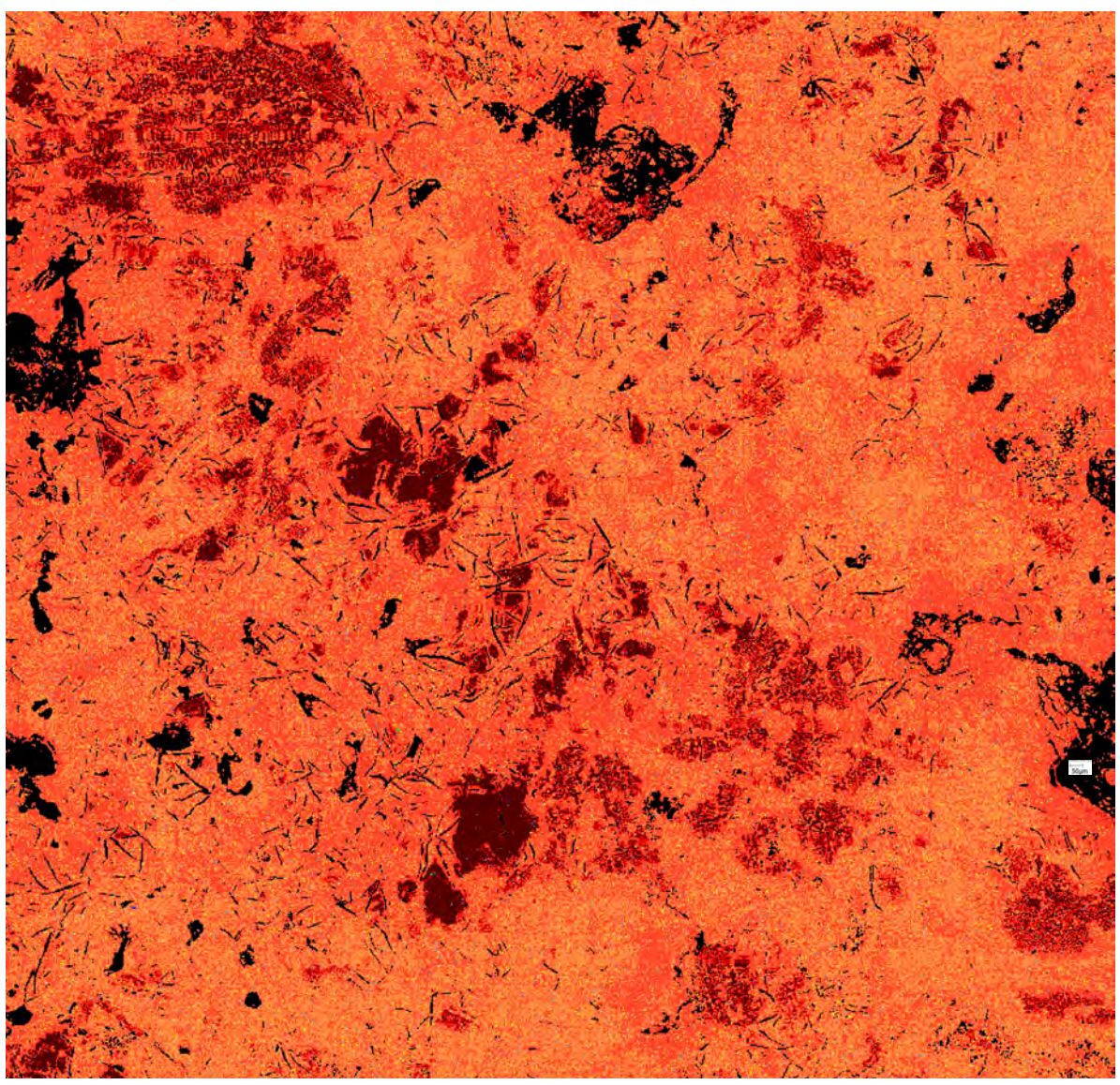
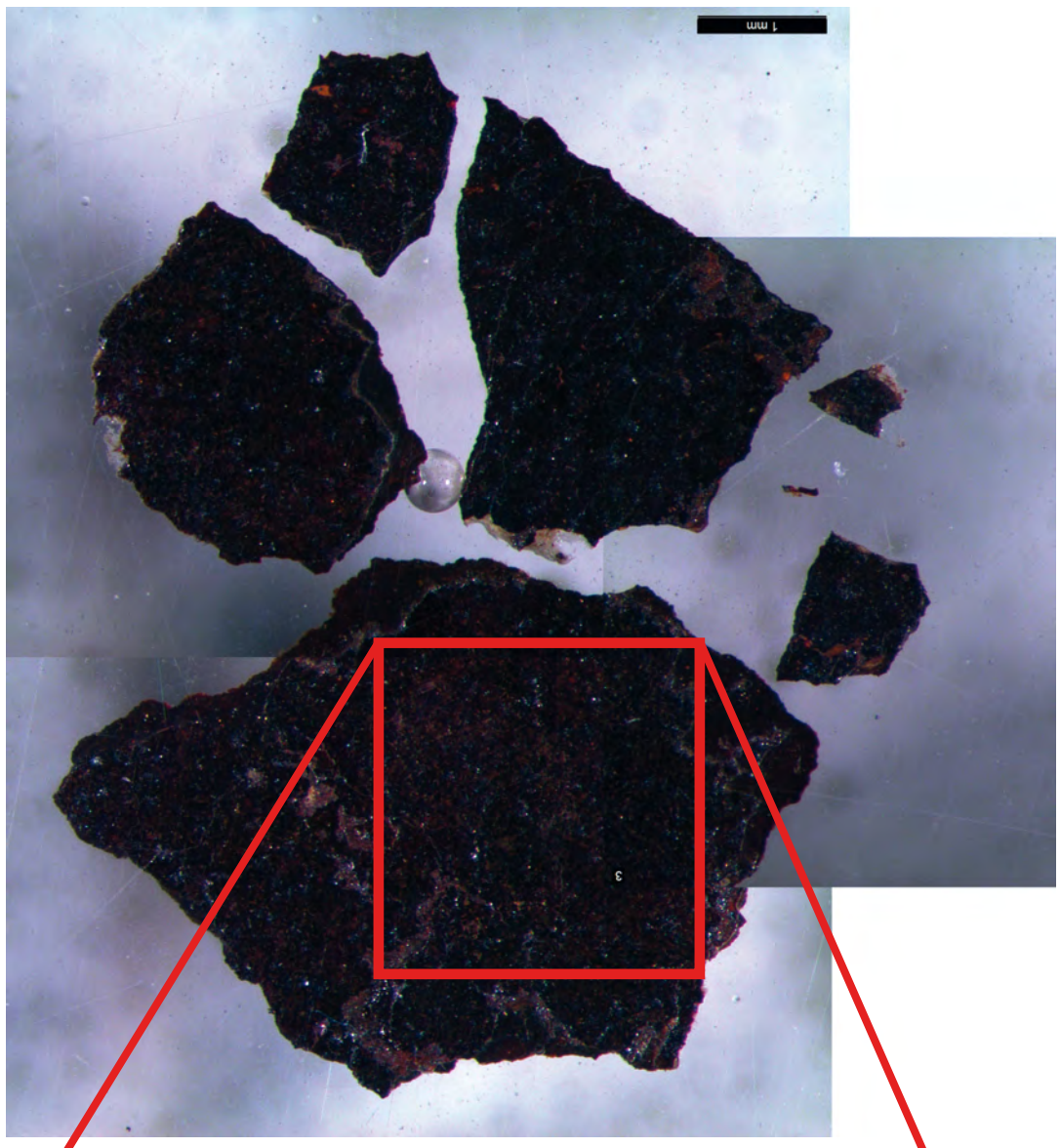




Mineral phases image

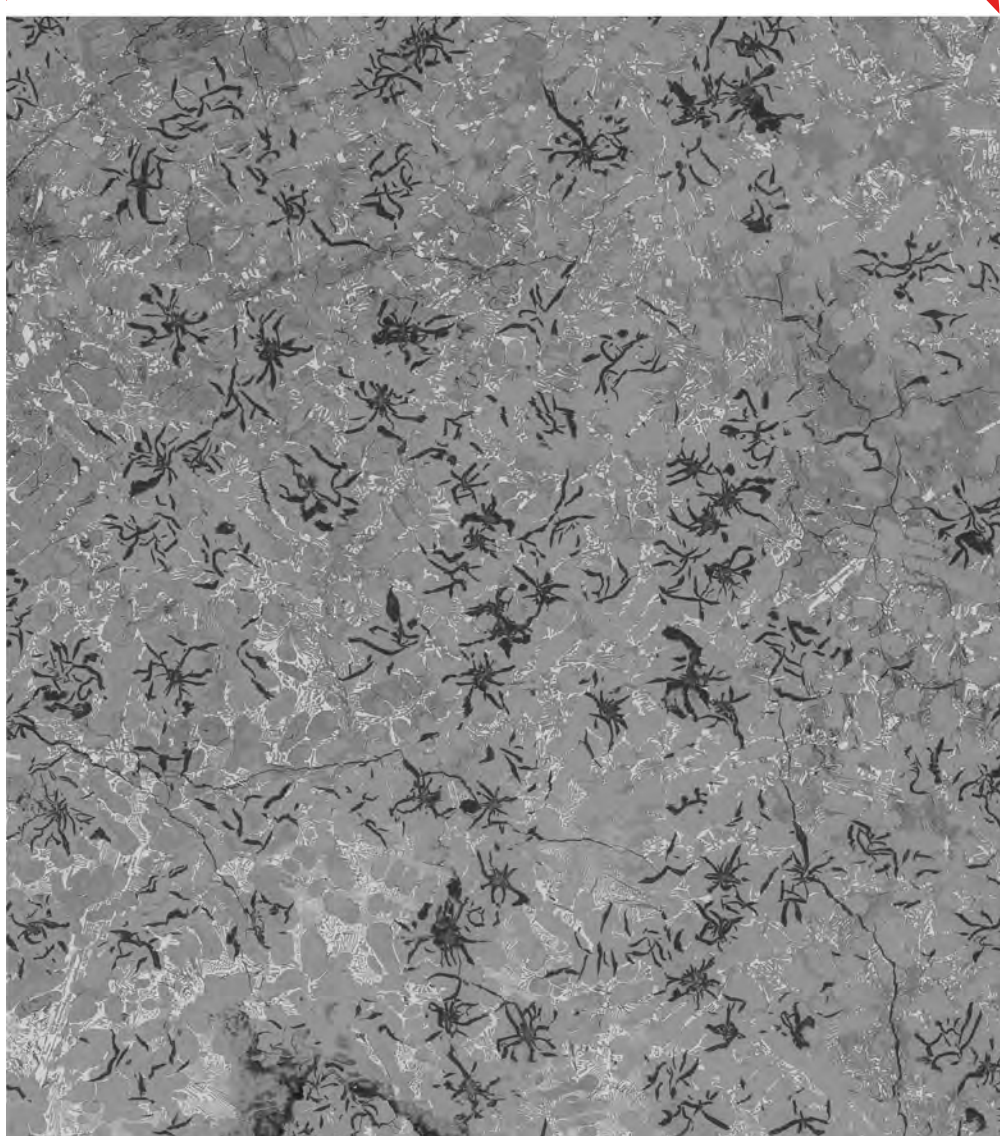
Cobalt	Fe	FeO(Fe40-50)	FeO(Fe60-70)
Copper	FeO(Fe30-40)	FeO(Fe50-60)	FeO(Fe70-80)
FeO(Fe80-90)	Lead	Phosphate/phosphide	Zinc
FeO(Fe90-100)	Manganese	Titanium	Not Analysed

BMB5895

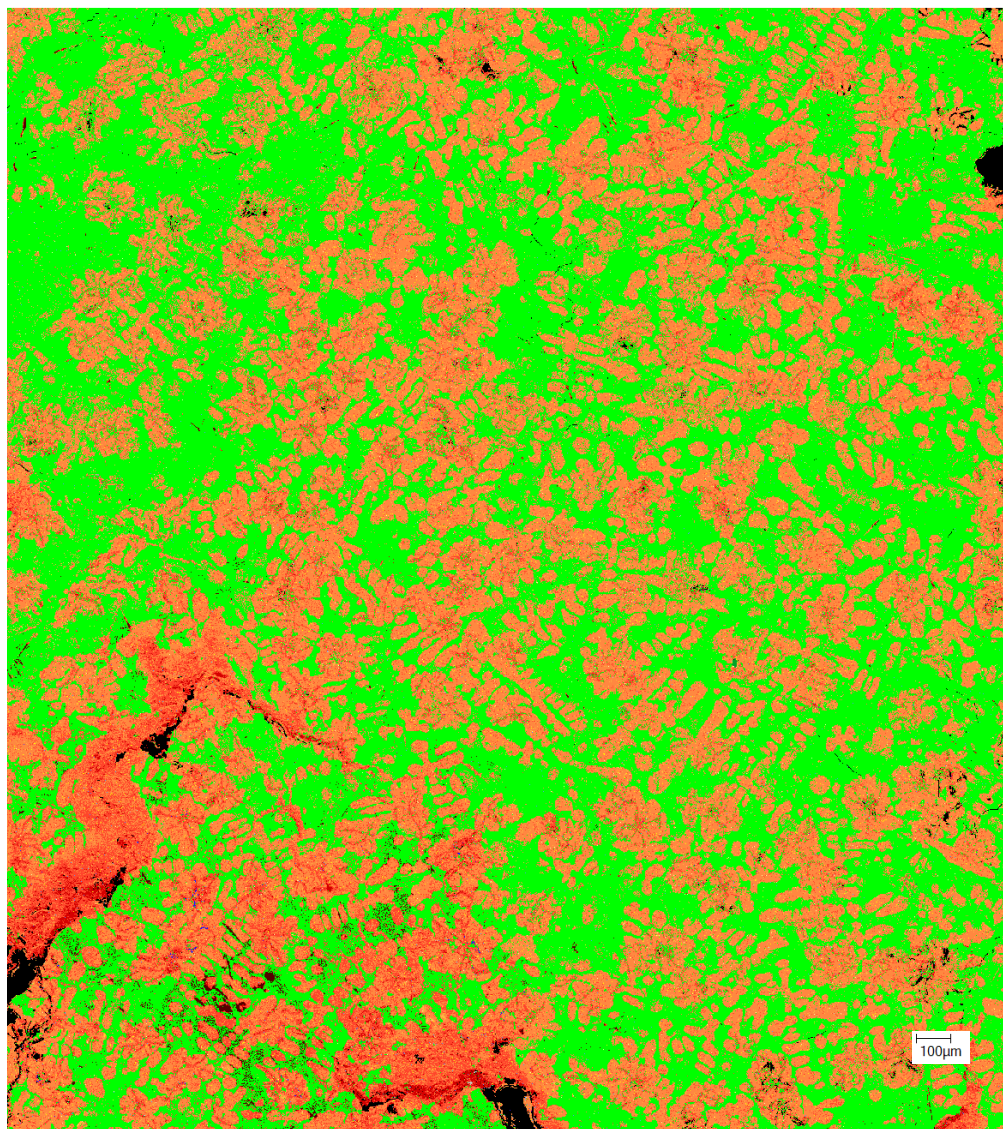


Optical microscopy image

BSE image



Mineral phases image



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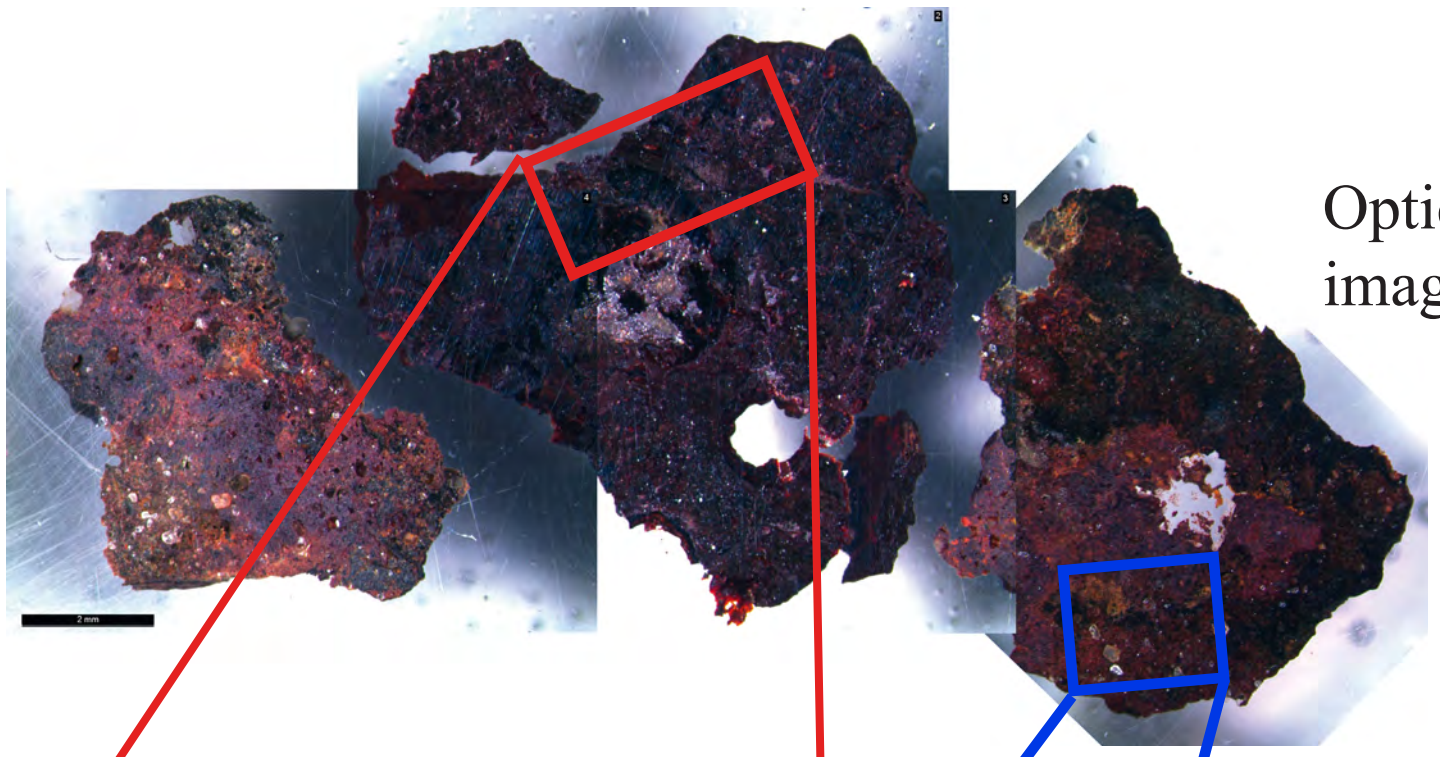
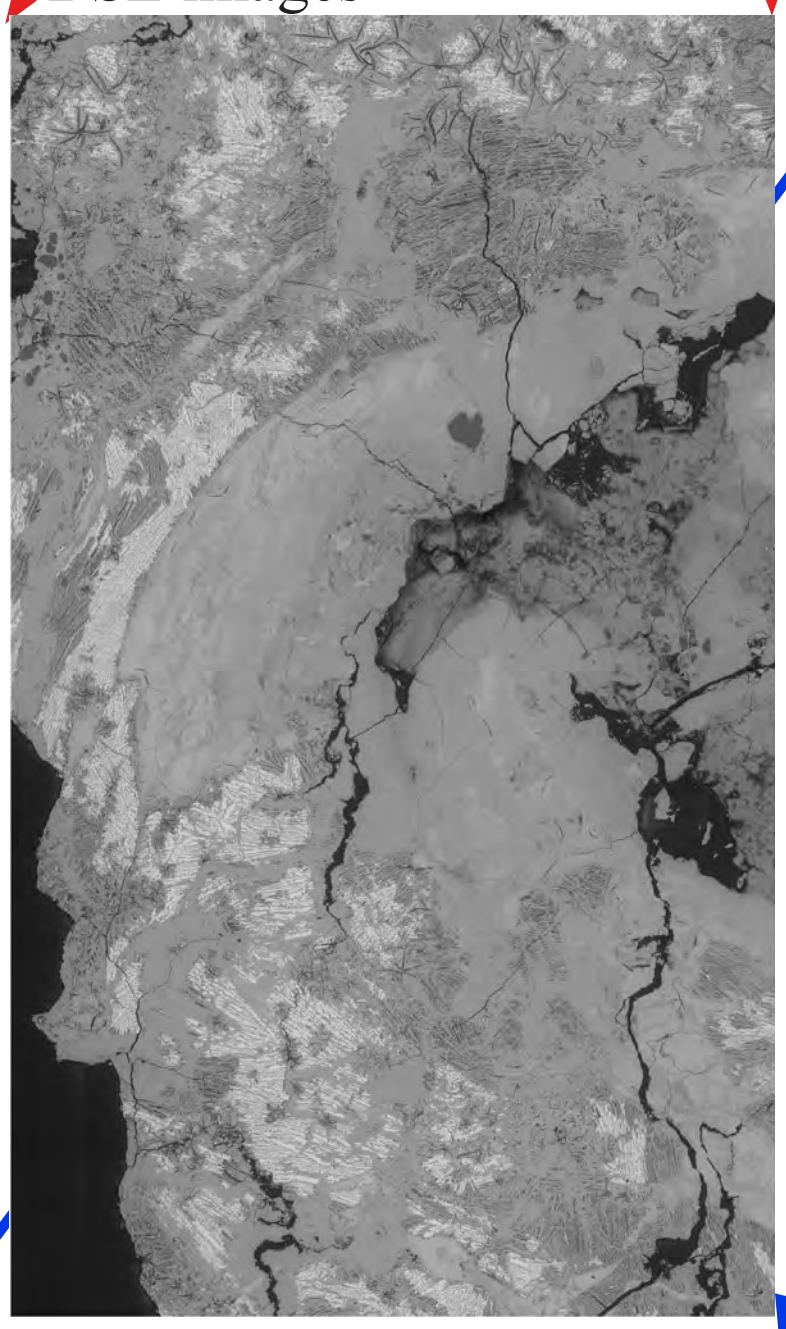
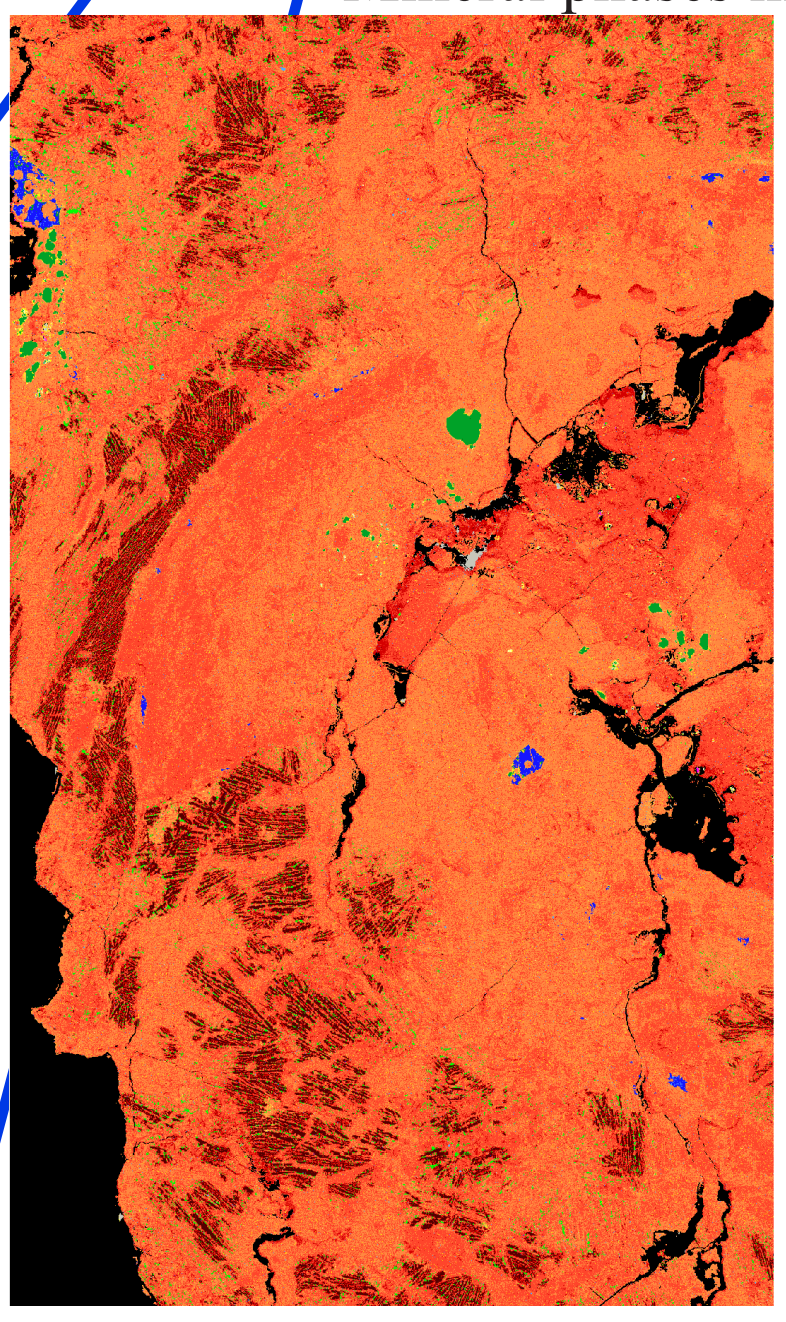


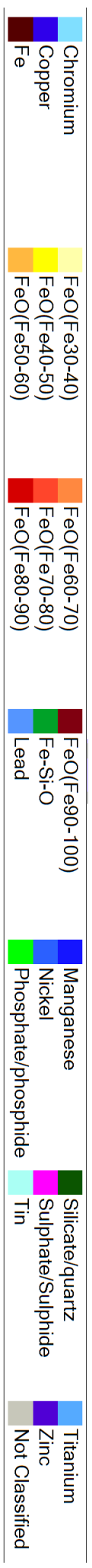
Optical microscopy image

BSE images



Mineral phases images





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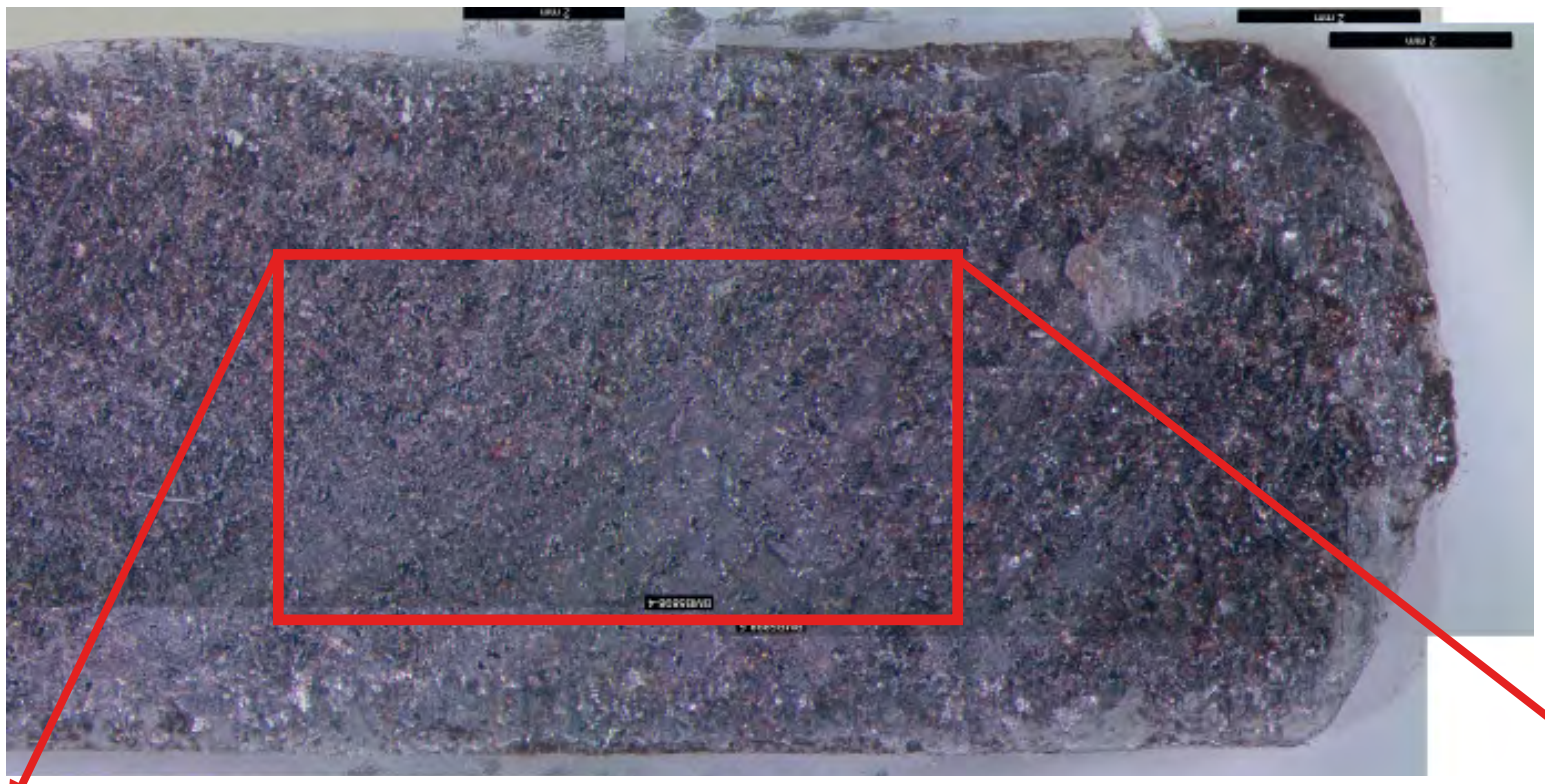
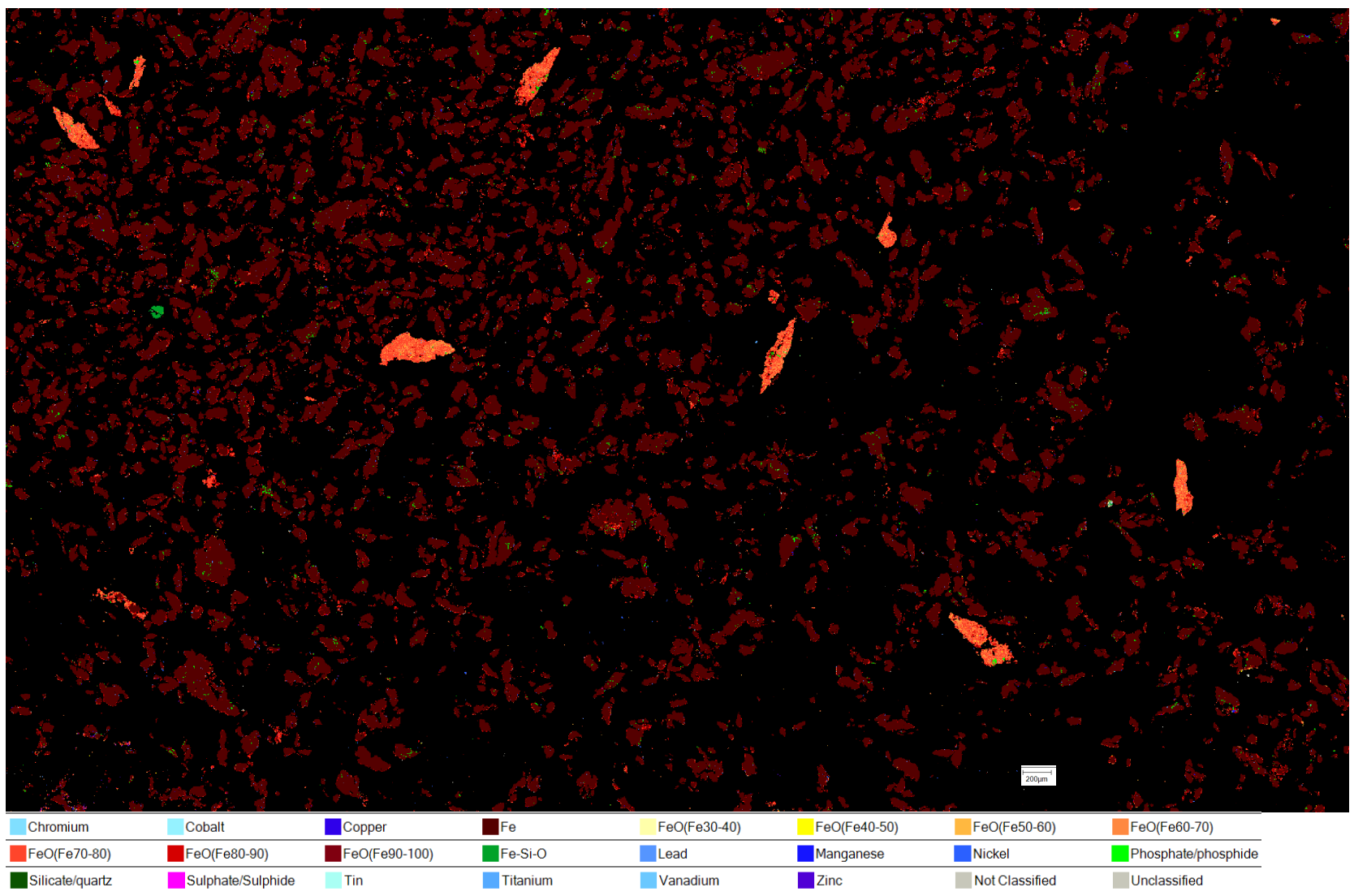


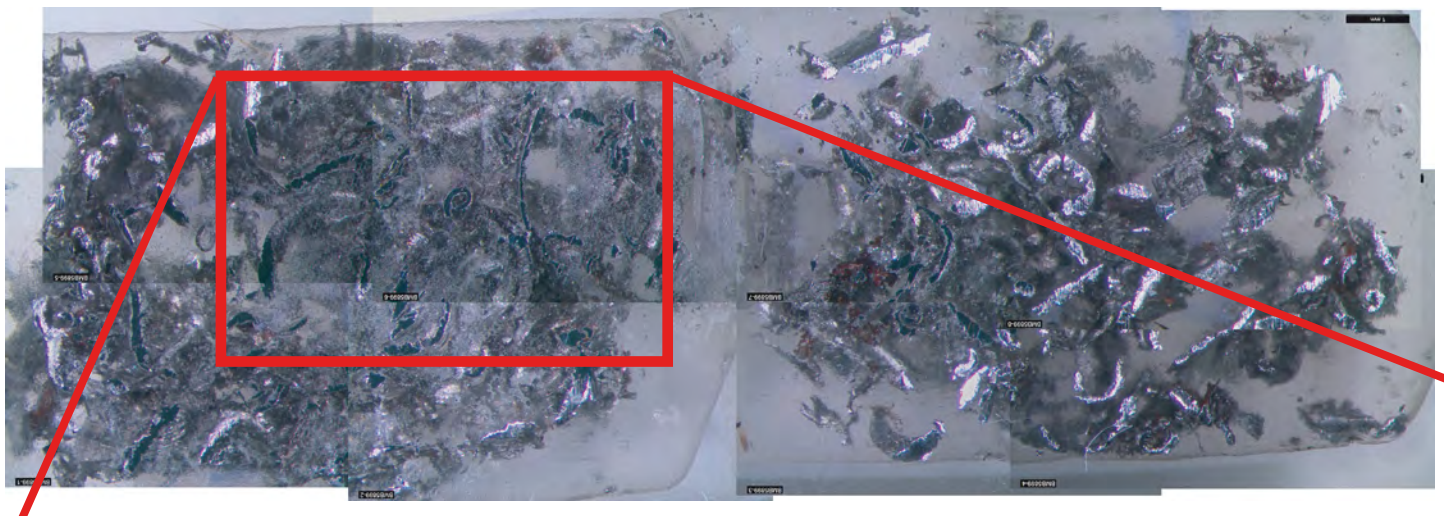
Optical microscopy image

BSE image



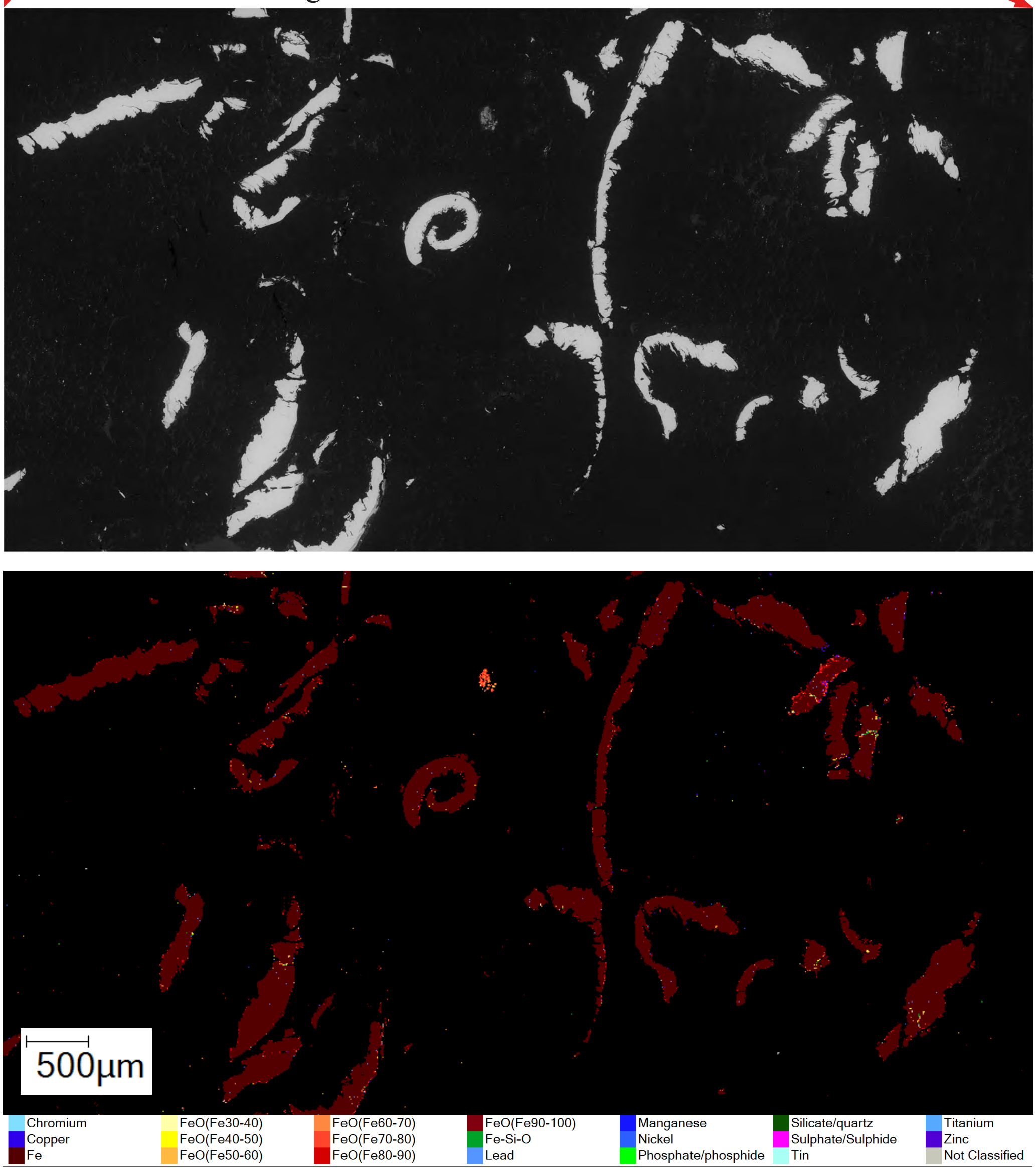
Mineral phases image

BMB5899



Optical microscopy image

BSE image



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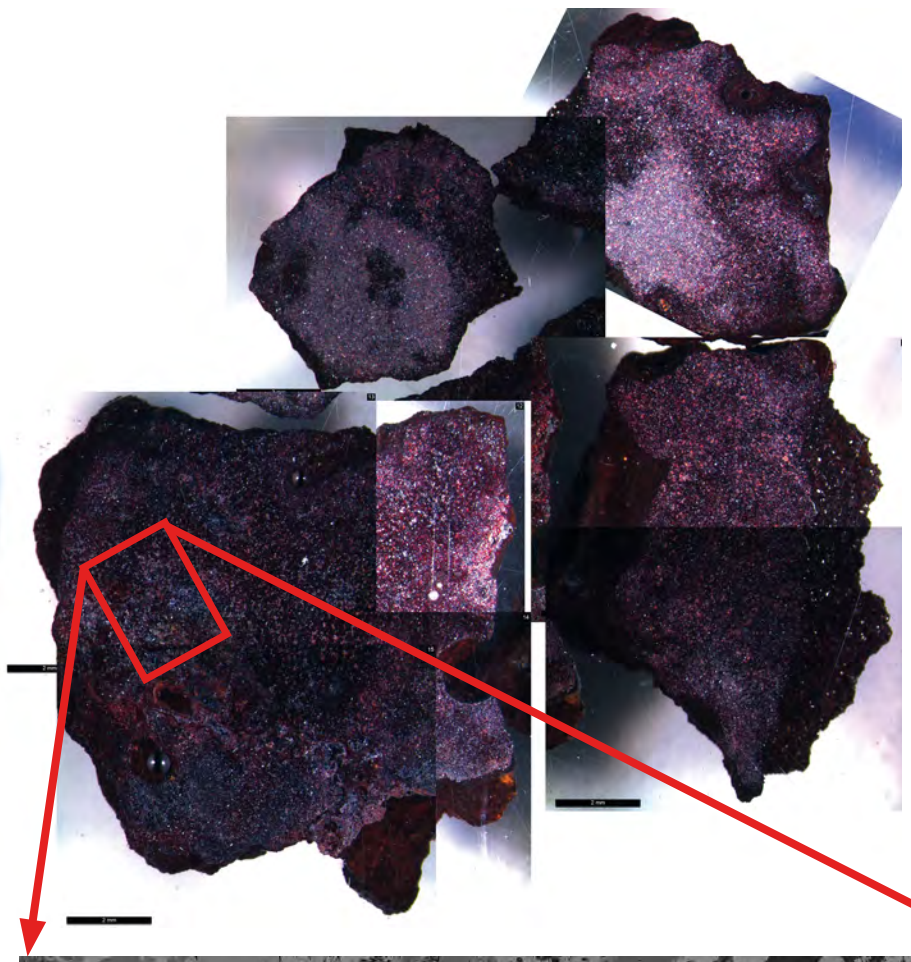
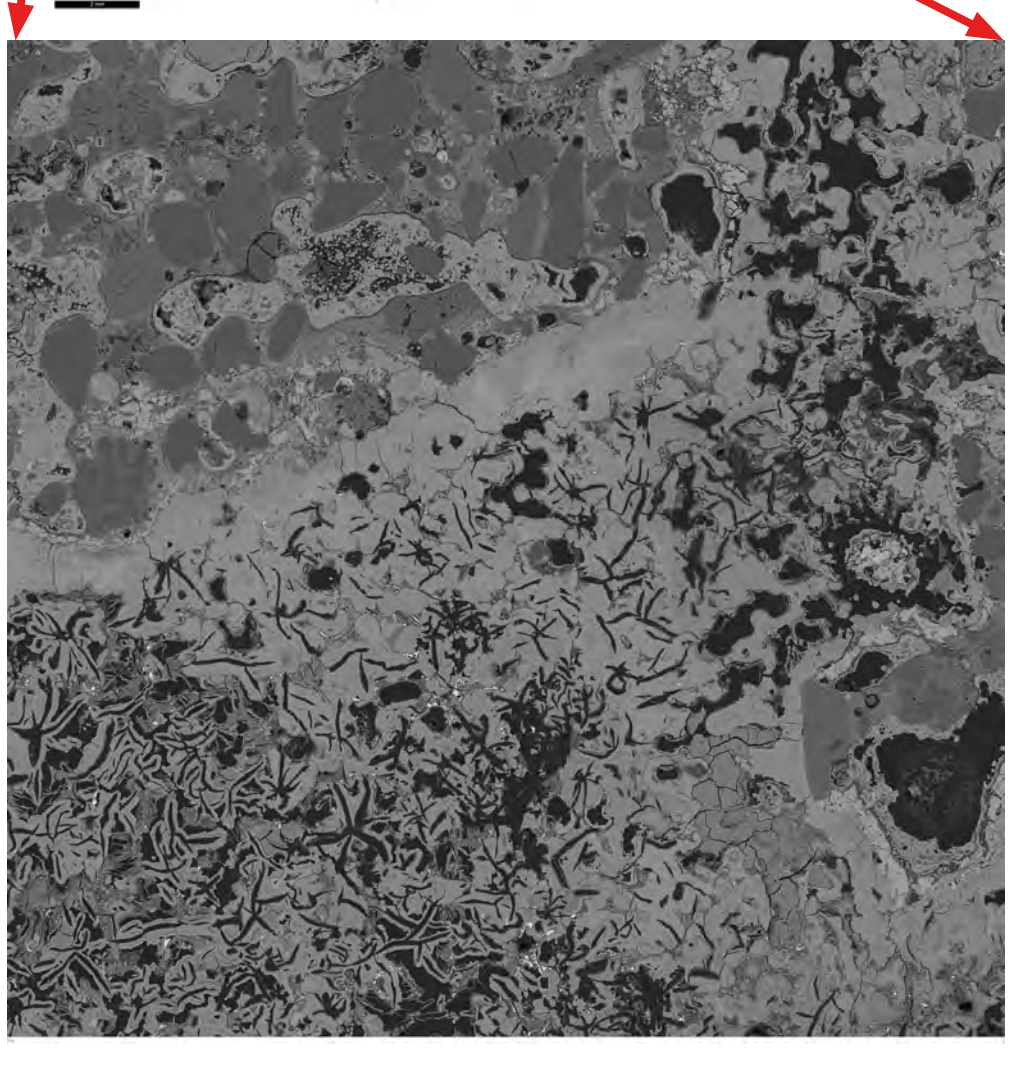


Optical microscopy image



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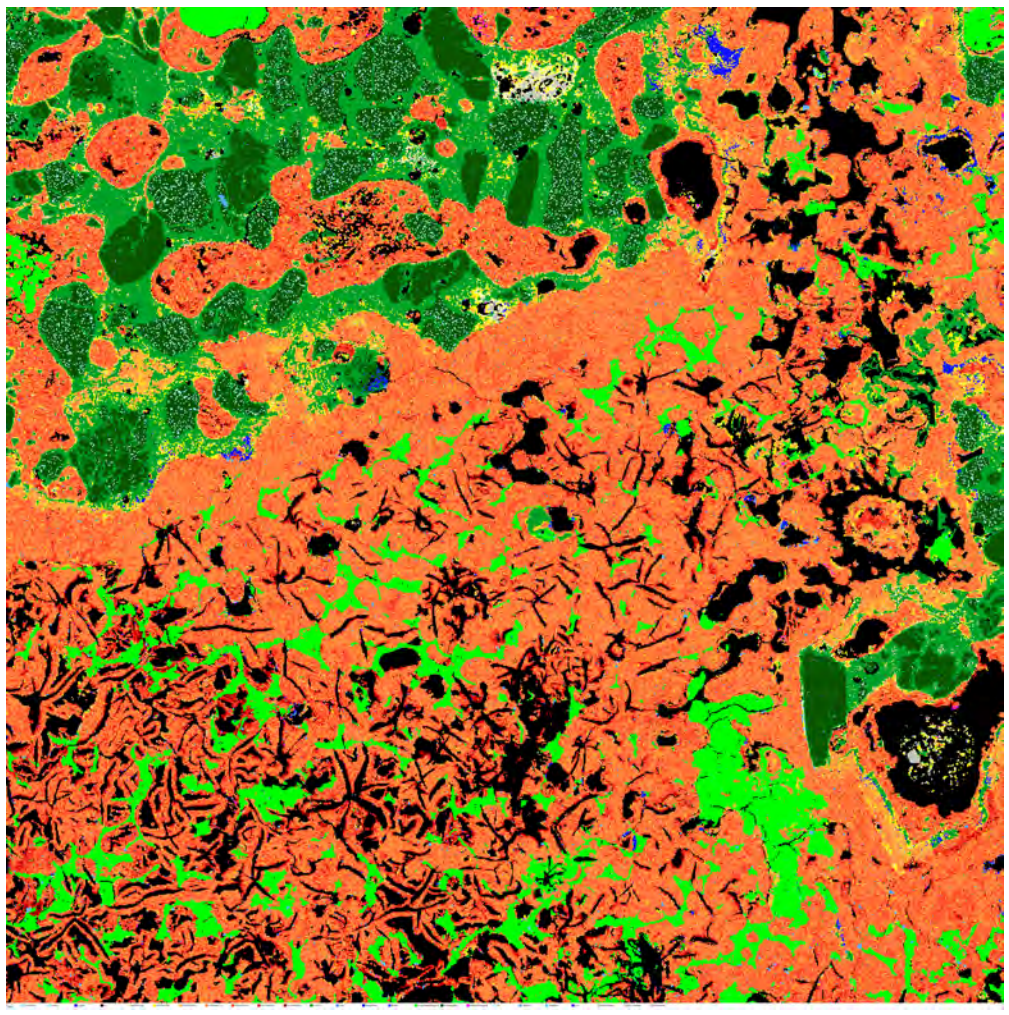
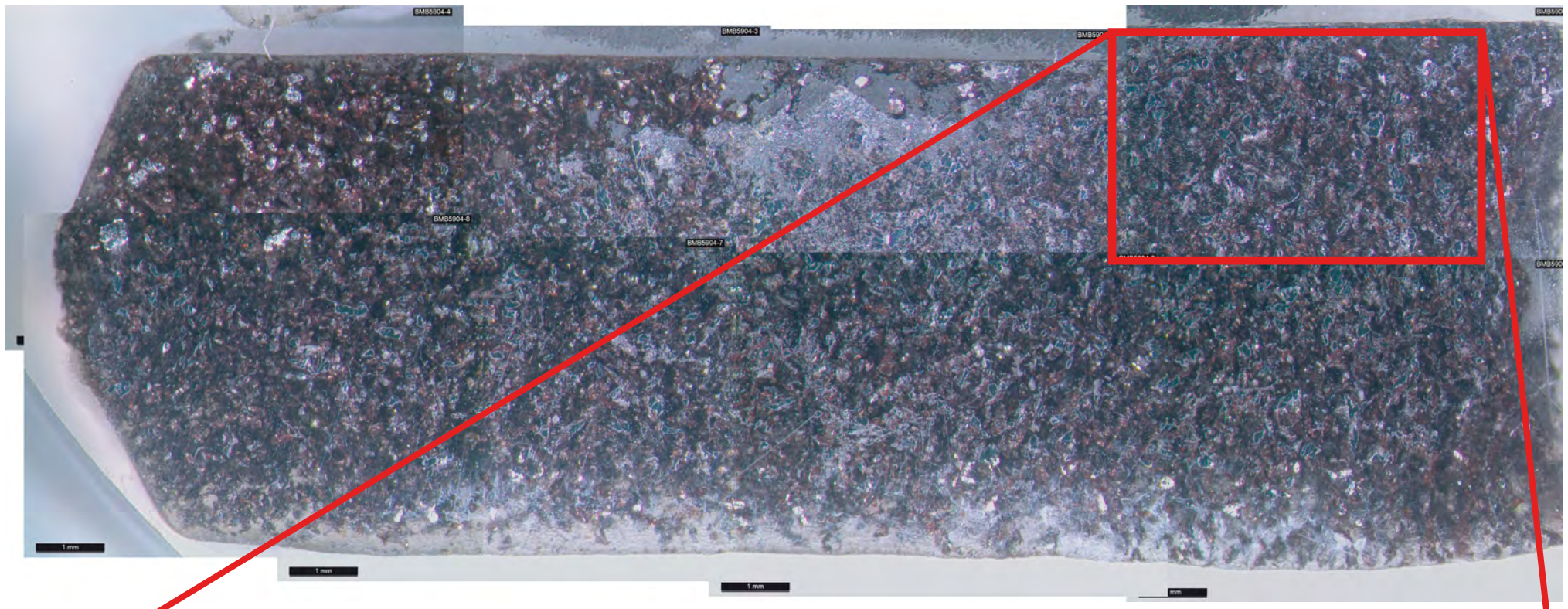


Mineral phases image

BMB5904

Optical microscopy image



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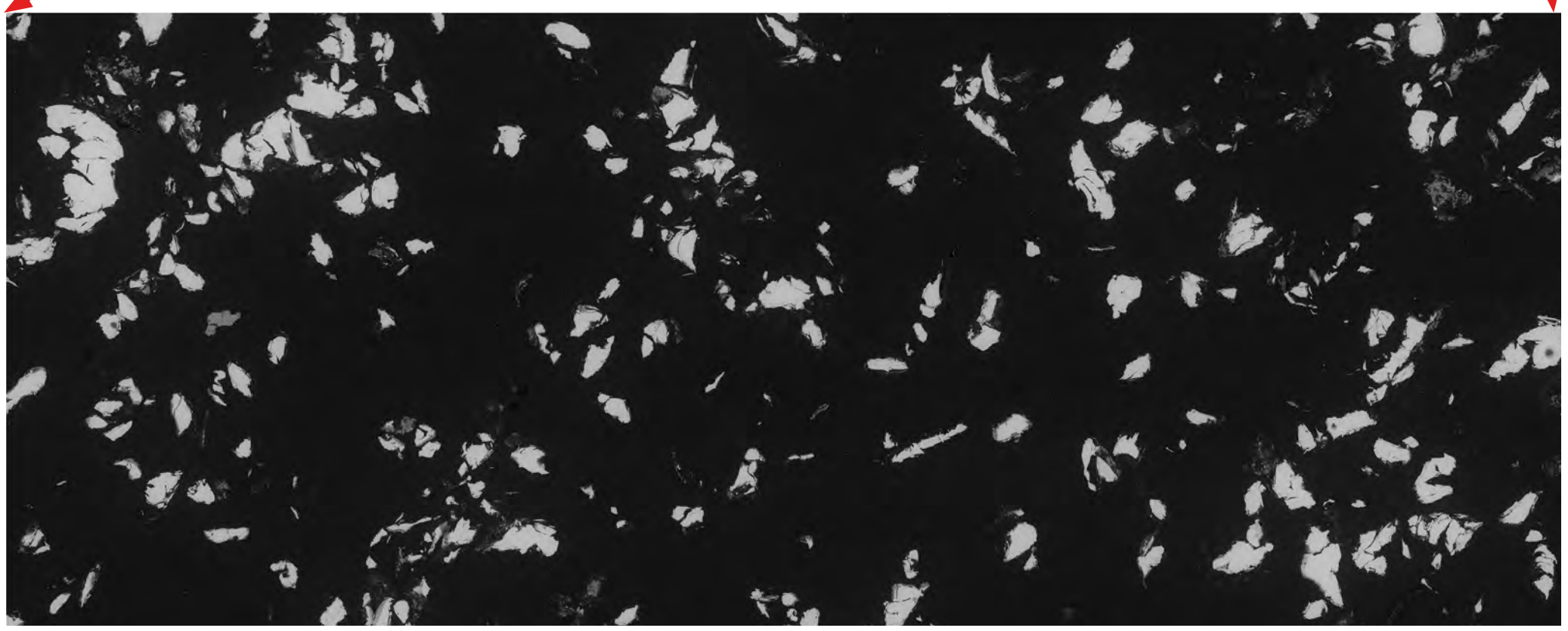
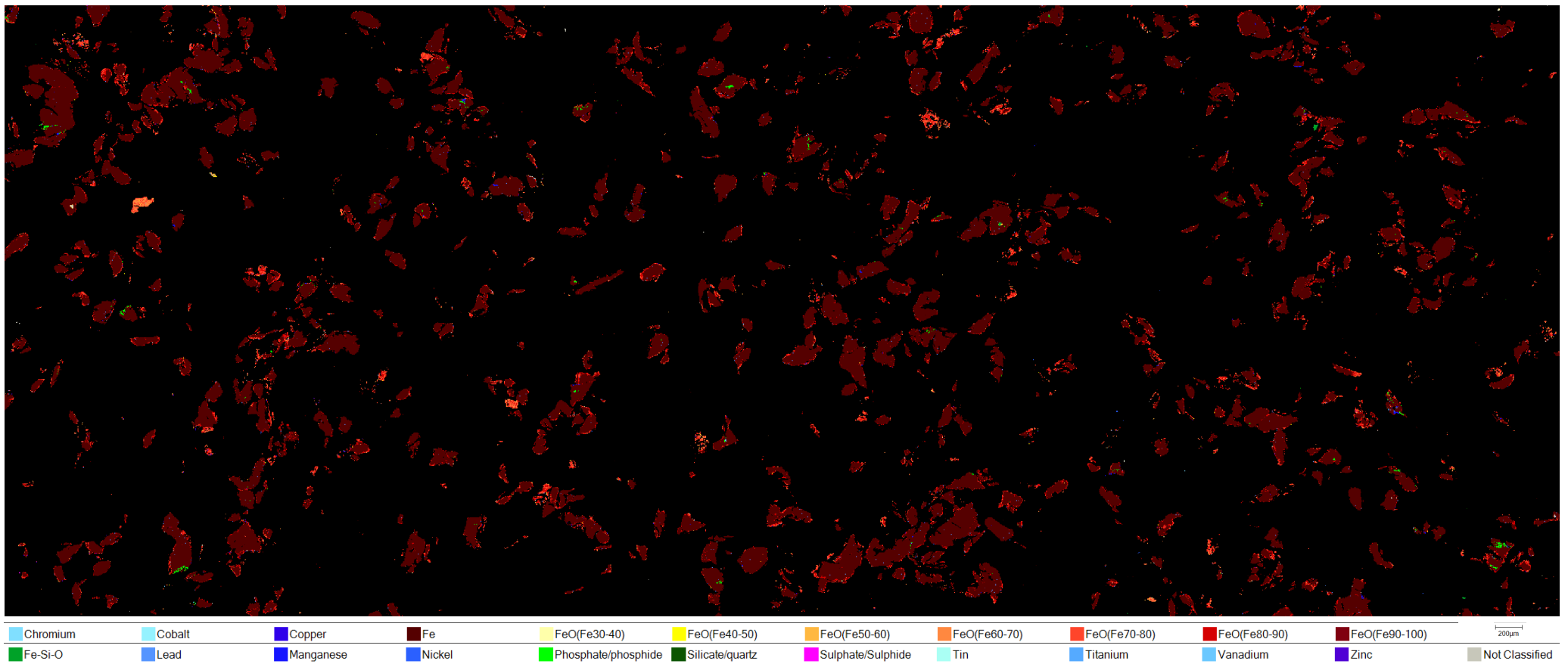
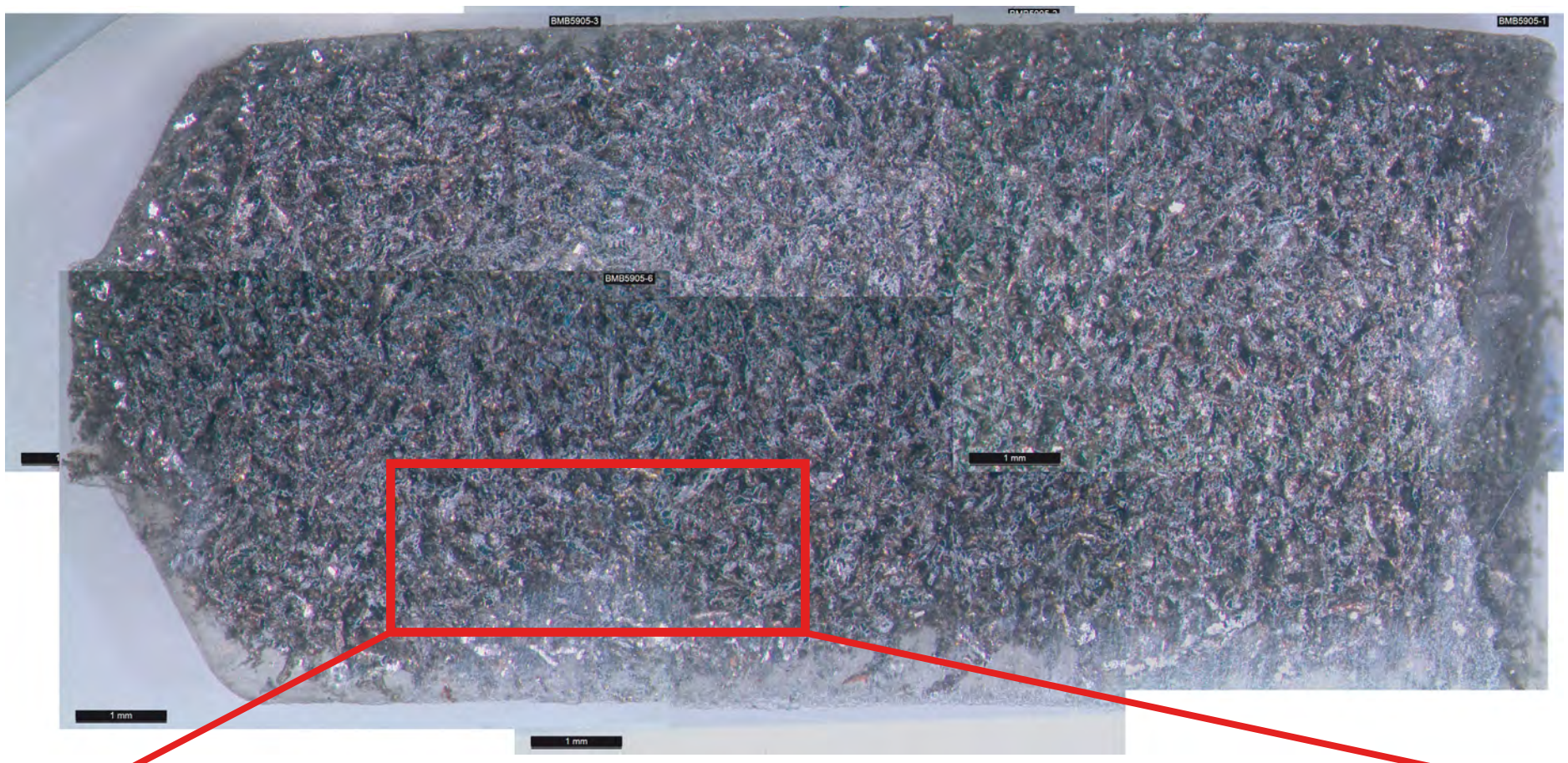




Mineral phases image

BMB5905

Optical microscopy image



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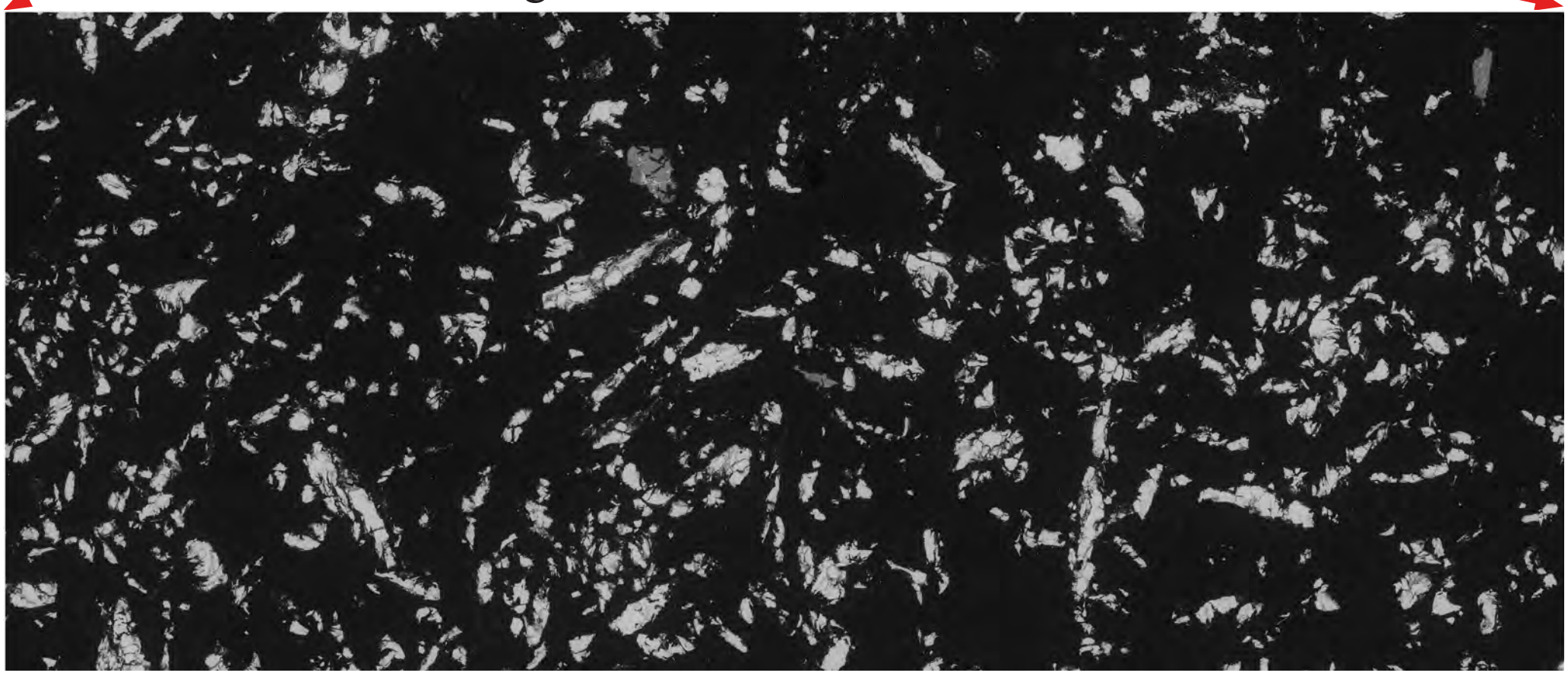
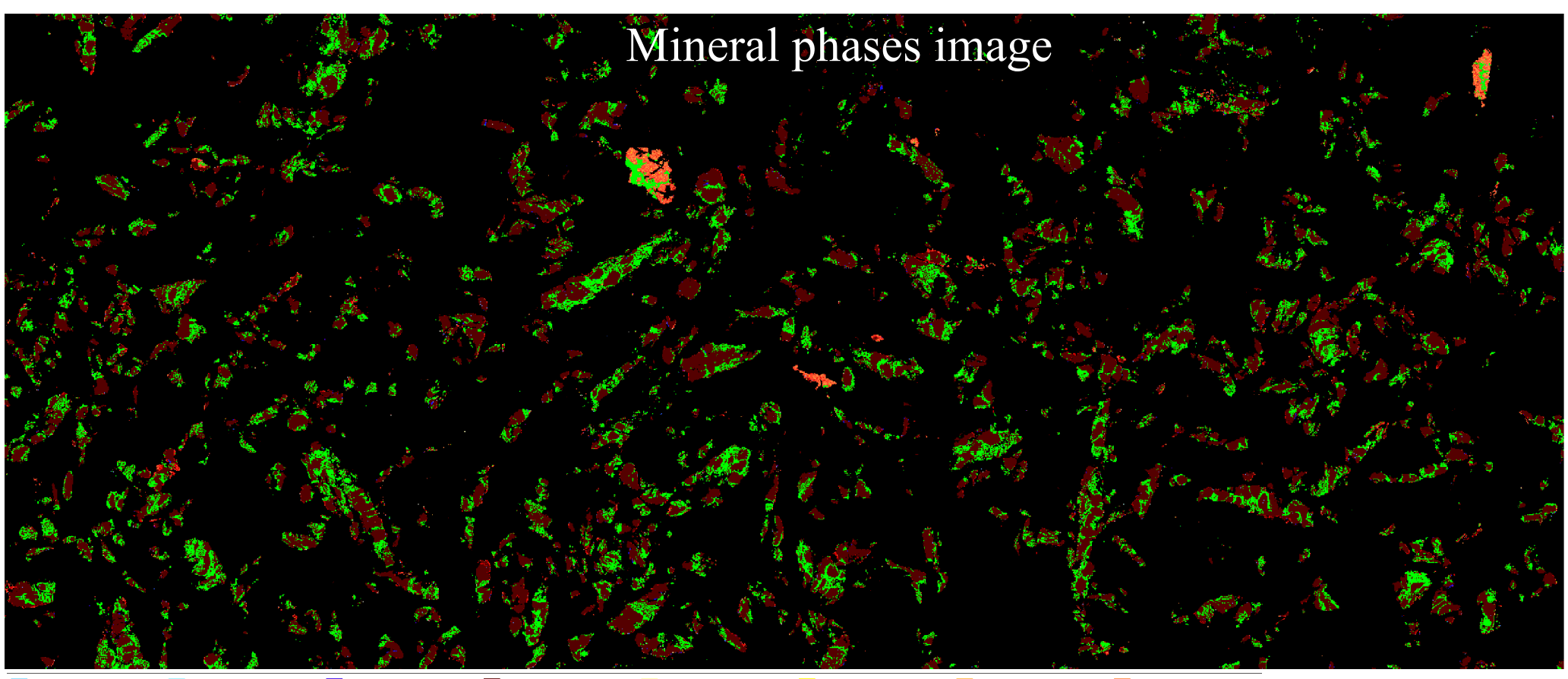


Mineral phases image



BMB5910

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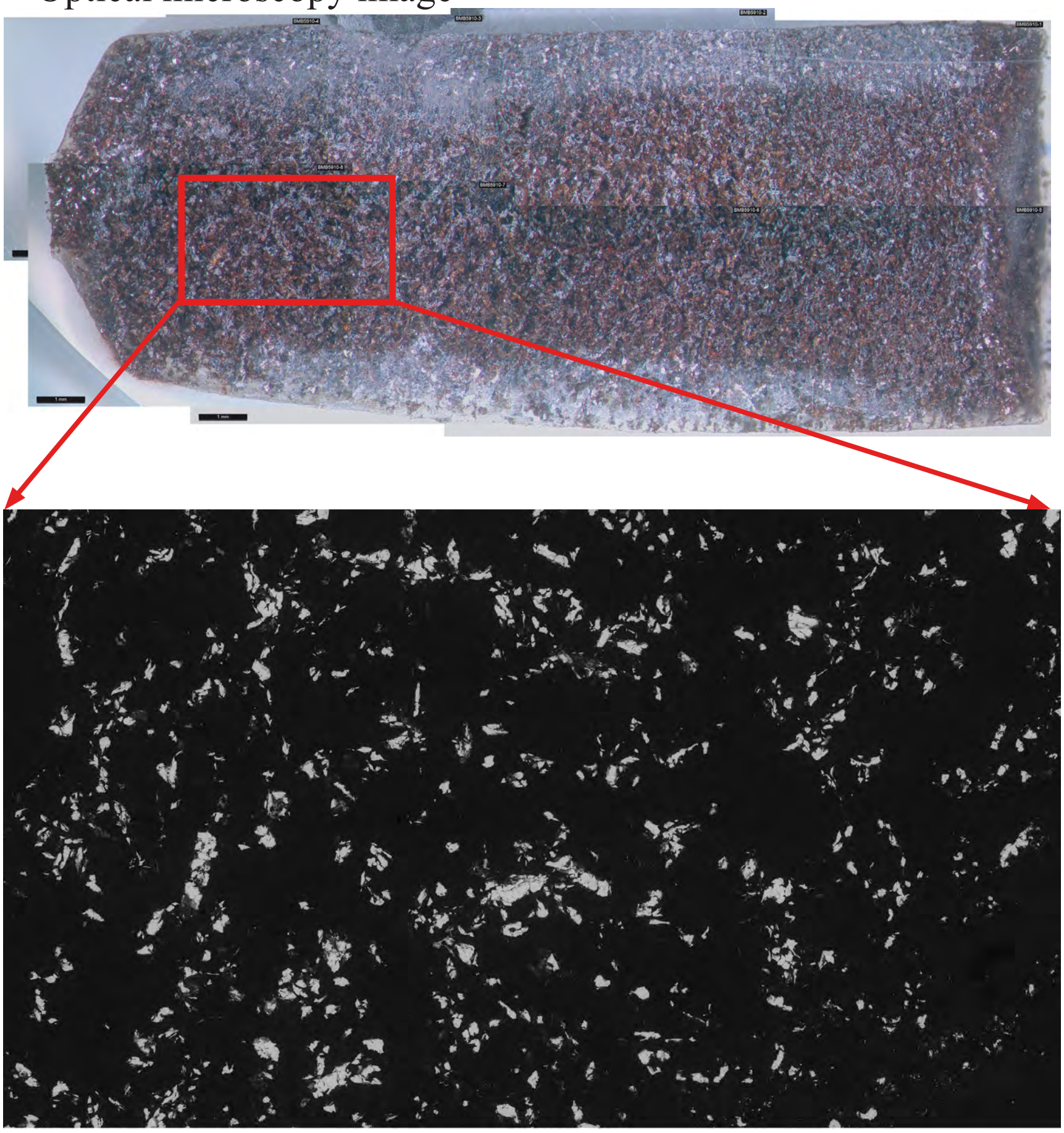

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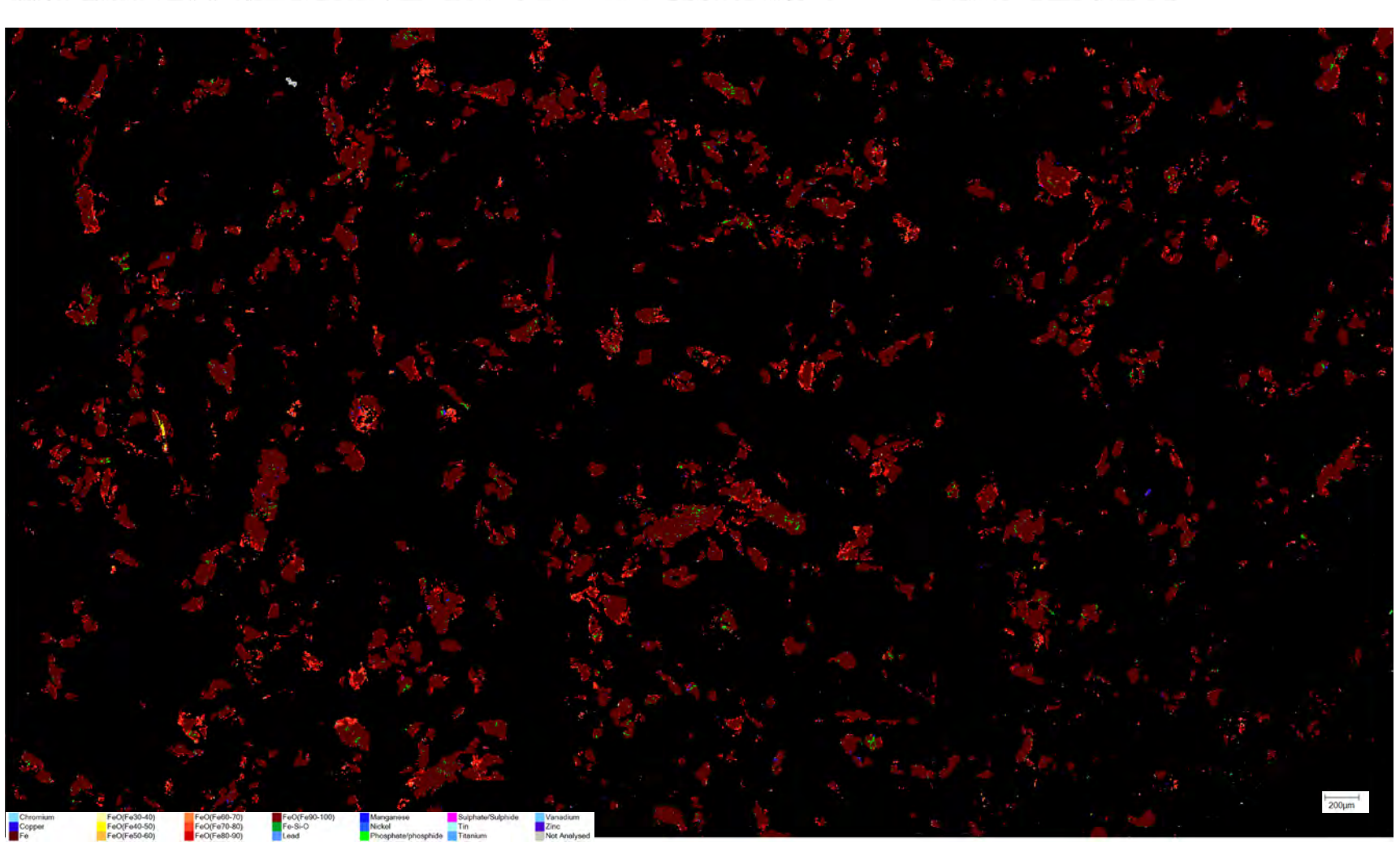
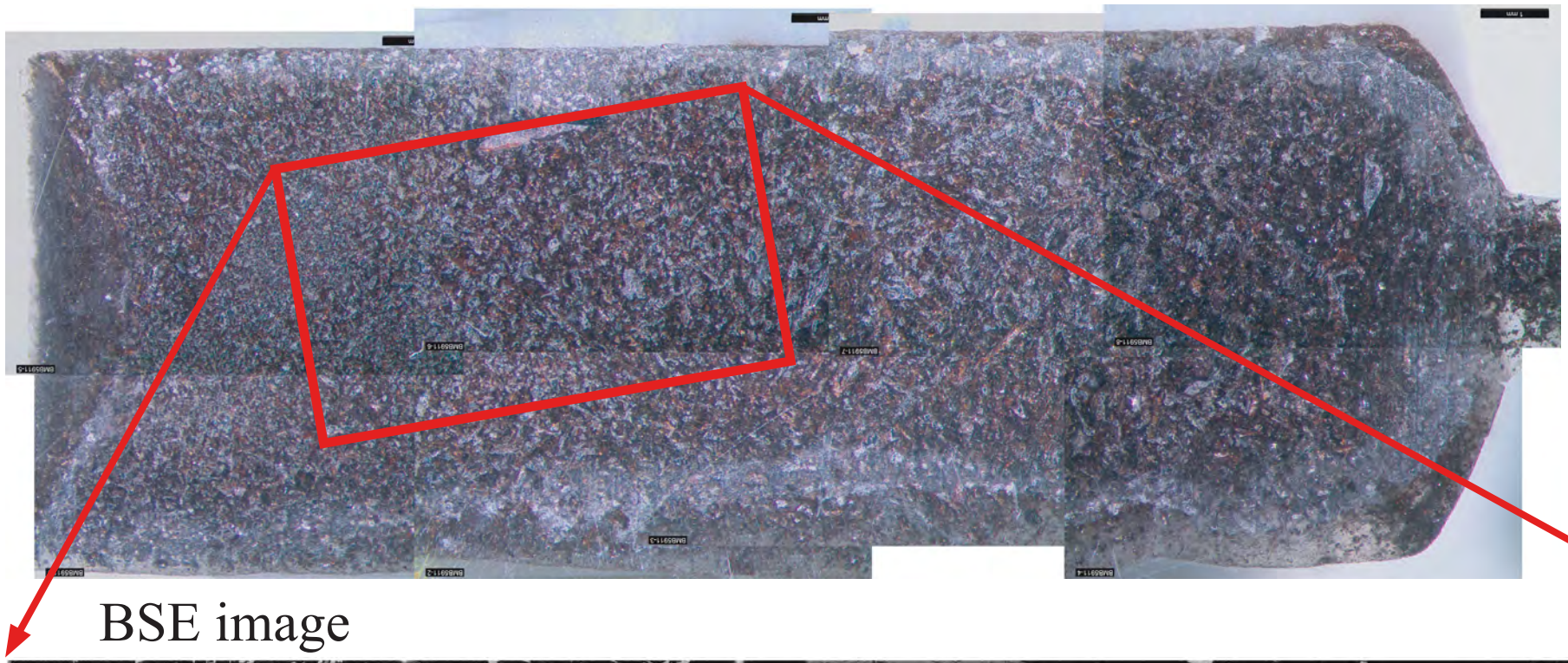


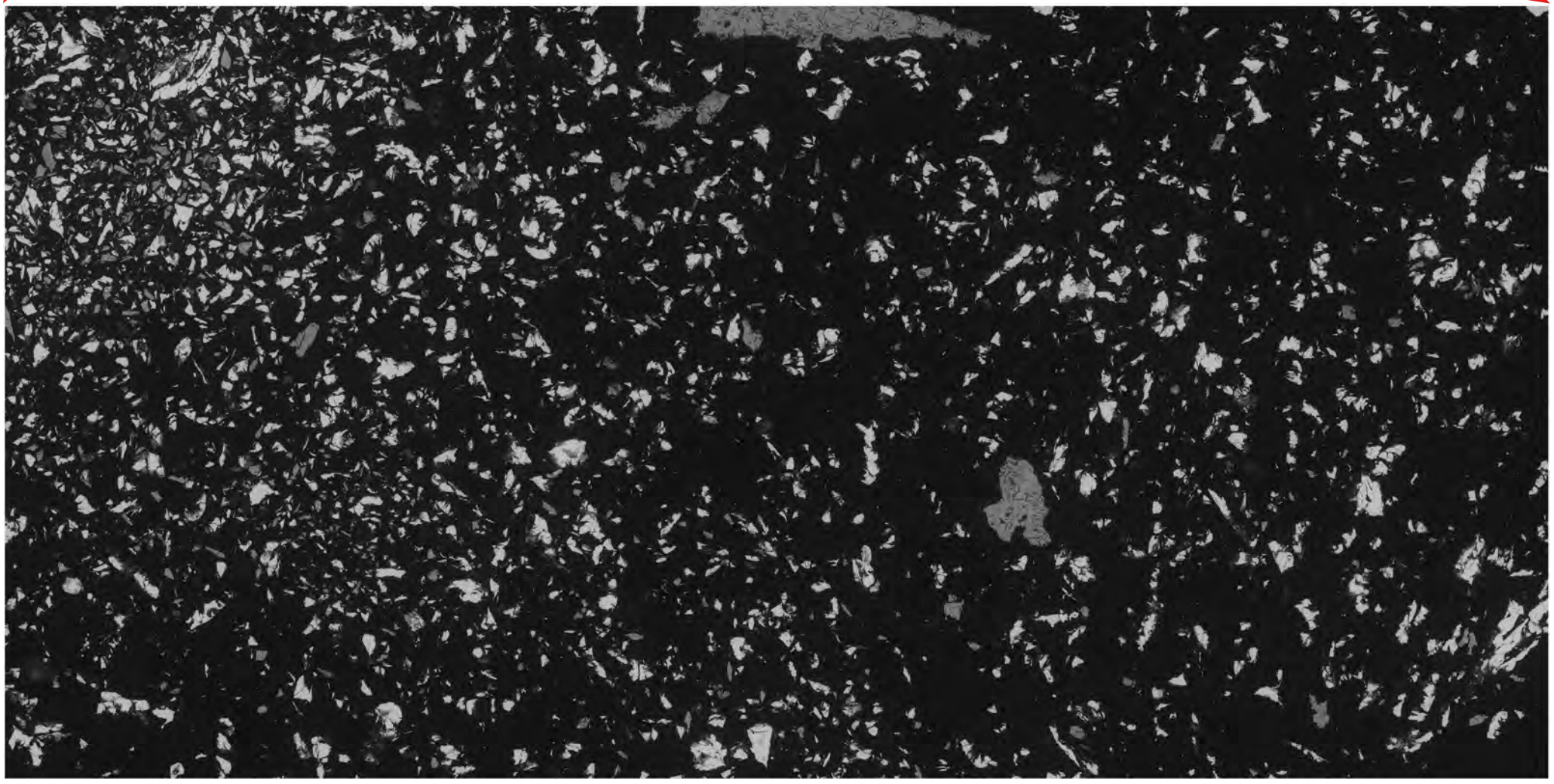
Mineral phases image

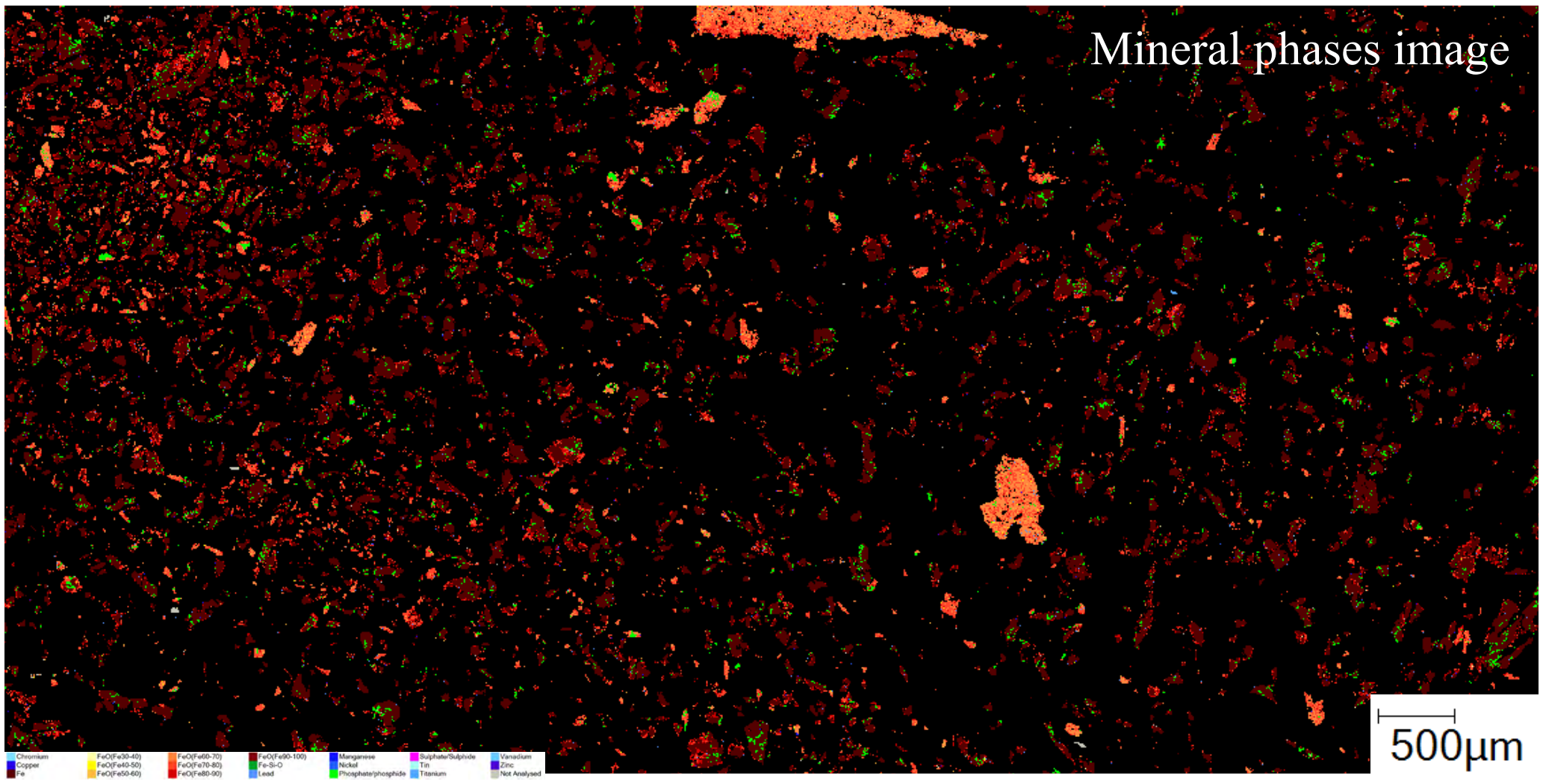
Optical microscopy image

BMB5911



BSE image





BMB5913

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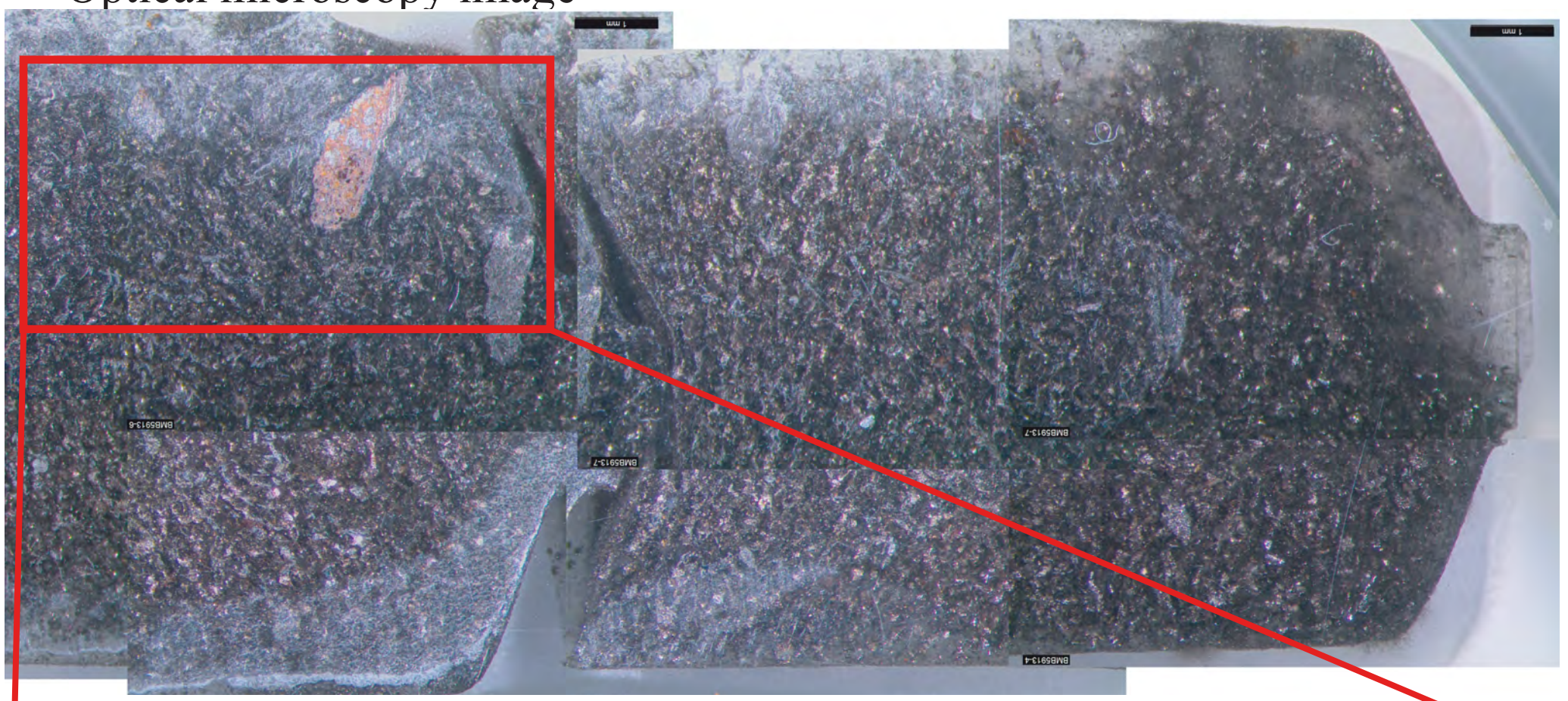

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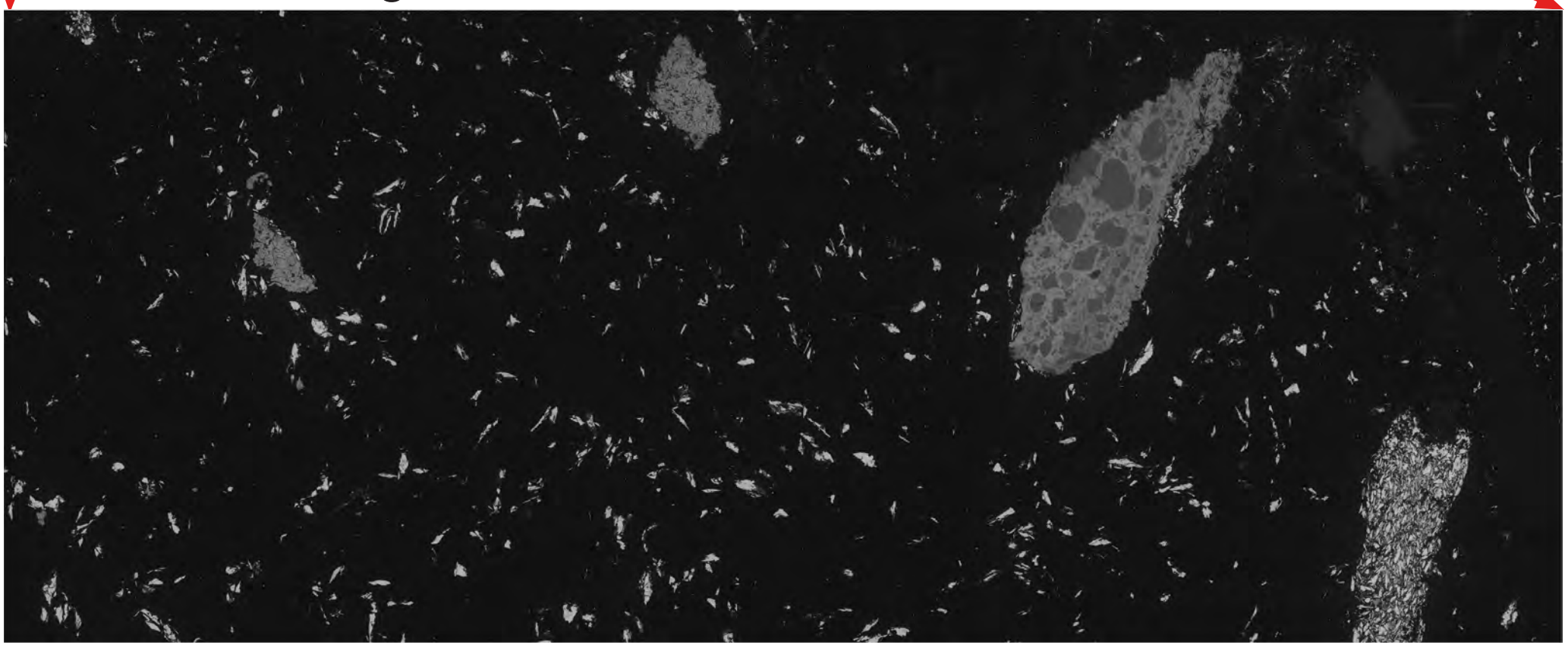
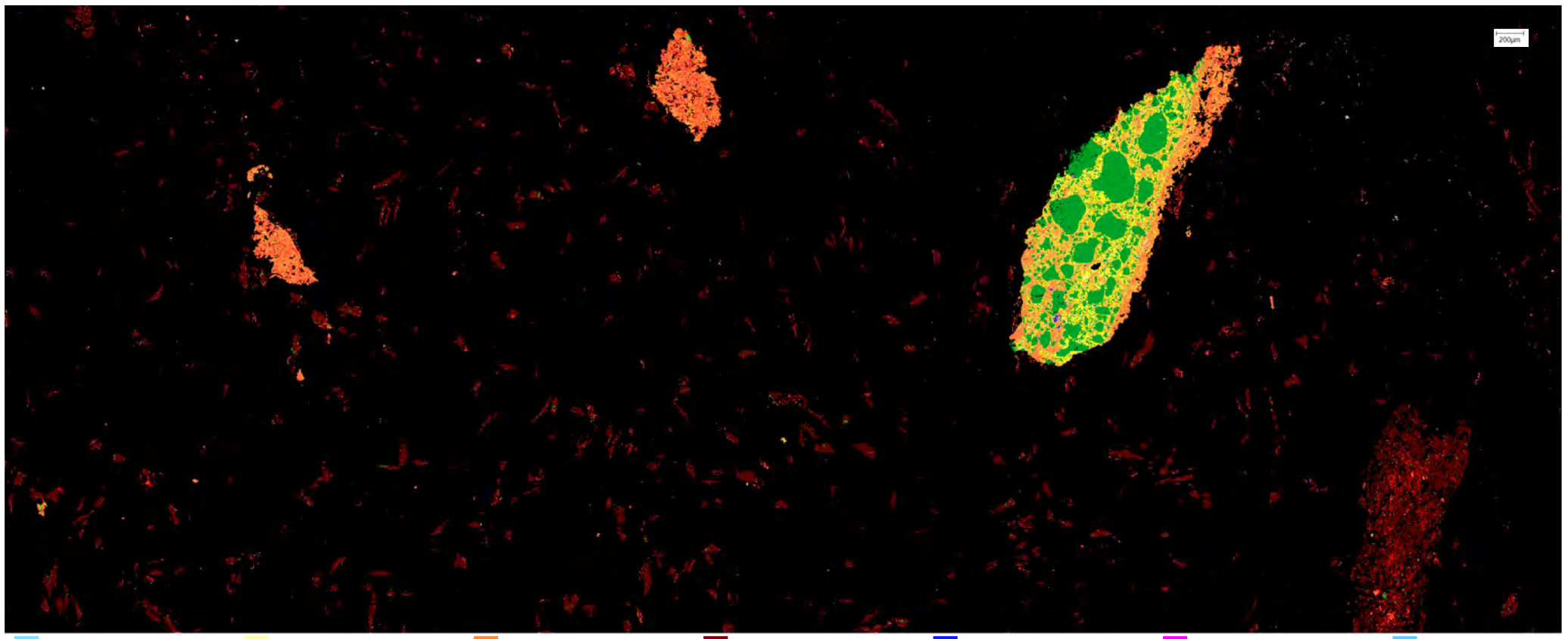
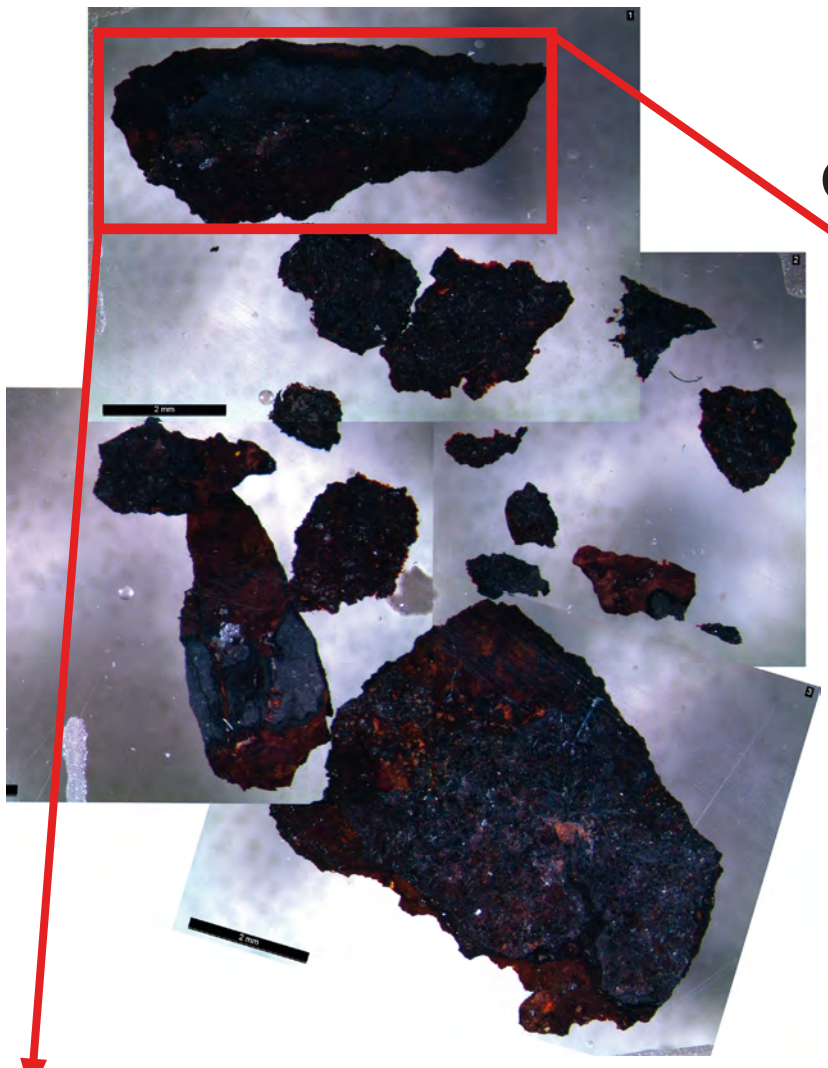




Mineral phases image

BMB5923

Optical microscopy image



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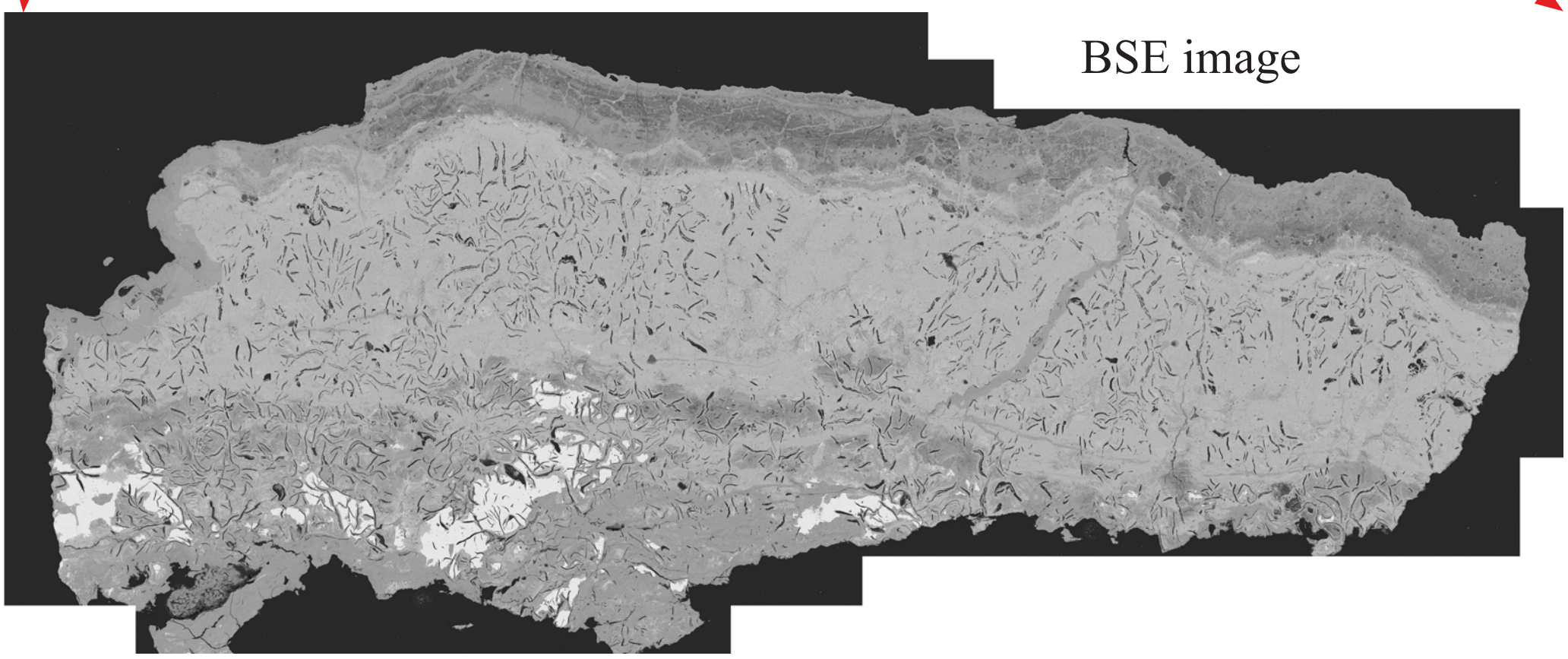
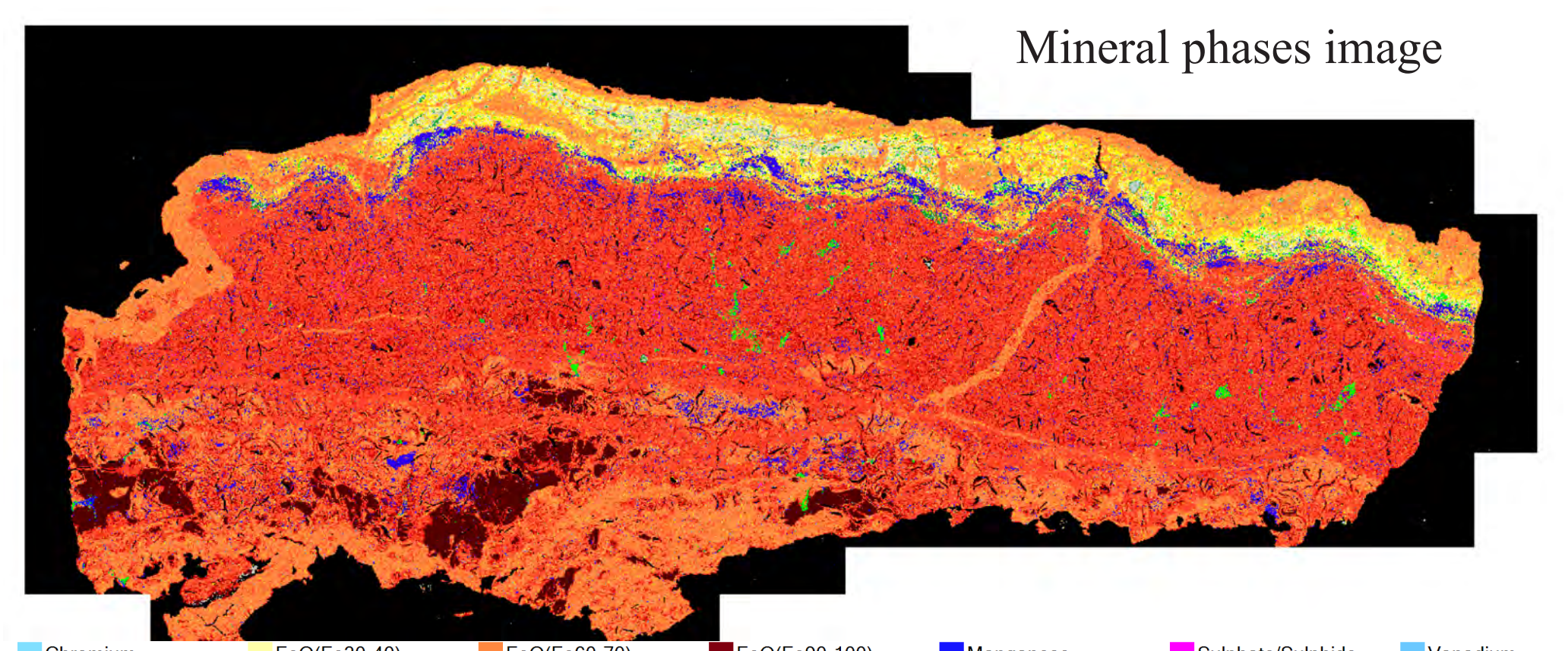
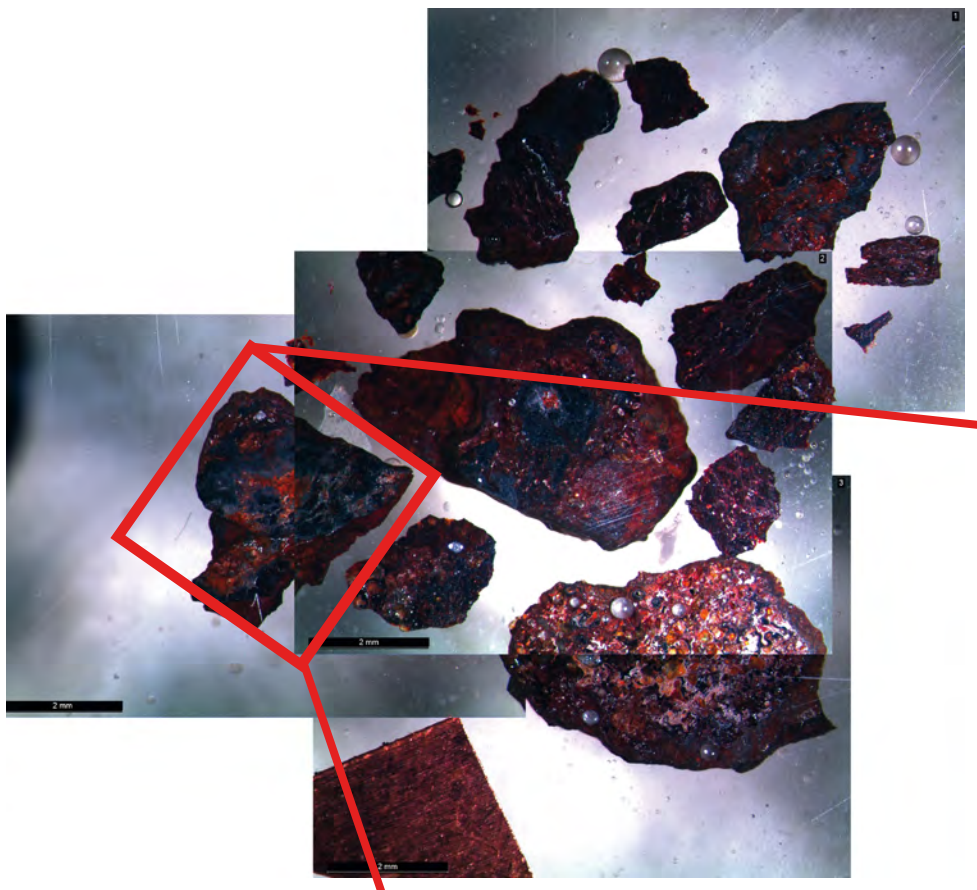


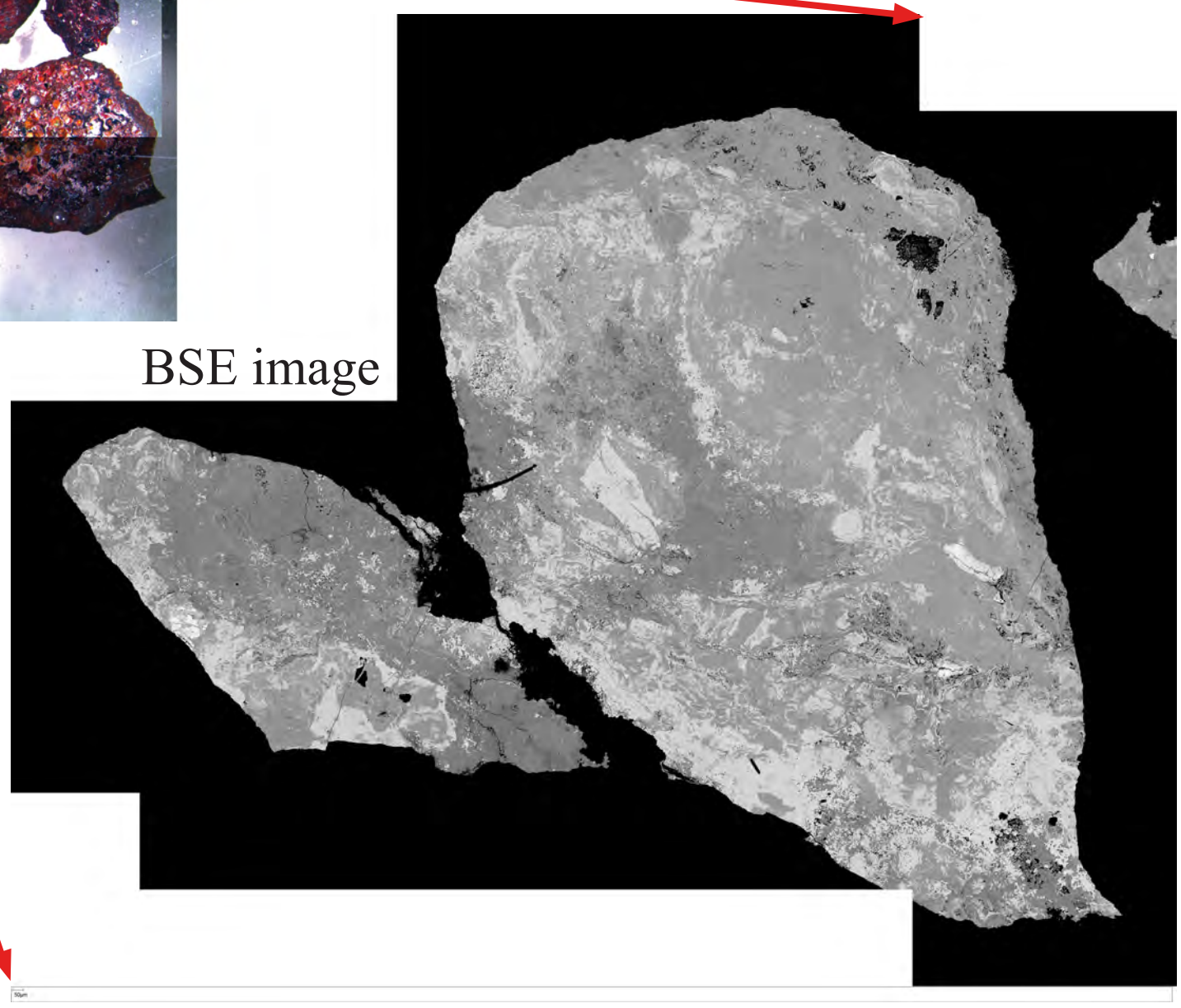
Mineral phases image



BMB5930



Optical microscopy image



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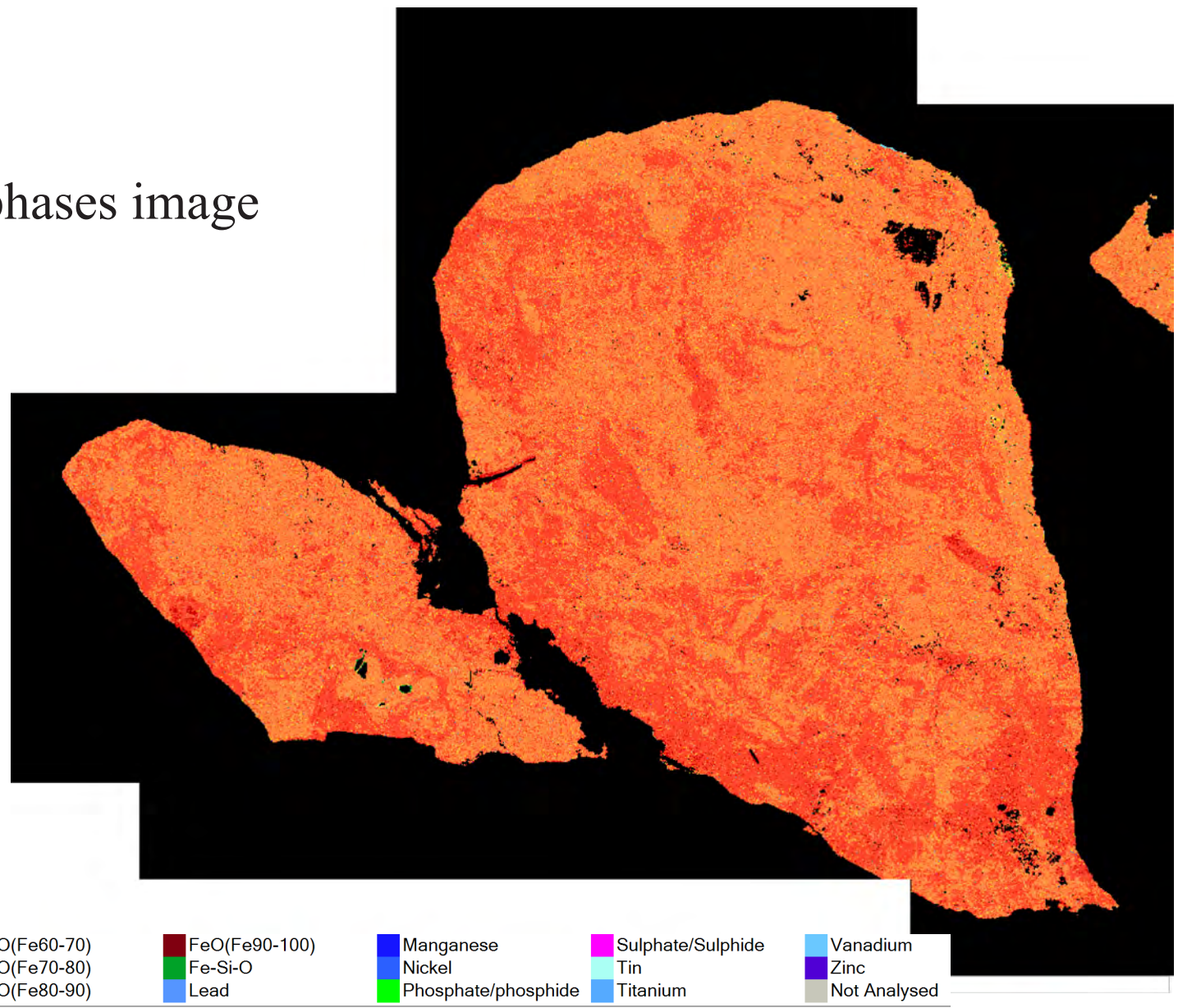
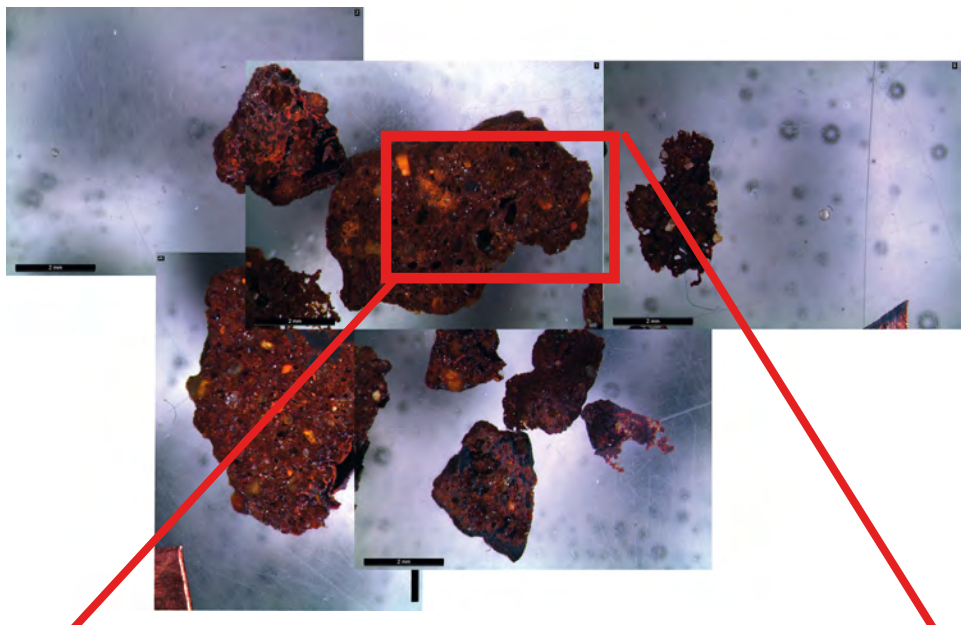


Mineral phases image

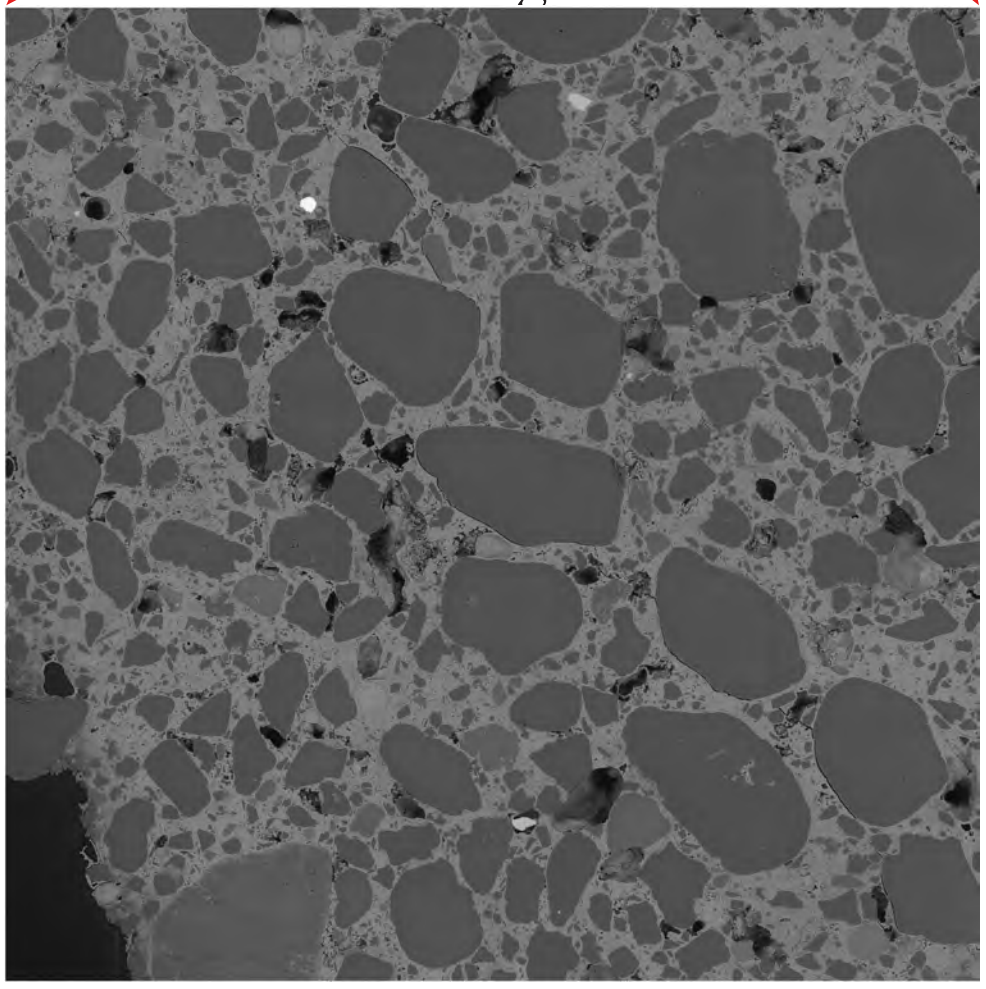
Chromium
Copper
Fe
FeO(Fe30-40)
FeO(Fe40-50)
FeO(Fe50-60)
FeO(Fe60-70)
FeO(Fe70-80)
FeO(Fe80-90)
FeO(Fe90-100)
Fe-Si-O
Lead
Manganese
Nickel
Phosphate/phosphide
Sulphate/Sulphide
Tin
Titanium
Vanadium
Zinc
Not Analysed

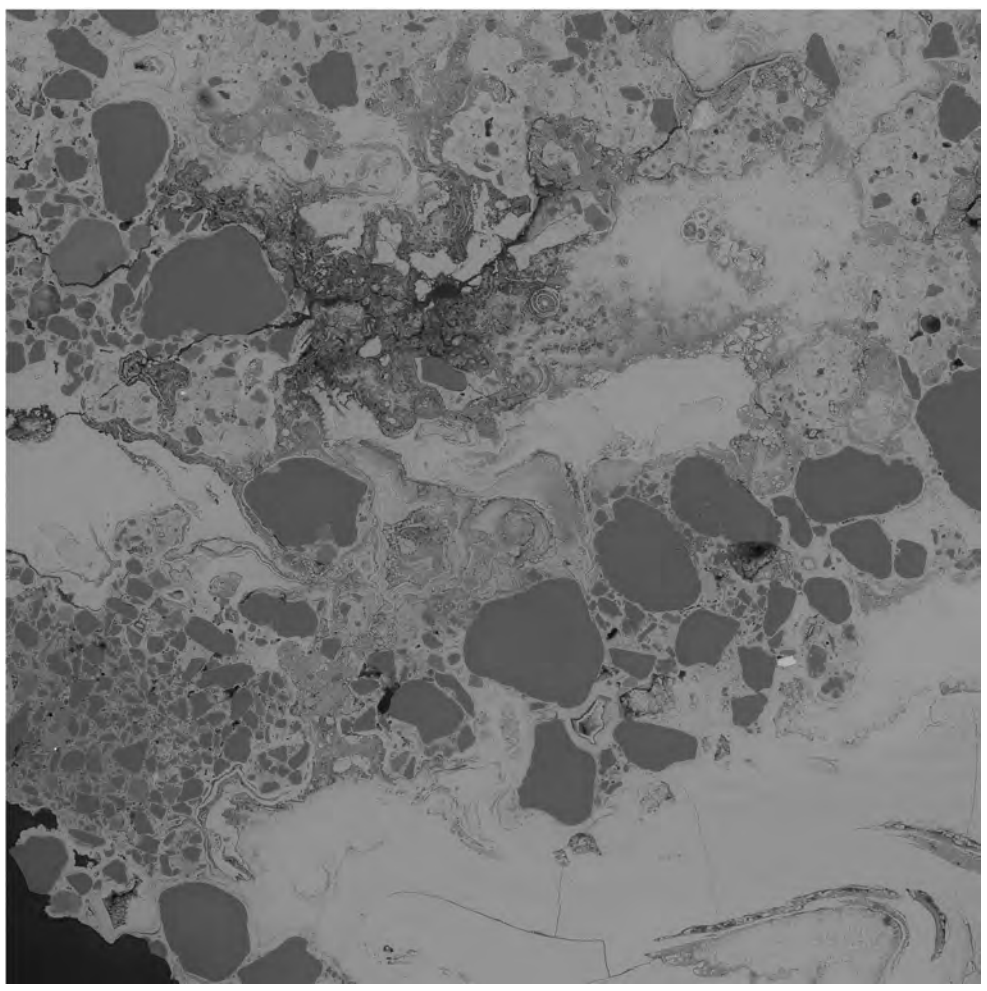
BMB5933

Optical microscopy image

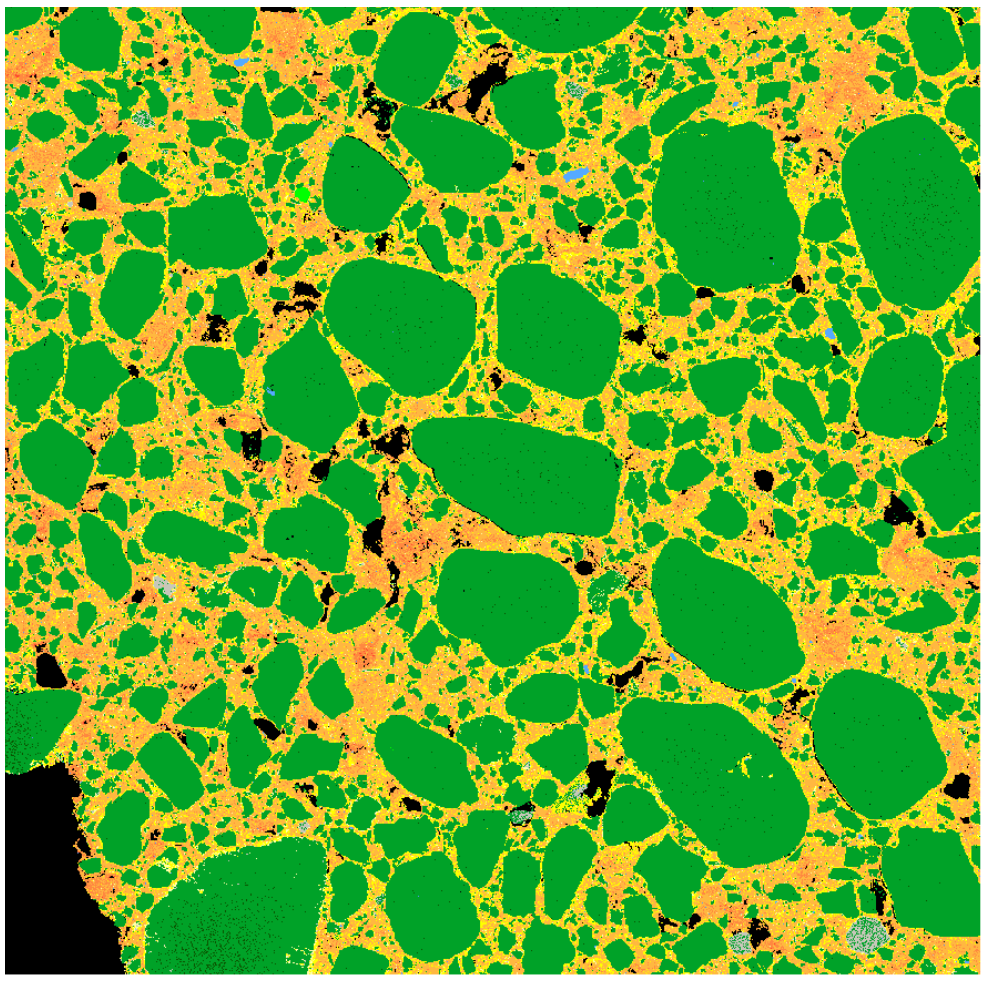


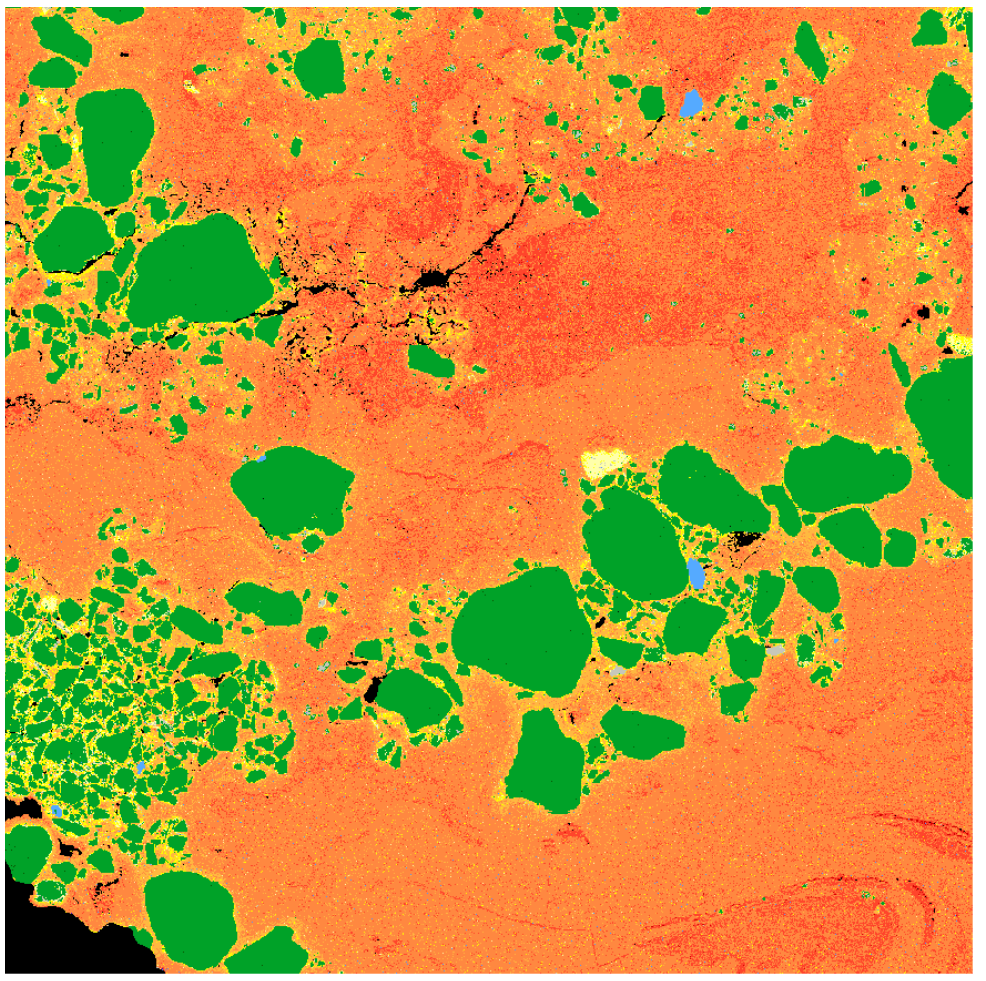
BSE images





Mineral phases image

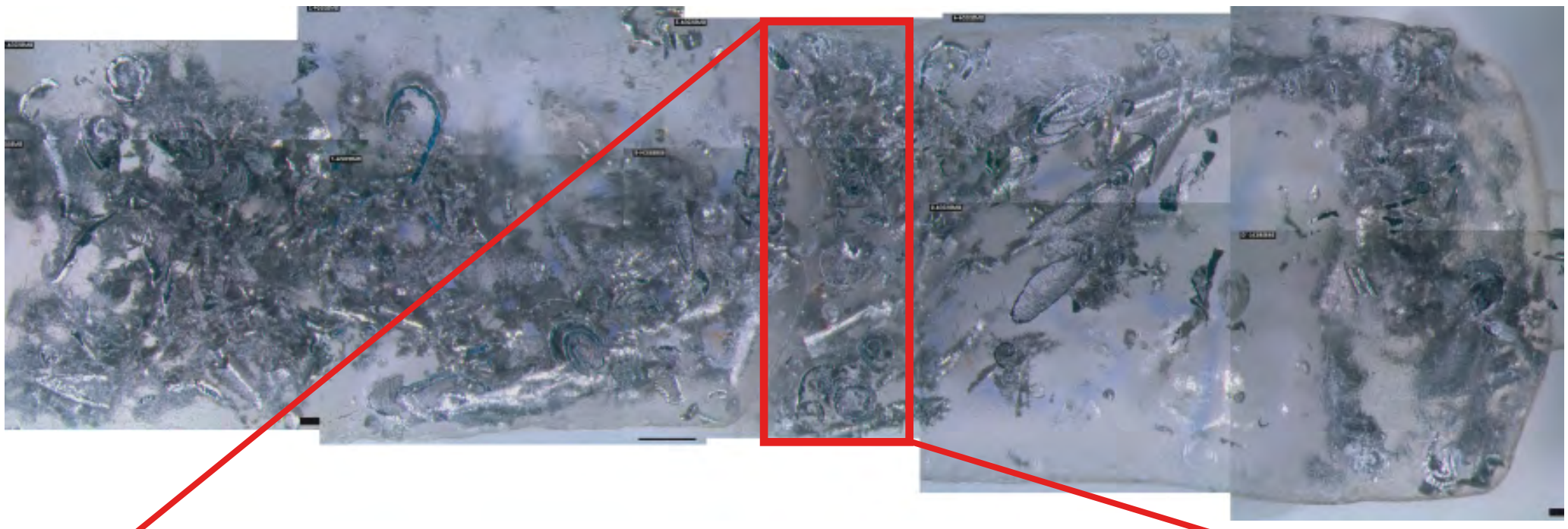




100µm

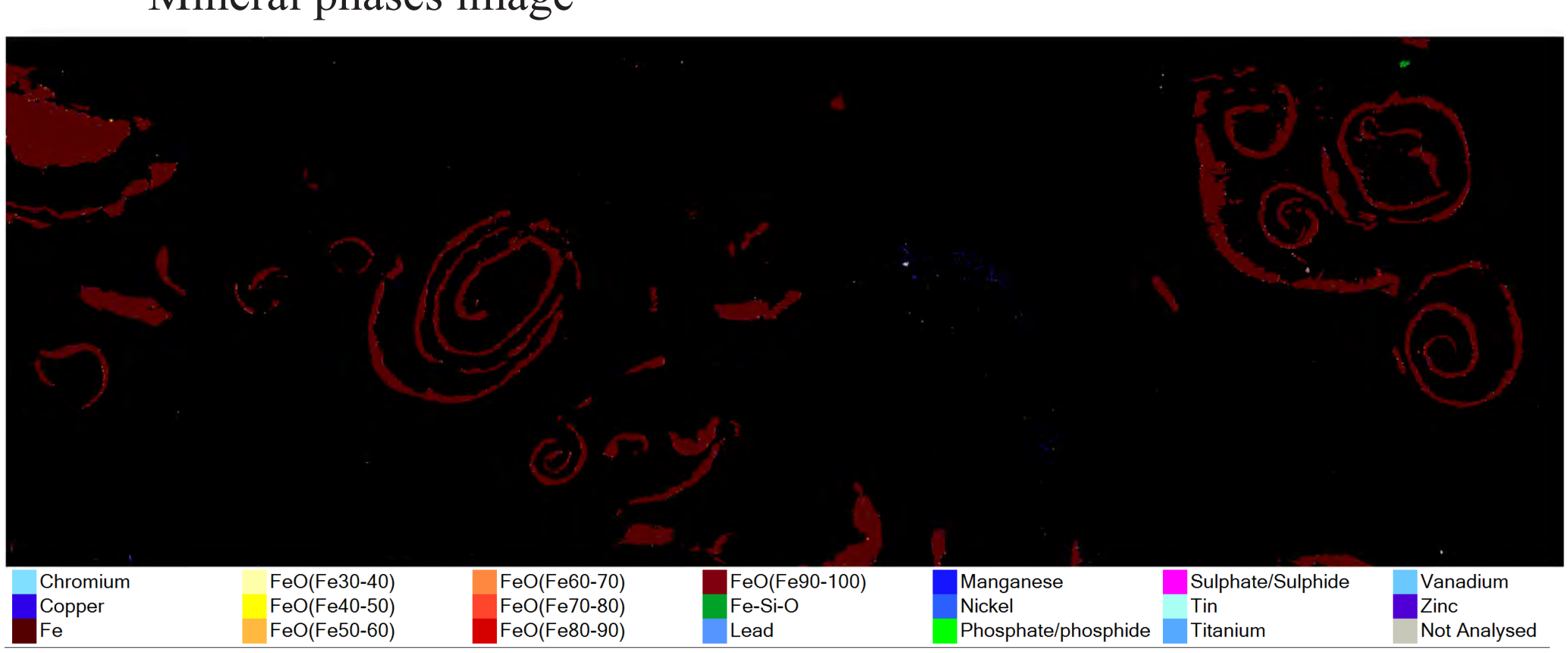
BMB5934

Optical microscopy image



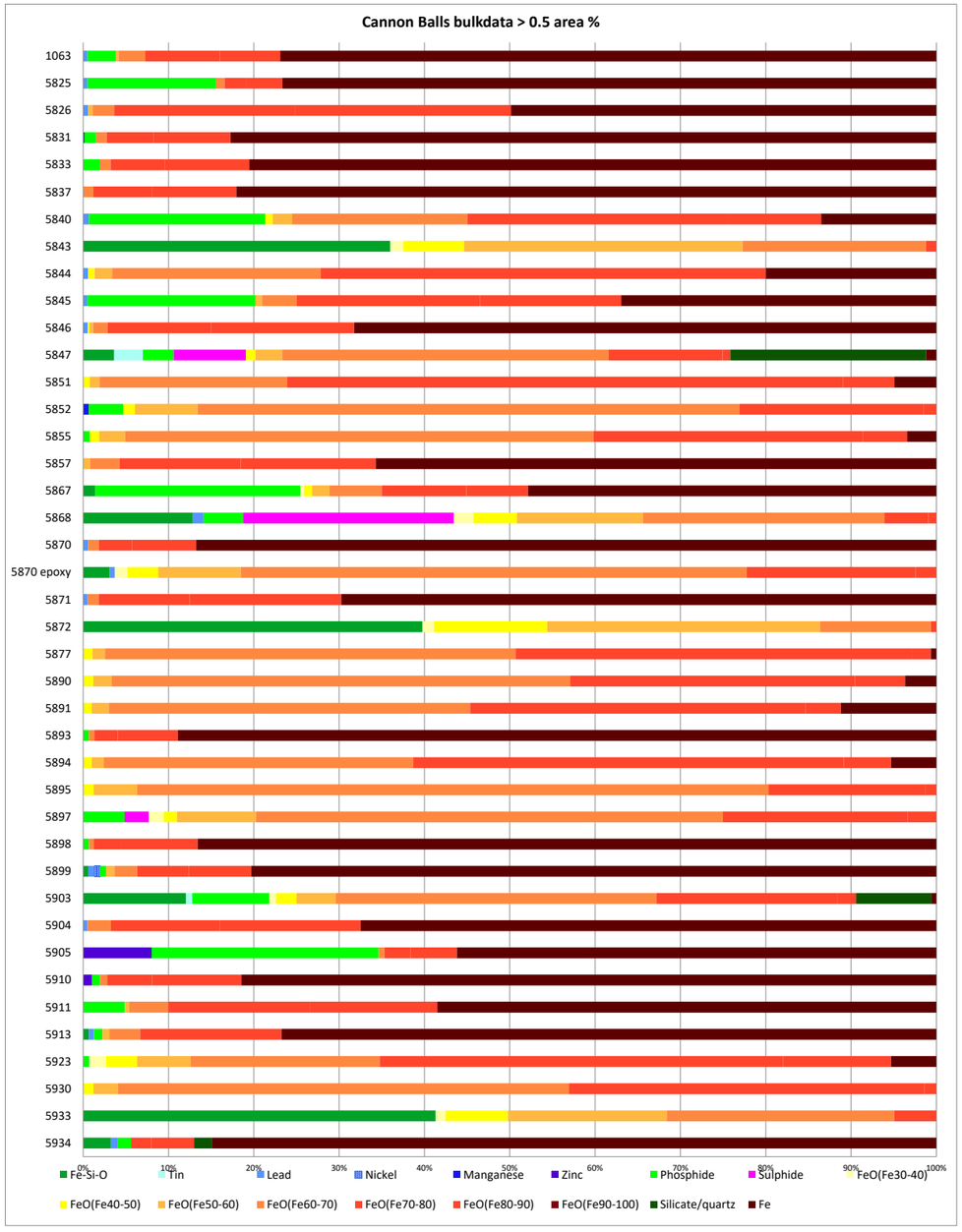
BSE image

Mineral phases image



Appendix C - Bulk SEM data

	5934	5933	5930	5923	5913	5911	5910	5905	5904	5903	5899	5898	5897	5895	5894	5893	5891	5890	5877	5872	5871	5870 epoxy	5870	5868	5867	5857	5855	5852	5851	5847	5846	5845	5844	5843	5840	5837	5833	5831	5826	5825	1063
Fe	77.52021553	0	0	5.310278	76.74708	58.48619	82.32867	61.10902	67.47945	0.599882	79.45084	86.58021	0	0	5.31909	88.32181	11.20277	3.669135	0.655547	0	69.74897	0	86.77664	0	47.86405	65.67895	3.4237	0	4.909277	1.240917	68.23129	36.95758	19.98831	0	13.49587	82.04109	80.54077	82.74479	49.87224	76.66237	76.90977
FeO(Fe30-4	0	1.158419	0	1.972687	0	0	0	0	0	0.772632	0	0	1.722653	0	0	0	0	0	0	1.333082	0	1.476648	0	2.28385	0.407073	0	0	0	0	0.04892	0	0	1.550246	0	0	0	0	0	0	0	0
FeO(Fe40-5	0	7.323726	1.203816	3.624167	0	0	0	0	0	2.385672	0	0	1.593454	1.229269	1.004302	0	1.020915	1.188012	1.106319	13.28525	0	3.605769	0	5.111474	0.957525	0	1.14707	1.364494	0.780801	1.103352	0.151652	0	0.75979	7.110139	0.831037	0	0	0	0	0	0
FeO(Fe50-6	0	18.63183	2.870206	6.252279	0.80262	0.502769	0	0	0	4.627058	0.974314	0	9.216193	5.072726	1.413284	0	1.984451	2.156766	1.434163	31.96455	0	9.684066	0	14.73627	2.031755	0.798972	3.022257	7.327877	1.129804	3.111776	0.428051	0.76686	2.030976	32.65209	2.291711	0	0	0	0.556547	0	0.311446
FeO(Fe60-7	0	26.63339	52.86825	22.21133	3.593339	4.549799	0.821017	0.733404	2.747143	37.58622	2.627694	0.540594	54.7373	74.01107	36.27027	0.626909	42.3485	53.70852	48.13953	12.99859	1.293169	59.30632	1.256874	28.30343	6.113881	3.491159	54.87859	63.54171	22.00398	38.30944	1.702419	4.093784	24.46669	21.48404	20.53212	1.192497	1.259439	1.203303	2.520214	0.993252	3.14041
FeO(Fe70-8	2.156334255	4.943802	41.6595	47.27853	6.591632	16.60971	5.346964	3.317454	12.79326	21.21922	5.96398	3.23789	21.66236	18.33708	50.45194	2.73268	39.3208	33.38887	46.54953	0.636132	10.67397	19.78022	3.92773	5.165851	9.9287	14.1557	31.57235	21.52498	65.11054	13.32816	12.10528	21.45356	37.5	1.215729	30.51516	6.913801	6.325072	5.5407	21.2083	2.570324	8.755083
FeO(Fe80-9	4.582210214	0	1.398224	12.63539	9.986623	14.95476	10.55309	5.915213	16.47082	2.173009	7.263065	8.95173	3.359173	1.349859	5.541118	6.984408	4.122571	5.8887	2.114912	0	17.76662	2.438187	7.462687	0.951604	7.22062	15.86827	5.213264	1.532448	6.065599	0.904702	16.78204	16.54426	14.66978	0.015509	10.96884	9.852613	9.913334	8.961856	25.27565	4.192888	7.055109
FeO(Fe90-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.006948	0	0	0	0	0.009784	0	0	0	0	0	0	0	0	0	0	0
Fe-Si-O	2.964959721	41.30883	0	0	0.691914	0	0	0	0	12.03619	0.620018	0	0	0	0	0	0	0	0	39.7824	0	3.090659	0	12.86025	1.412392	0	0	0	0	3.618932	0	0	0	35.97225	0	0	0	0	0	0	0	0
Lead	0.700808642	0	0	0	0.558144	0	0	0	0.509324	0	0.708592	0	0	0	0	0	0	0	0	0	0.517268	0.618132	0.576067	1.223491	0	0	0	0	0	0	0.540567	0.484211	0.584454	0	0.680517	0	0	0	0.567048	0.492835	0.497448
Manganese	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.663958	0	0	0	0	0	0	0	0	0	0.157295	0	0	0
Nickel	0	0	0	0	0	0	0	0	0	0	0.620018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phosphide	1.455525681	0	0	0.715342	1.028645	4.896762	0.950258	28.92491	0	9.062991	0.708592	0.689577	4.866494	0	0	0.68317	0	0	0	0	0	0	0	4.649266	24.06401	0	0.742768	4.044539	0	3.596394	0	19.69974	0	0	20.68476	0	1.961381	1.392057	0	15.08833	3.330738
Silicate/qua	1.88679254	0	0	0	0	0	0	0	0	8.796561	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.91399	0	0	0	0	0	0	0	0	0	0	0
Sulphide	0	0	0	0	0	0	0	0	0	0	0	0	2.842377	0	0	0	0	0	0	0	0	0	0	24.71452	0	0	0	0	0	8.488386	0	0	0	0	0	0	0	0	0	0	0
Tin	0	0	0	0	0	0	0	0	0	0.740552	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.38395	0	0	0	0	0	0	0	0	0	0	0
Zinc	0	0	0	0	0	0	1.063	8.733	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Appendix D. LA-SF-ICP-MS operating and data acquisition parameters

Laser ablation system	**New Wave Research NWR213 solid state Nd:YAG laser with aperture imaging**
Laser wavelength	213 nm (Nd:YAG)
Laser mode	Q-switched (Nd:YAG)
Nominal pulse width	4 ns (Nd:YAG)
Repetition rate	10 Hz
Spot sizes (diameter)	25 µm
Energy density on sample	3.4-3.5 J/cm^2 (homogenized energy distribution)
Ablation cell	standard TV2 cell with custom sample holder
Ablation cell gas flow rates	421-481 ml/min He
Tubing for gas flow	Tygon S3 B44-3 and S-50 HL
Laser beam focus	Fixed at sample surface

ICP-MS	**Thermo-Fisher Scientific ELEMENT 2 double-focusing magnetic sector-field ICP-MS with Jet interface system**
Interface cones	Ni Jet sampler (X-cone) and H-type skimmer cone
Detector type	single-collector discrete dynode electron multiplier
Detector mode	cross-calibrated pulse counting and analogue
Detector vacuum	10^{-7} mbar (during analysis)
Mass resolution	300 (low resolution)
Scan type	E-scan
Detection mode	Both
Integration type	Average
Aquisition mode	Time resolved analysis
Argon gas flow rates (l/min):	
Plasma	16
Auxiliary	0.70
Sample	0.896-0.902
RF power	1400 W
Lenses (V):	
Extraction	-2000
Focus	-848
X-Deflection	2.00
Y-Deflection	-4.25
Shape	120
SEM potential	2500 V

Data acquisition and processing	
Isotopes measured	^{45}Sc, ^{47}Ti, ^{51}V, ^{53}Cr, ^{55}Mn, ^{57}Fe, ^{59}Co, ^{65}Cu, ^{66}Zn, ^{95}Mo, ^{120}Sn, ^{121}Sb, ^{139}La, ^{140}Ce, ^{141}Pr, ^{146}Nd, ^{147}Sm, ^{153}Eu, ^{157}Gd, ^{159}Tb, ^{163}Dy, ^{165}Ho, ^{166}Er, ^{169}Tm, ^{172}Yb, ^{175}Lu, ^{178}Hf, ^{182}W, ^{202}Hg, ^{208}Pb
Sampling time (ms)	10 ms for all elements except the lanthanides (La-Lu, 15 ms) and Hf (15 ms)
Search & integration window (%/%)	0/80 for all elements
Samples per peak	10 for all elements
Oxide production rate	Tuned to ≤ 0.1% UO_2 ($^{254}UO_2/^{238}U$)
Analysis duration	Preablation (5 impulses) followed by 60 s. blank, 40 s. ablation and 40 s. washout.
Software for data reduction	Iolite vers. 2.5 (Hellstrom et al. 2008)
External standardization	BCR-2 (glass) as primary standard with NIST-612, NIST-614, BHVO2 glasses and the E363 pressed powder pellet as secondary standards. E363 was also used to verify the FeO concentration of BCR-2 and the other standards.
Internal standard isotopes	^{57}Fe

Appendix E - LA-ICPMS analyses of historic cannon balls from Bremervörde Castle, Germany

BMB 1063

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb [ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB1063	Zircon_sample-007.FIN2	Fe-rich	700000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5825

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb [ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5825	Zircon_Sample-098.FIN2	Fe-rich	700000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5826

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb [ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5826	Zircon_Sample-189.FIN2	Fe-rich	700000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5831			CONCENTRATIONS																									
Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s
BMB5831	Zircon_Sample-267.FIN2	Fe-rich	700000		0.0029	0.0056	10.4	5.8	62	27	23.2	9	960	230	18.5	5.4	14.1	6.4	0.274	0.093	29.5	3.3	0.58	0.13	3.3	1.6	-0.0072	0.0085
BMB5831	Zircon_Sample-268.FIN2	Fe-rich	700000		-0.027	0.03	2.6	1.8	16	14	6.3	4.2	440	240	8.6	5.3	52	59	0.59	0.6	5.8	3.7	0.15	0.14	0.85	0.6	0.0045	0.0045
BMB5831	Zircon_Sample-269.FIN2	Fe-rich	700000		-0.042	0.091	13.3	9.1	62	16	21.4	3.7	544	99	12.4	3	10	2.8	1.1	1.4	41	28	0.63	0.23	3.2	1.4	0.0011	0.0082
BMB5831	Zircon_Sample-270.FIN2	Fe-rich	700000		0.034	0.019	34	14	330	130	101	32	537	92	29.7	8.5	43	20	79	40	93	18	2.36	0.84	12.8	3.9	0.0009	0.008
BMB5831	Zircon_Sample-271.FIN2	Fe-rich	700000		0.007	0.097	9.7	4.3	39.7	1.7	17.3	3.4	676	31	15.35	0.7	22.9	2.1	1.54	0.4	10.7	1	0.68	0.42	3.85	0.55	-0.012	0.032
BMB5831	Zircon_Sample-272.FIN2	Fe-rich	700000		0.05	0.12	9.8	4.8	43.4	8.3	17	3.7	726	56	15	2	20.8	1.8	1.56	0.18	9.9	1.4	0.89	0.55	3.24	0.4	0.007	0.043
BMB5831	Zircon_Sample-273.FIN2	Fe-rich	700000		0.018	0.033	9.9	2.9	143	59	38	11	290	140	12.6	1.4	12	2.3	1.68	0.27	44	16	1.17	0.45	6.9	2.5	0.003	0.035
BMB5831	Zircon_Sample-280.FIN2	Fe-rich	700000		-0.065	0.049	10.1	4.1	61.2	9.2	24.3	3.4	744	72	14.5	2	14	1.7	1.35	0.61	17.1	2.6	0.8	0.39	5	0.65	0.064	0.075
BMB5831	Zircon_Sample-281.FIN2	Fe-rich	700000		-0.08	0.16	4.9	1.5	45.8	4.2	17.3	1.9	692	31	15.78	0.4	17.9	1.3	2.06	0.43	11.5	2.4	0.64	0.22	3.92	0.43	-0.022	0.03
BMB5831	Zircon_Sample-282.FIN2	Fe-rich	700000		0.069	0.097	8.3	3.3	28	2.1	15.1	1.6	594	41	14.3	1.6	18.8	2.2	2.13	0.62	7.8	1.6	0.41	0.38	3.23	0.62	-0.019	0.051
BMB5831	Zircon_Sample-283.FIN2	Fe-rich	700000		0.1	0.1	6.6	1.9	34.59	0.8	16.3	3	635	67	14.14	0.81	20.4	1	1.5	0.39	7.7	3.1	0.34	0.28	3.74	0.79	0.077	0.049
BMB5831	Zircon_Sample-284.FIN2	Fe-rich	700000		-0.12	0.11	12.8	3.8	95	19	34.8	3.3	623	89	13.9	1.7	12.57	0.32	2.83	0.95	23.5	6.2	1.2	0.42	7	1.4	0.031	0.062
BMB5831	Zircon_Sample-285.FIN2	Fe-rich	700000		-0.015	0.041	-0.09	0.33	2.8	1.1	6.2	1.4	368	44	4.1	0.66	1.62	0.52	0.65	0.89	3	0.48	0.044	0.029	0.217	0.041	-0.0016	0.0043
BMB5831	Zircon_Sample-286.FIN2	Fe-rich	700000		-0.003	0.011	4.2	1.2	50.3	8.6	22.2	1.3	1410	300	15.3	1.3	18.6	3.4	2.35	0.37	12.9	2.2	0.54	0.11	2.74	0.38	0.004	0.016
BMB5831	Zircon_Sample-293.FIN2	Fe-rich	700000		-0.02	0.11	9.3	4	37.5	3	13.1	1.3	702	44	17.92	0.92	24.4	1.3	1.7	0.36	10.35	0.97	0.54	0.34	3.94	0.5	0.03	0.035
BMB5831	Zircon_Sample-294.FIN2	Fe-rich	700000		0.02	0.11	8.1	3.4	33.6	2.3	16.2	2.9	670	19	18	2	23.64	0.53	2.23	0.72	8.3	2.6	0.5	0.17	4.18	0.6	-0.001	0.034
BMB5831	Zircon_Sample-295.FIN2	Fe-rich	700000		-0.04	0.15	9.5	4.1	47.5	2.4	19.7	2.3	687	54	13.2	1.4	19	1.3	2.2	0.51	11.8	2.6	0.57	0.4	4.06	0.52	-0.012	0.027
BMB5831	Zircon_Sample-296.FIN2	Fe-rich	700000		0.027	0.037	10.2	4.7	74.8	9	26.2	2.8	750	85	12.66	0.89	13.7	1.3	2.1	1	18.3	4.4	0.66	0.18	4.62	0.65	0	0.054
BMB5831	Zircon_Sample-297.FIN2	Fe-rich	700000		0.037	0.064	9.9	7.4	79	8.7	32.7	4.5	427	28	10.7	1.8	11.62	0.67	2.8	3.2	28	5.3	0.96	0.29	5.97	0.69	-0.011	0.012
BMB5831	Zircon_Sample-298.FIN2	Fe-rich	700000		0	0.11	11	4.3	44.1	5.1	22.6	3.8	711	69	14	3	18.4	1.8	2.9	1.3	17	3.9	1.07	0.48	6.2	1.1	-0.004	0.02
BMB5831	Zircon_Sample-299.FIN2	Fe-rich	700000		-0.02	0.17	10.3	4.8	52.8	2.5	25.3	3.9	697	18	12.7	1.3	15.9	1.3	2.02	0.51	14.2	2.1	0.49	0.28	6.06	0.99	0.045	0.034
BMB5831	Zircon_Sample-306.FIN2	Fe-rich	700000		-0.09	0.21	10.9	2.7	44.1	2.6	19.2	2.1	676	42	14.9	1.3	19.9	1.1	2.42	0.59	11.3	1.9	0.85	0.57	5	1.2	0.026	0.02
BMB5831	Zircon_Sample-307.FIN2	Fe-rich	700000		0.02	0.17	12.3	5.6	68	11	31.4	5.2	703	89	12.9	2.2	13.1	1.2	2.34	0.88	17.9	1.7	0.73	0.28	6.2	1.2	-0.012	0.017
BMB5831	Zircon_Sample-308.FIN2	Fe-rich	700000		-0.05	0.12	13.2	1.8	65.3	5.3	31.2	2.7	592	37	11.2	1.1	14.2	1.1	2.3	1.3	22.1	6.1	1.45	0.75	7.2	2.2	-0.003	0.051
BMB5831	Zircon_Sample-309.FIN2	Fe-rich	700000		-0.09	0.1	10.4	2.3	68.1	9.8	25.7	2.8	542	43	11.4	1.1	20.4	8.5	2.46	0.92	24.2	8.9	1.05	0.42	7.5	2	-0.022	0.041
BMB5831	Zircon_Sample-310.FIN2	Fe-rich	700000		0.016	0.072	9.3	6.2	81	14	28.8	7.1	593	81	14.2	2	12.8	2	2.2	1.1	23.7	3.4	1.05	0.22	6.6	1.2	0.005	0.048
BMB5831	Zircon_Sample-311.FIN2	Fe-rich	700000		-0.014	0.077	17	14	43.7	7.8	24.7	4.9	1280	930	11.4	0.87	19.4	2.4	19	11	10	2	1.17	0.45	6.4	1.2	0.003	0.068
BMB5831	Zircon_Sample-312.FIN2	Fe-rich	700000		-0.068	0.062	8.6	4.1	47.6	9.2	18.2	4.6	710	110	18.7	1.1	20.5	1.9	2.26	0.57	13.4	4	1	0.79	5.85	0.75	0.023	0.089
BMB5831	Zircon_Sample-319.FIN2	Fe-rich	700000		0.094	0.045	9.1	3	78	11	19.6	2.9	619	85	15.4	2	18.4	1.3	1.59	0.21	18.7	3.8	0.7	0.29	5.3	0.57	-0.002	0.044
BMB5831	Zircon_Sample-320.FIN2	Fe-rich	700000		-0.07	0.12	11.5	3.4	47.4	7.8	19.7	1.9	633	50	12.3	1.1	16.81	0.61	1.68	0.36	12.9	2	0.53	0.26	5.9	1.1	-0.01	0.042
BMB5831	Zircon_Sample-321.FIN2	Fe-rich	700000		0.003	0.038	5.1	7.6	35.5	3.4	14.6	1.6	656	44	14.1	1.7	19.98	0.69	1.79	0.51	8.48	0.9	0.69	0.47	4.9	1.2	-0.013	0.048
BMB5831	Zircon_Sample-322.FIN2	Fe-rich	700000		0.07	0.14	6.8	3.2	24.5	3.8	14.7	4.2	609	10	13.8	1.1	22.5	2.6	2.22	0.13	8.3	1.6	0.7	0.3	5.1	1	0.012	0.022
BMB5831	Zircon_Sample-323.FIN2	Fe-rich	700000		-0.036	0.039	71	66	80.2	7.3	26.7	1.6	636	53	13.34	0.58	16.2	2.4	1.59	0.49	19.9	5.9	0.55	0.3	6.02	0.55	0.021	0.043
BMB5831	Zircon_Sample-324.FIN2	Fe-rich	700000		0.021	0.055	15	12	106	27	25.7	5.1	523	93	14.3	1.3	14.91	0.94	1.8	1.1	46	37	0.8	0.18	7.98	0.86	0.013	0.066
BMB5831	Zircon_Sample-325.FIN2	Fe-rich	700000		0.047	0.034	60	60	57.5	5	18.9	1.5	854	11	16.6	2.2	18	1.1	1.87	0.87	13.7	2.8	0.75	0.44	5.67	0.39	0.007	0.05
BMB5831	Zircon_Sample-332.FIN2	Fe-rich	700000		0.1	0.073	31	31	144	51	41.4	5.1	640	180	12.25	0.85	11.47	0.98	1.67	0.46	35	17	1.34	0.31	10.9	2.5	0.041	0.065
BMB5831	Zircon_Sample-333.FIN2	Fe-rich	700000		-0.01	0.2	16.6	6.3	107.2	8.1	27.8	3.6	720	120	16.8	3.8	15.6	5.4	2.8	1.6	31	21	1.5	1	10.7	5.3	-0.001	0.04
BMB5831	Zircon_Sample-334.FIN2	Fe-rich	700000		-0.039	0.056	12.7	7.6	42.1	2.9	22.6	5.2	644	77	13.2	2.3	18.5	2.9	2.9	2.1	14.7	3.2	0.69	0.36	9.5	4	-0.005	0.034
BMB5831	Zircon_Sample-335.FIN2	Fe-rich	700000		0.073	0.042	7.6	2.8	89	14	32.3	6.2	460	130	13.4	3.7	14.9	2.5	2.3	1.2	32	14	1.29	0.57	11.9	4.5	0.022	0.033
BMB5831	Zircon_Sample-336.FIN2	Fe-rich	700000		-0.053	0.032	10.2	1.2	45	0.71	20.4	4.4	649	42	14.4	1	21.81	0.84	2.05	0.32	11.5	1.5	0.97	0.16	9.1	1	0.009	0.055
BMB5831	Zircon_Sample-337.FIN2	Fe-rich	700000		-0.01	0.14	75	56	246	85	49	11	1620	580	12.4	1.9	11.7	2.4	1.66	0.37	69	25	1.37	0.22	17.44	0.53	0.023	0.044
BMB5831	Zircon_Sample-338.FIN2	Fe-rich	700000		0.028	0.068	5.6	1.3	34.2	5.2	14.5	1.7	633	39	15.2	2.3	21.9	3.3	2.94	0.64	9.2	1.8	0.94	0.62	7.38	0.76	0.042	0.02

Analysis #	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
Zircon_Sample-267.FIN2	0	0.011	-0.0003	0.0031	-0.0008	0.0078	0.0085	0.0088	-0.0000481	0.0000027	-0.022	0.076	-0.0002	0.0067	-0.0079	0	0.0016	0.0017	0.001	0.0085	0.0007	0.0016	0.01	0.02	0.0009	0.0018	-0.0001564	0.0000089	2.18	0.39	310	360	0.051	0.011
Zircon_Sample-268.FIN2	0.006	0.018	-0.0018	0.0017	0.008	0.014	0.009	0.012	0.0049	0.0058	-0.01	0.07	-0.0035	0.0032	0.029	0	0.0005	0.0013	-0.0087	0.0071	0.0006	0.0012	-0.00027	0.00014	-0.000034	0.000017	0.0063	0.0077	0.5	0.34	220	250	0.112	0.029
Zircon_Sample-269.FIN2	0.0011	0.0017	-0.0023	0.0062	0.013	0.04	0.012	0.011	-0.00008	0.000067	-0.09	0.13	0.0014	0.0046	0.027	0	0.00027	0.00095	-0.006	0.015	0.0005	0.0011	0.0017	0.0041	-0.000043	0.000037	0.01	0.02	2.1	1.2	80	95	0.149	0.092
Zircon_Sample-270.FIN2	-0.002	0.006	0.0004	0.002	-0.007	0.0062	-0.000259	0.000027	0.0014	0.0029	0.021	0.052	0.0012	0.0038	0.006	0	0.002	0.0021	0	0.016	0.00041	0.0009	0.0101	0.0091	-0.0000268	0.0000028	-0.000163	0.000017	8.6	2.3	130	140	0.137	0.086
Zircon_Sample-271.FIN2	-0.008	0.01	0.009	0.018	0.012	0.093	0.16	0.19	0.006	0.012	0.06	0.47	0.005	0.032	0.022	0	0.01	0.013	-0.025	0.034	0.0017	0.0039	0.018	0.037	0.0044	0.0091	0.009	0.021	1	0.25	10	110	0.028	0.043
Zircon_Sample-272.FIN2	0.009	0.022	-0.0052	0.0075	0	0.089	-0.0012	0.00034	0.005	0.01	0.03	0.21	0.002	0.012	0.06	0	0.011	0.014	0.034	0.054	-0.000191	0.000054	0.034	0.026	-0.000126	0.000035	0.014	0.03	0.79	0.26	70	100	-0.00061	0.00017
Zircon_Sample-273.FIN2	0.025	0.027	0	0.011	-0.01	0.05	-0.00114	0.0003	0.009	0.011	0.04	0.23	-0.005	0.032	0.002	0	0.007	0.011	0.03	0.036	0.0026	0.0057	-0.00095	0.00025	-0.00012	0.000032	0.026	0.033	3.9	1.2	22	33	0.019	0.023
Zircon_Sample-280.FIN2	0.009	0.052	0.0033	0.0085	-0.047	0.036	0.015	0.033	-0.000223	0.000082	-0.02	0.26	0.01	0.013	-0.03	0	0.012	0.015	0.014	0.046	-0.000194	0.000072	0.038	0.078	0.0056	0.007	0.025	0.031	1.38	0.27	-24	85	-0.00046	0.00017
Zircon_Sample-281.FIN2	-0.014	0.016	0.008	0.022	-0.035	0.034	0.009	0.021	0.01	0.019	0.08	0.31	0	0.019	0.08	0	-0.00057	0.00015	-0.015	0.056	-0.000196	0.000052	-0.00107	0.00028	0.0041	0.0084	-0.00082	0.00022	1.14	0.27	50	210	0.062	0.085
Zircon_Sample-282.FIN2	-0.009	0.042	0.007	0.014	0.04	0.07	0.016	0.034	-0.000243	0.000087	0.19	0.41	-0.015	0.025	-0.028	0	0.0049	0.0069	0.032	0.061	0.0132	0.0088	0.025	0.032	0.02	0.022	0.03	0.046	0.71	0.32	10	170	0.041	0.046
Zircon_Sample-283.FIN2	0.031	0.015	-0.0023	0.0051	0.028	0.068	0.035	0.042	-0.000224	0.000076	0.18	0.15	0.005	0.03	0.01	0	0.0042	0.0093	0.017	0.095	0.01	0.013	0.013	0.028	-0.000141	0.000048	0.018	0.038	0.69	0.19	-20	280	0.05	0.048
Zircon_Sample-284.FIN2	-0.004	0.017	0.028	0.038	0.068	0.033	0.013	0.019	-0.00027	0.000061	-0.16	0.28	0.004	0.027	-0.013	0	0.012	0.013	-0.014	0.03	0.013	0.014	0.044	0.051	-0.000155	0.000057	0.019	0.026	2.53	0.62	-22	68	0.061	0.047
Zircon_Sample-285.FIN2	-0.002	0.0037	0.0023	0.0035	0.007	0.019	0.017	0.028	-0.00005	0.000024	-0.06	0.038	-0.002	0.011	-0.0009	0	0.0055	0.0053	0.0023	0.0062	0.0029	0.0023	0.007	0.014	0.0013	0.0027	0.006	0.012	0.276	0.047	160	220	0.0048	0.0063
Zircon_Sample-286.FIN2	-0.0033	0.0036	0.0003	0.0012	0.016	0.021	-0.000234	0.000016	0.0022	0.0023	-0.034	0.014	0.007	0.012	-0.00424	0	0.0025	0.003	0.0075	0.0084	0.0008	0.0017	0.0032	0.0068	0.001	0.002	0.016	0.017	1.25	0.23	260	110	0.36	0.15
Zircon_Sample-293.FIN2	0.002	0.035	0.002	0.029	0.11	0.13	0.059	0.055	0.013	0.02	-0.11	0.2	-0.018	0.013	-0.018	0	-0.00065	0.00016	-0.022	0.046	0.015	0.03	0.032	0.03	0.0065	0.0082	0.026	0.036	0.59	0.18	-70	110	0.084	0.069
Zircon_Sample-294.FIN2	0.022	0.024	0.002	0.013	0.13	0.15	0.072	0.049	0.014	0.011	0.17	0.21	0.005	0.013	0.059	0	0.003	0.0071	-0.031	0.042	0.016	0.021	0.035	0.03	-0.000153	0.000039	0.032	0.04	0.77	0.13	10	210	0.049	0.041
Zircon_Sample-295.FIN2	0	0.035	0.01	0.017	0.069	0.05	0.026	0.055	0.0039	0.0082	0.22	0.36	-0.019	0.015	0.04	0	0.007	0.01	0.004	0.044	0.008	0.0068	0.046	0.07	0.011	0.014	0.029	0.059	0.7	0.13	50	92	0.039	0.027
Zircon_Sample-296.FIN2	-0.016	0.029	-0.001	0.012	-0.009	0.032	0.062	0.067	0.0017	0.0039	0.01	0.23	-0.001	0.023	-0.001	0	0.0057	0.0094	0.012	0.086	0.007	0.014	0.055	0.084	0.011	0.011	0.014	0.03	1.31	0.15	0	120	0.062	0.037
Zircon_Sample-297.FIN2	0.007	0.031	0.0004	0.0059	0.032	0.074	0.06	0.053	0.011	0.01	-0.19	0.19	-0.0103	0.0077	0.06	0	0.0046	0.0067	-0.005	0.048	0.0051	0.0068	0.006	0.014	0.008	0.01	-0.00068	0.00016	1.77	0.22	-120	170	0.023	0.02
Zircon_Sample-298.FIN2	0.0103	0.0089	0.004	0.021	0.059	0.077	0.016	0.035	0.013	0.013	0.23	0.32	-0.002	0.018	0.01	0	0.003	0.0071	-0.03	0.048	0.012	0.012	0.025	0.034	0.011	0.01	-0.00083	0.00024	1.07	0.3	40	220	0.035	0.037
Zircon_Sample-299.FIN2	0.036	0.058	0.002	0.014	0.031	0.08	-0.00119	0.00033	-0.000186	0.000051	-0.01	0.1	0.007	0.019	0.03	0	0.006	0.013	0.002	0.036	0.0037	0.0077	0.012	0.025	-0.00014	0.000038	-0.00074	0.0002	0.93	0.28	50	100	0.052	0.022
Zircon_Sample-306.FIN2	-0.004	0.034	0.014	0.024	-0.058	0.059	0.017	0.037	0.006	0.012	0.12	0.41	-0.006	0.01	0.01	0	-0.00072	0.00029	0	0.054	0.014	0.02	0.014	0.02	-0.00018	0.000072	0.048	0.068	0.67	0.2	40	150	0.09	0.11
Zircon_Sample-307.FIN2	0.023	0.017	0.008	0.024	-0.019	0.065	0.014	0.031	0.0027	0.0058	-0.18	0.26	-0.001	0.011	0.07	0	0.016	0.018	0.033	0.077	0.0028	0.006	0.011	0.024	0.0025	0.0052	-0.00074	0.00021	1.27	0.24	-10	160	0.059	0.036
Zircon_Sample-308.FIN2	0.012	0.035	-0.0023	0.0067	-0.084	0.063	0.035	0.034	0.013	0.011	0	0.24	0.006	0.024	0.1	0	0.013	0.012	-0.025	0.088	0.013	0.018	0.075	0.045	0.0045	0.0094	0.036	0.046	1.27	0.43	-50	250	0.089	0.06
Zircon_Sample-309.FIN2	-0.001	0.06	0.003	0.015	0.05	0.17	-0.00145	0.00071	0.0093	0.0091	-0.02	0.32	-0.016	0.021	0.01	0	0.0089	0.0081	-0.004	0.09	0.008	0.011	0.11	0.12	0.01	0.014	0.037	0.053	1.38	0.53	121	49	0.044	0.06
Zircon_Sample-310.FIN2	0.043	0.037	0	0.012	-0.003	0.077	0.017	0.035	0.004	0.0082	0	0.15	-0.001	0.012	0.021	0	0.0049	0.007	-0.022	0.039	0.0087	0.0085	0.011	0.024	0.0043	0.0057	0.058	0.072	1.39	0.44	170	96	0.054	0.044
Zircon_Sample-311.FIN2	0.03	0.053	0.004	0.012	-0.037	0.012	0.034	0.041	0.012	0.018	0.01	0.22	-0.0077	0.0073	0.08	0	-0.0006	0.0002	0.056	0.098	0.0111	0.0077	0.034	0.027	-0.00015	0.00005	0.08	0.16	0.75	0.57	60	200	0.62	0.52
Zircon_Sample-312.FIN2	0.002	0.03	0.01	0.019	-0.015	0.085	0.031	0.04	-0.000189	0.000043	0.02	0.22	0.007	0.031	-0.03	0	-0.00066	0.00015	-0.031	0.018	0.007	0.014	0.012	0.027	0.0069	0.0087	0.042	0.061	1.09	0.3	-50	170	0.037	0.042
Zircon_Sample-319.FIN2	-0.0113	0.008	-0.0049	0.0064	-0.037	0.065	0.035	0.043	0.009	0.011	0.45	0.88	-0.011	0.014	-0.043	0	0.016	0.016	0.027	0.056	0.0042	0.0087	0.056	0.042	0.0022	0.0048	-0.00064	0.00022	0.74	0.17	-97	97	0.053	0.067
Zircon_Sample-320.FIN2	0.023	0.03	0.009	0.017	-0.05	0.069	0.15	0.22	0.0042	0.0056	0.51	0.33	-0.009	0.019	-0.003	0	0.0041	0.0065	0.009	0.063	0.0044	0.009	0.049	0.027	-0.000162	0.000064	0.034	0.03	0.68	0.3	60	110	0.31	0.56
Zircon_Sample-321.FIN2	0.01	0.026	0.018	0.013	0.04	0.18	0.048	0.084	0.0047	0.0098	0.41	0.27	0.006	0.04	0	0	0.0116	0.0082	0.023	0.062	0.0035	0.0074	0.069	0.036	0.012	0.015	0.033	0.035	0.55	0.28	-60	160	0.039	0.044
Zircon_Sample-322.FIN2	-0.02	0.017	0.015	0.012	0.049	0.035	-0.0011	0.00037	0.009	0.018	0.02	0.3	-0.011	0.02	0.048	0	0.0029	0.007	-0.053	0.028	0.0032	0.0066	0.015	0.031	0.008	0.016	0.035	0.054	0.38	0.092	-30	110	0.014	0.018
Zircon_Sample-323.FIN2	0.008	0.022	-0.0072	0.0084	0.053	0.045	-0.00108	0.00032	0.009	0.018	-0.07	0.32	0.016	0.012	-0.037	0	0.009	0.011	-0.02	0.04	0.006	0.012	0.017	0.021	0.0067	0.0084	0.044	0.065	0.94	0.18	106	68	0.056	0.04
Zircon_Sample-324.FIN2	0.1	0.13	0.005	0.027	0.08	0.14	0.088	0.016	0.005	0.011	-0.04	0.46	-0.017	0.012	0.051	0	0.01	0.012	0.021	0.03	0.008	0.017	0.026	0.033	-0.000152	0.000046	0.038	0.03	2.2	1.9	80	270	0.044	0.04
Zircon_Sample-325.FIN2	-0.012	0.025	0.019	0.02	0.01	0.11	0.051	0.062	0.009	0.012	0.08	0.17	-0.001	0.035	-0.022	0	0.0061	0.0085	0.052	0.07	0.0044	0.0092	0.011	0.025	0.005	0.01	0.009	0.019	0.85	0.34	30	190	0.038	0.047
Zircon_Sample-332.FIN2	-0.0276	0.0096	0.027	0.028	-0.01	0.1	-0.00106	0.00023	0.017	0.021	-0.02	0.37	-0.0111	0.0094	-0.017	0	-0.00056	0.00012	0.017	0.064	-0.000137	0.00003	0.065	0.083	-0.000144	0.000032	-0.0057	0.00013	2.1	0.38	-162	73	0.059	0.081
Zircon_Sample-333.FIN2	-0.003	0.029	0.007	0.012	0.05	0.066	-0.00161	0.00071	-0.000187	0.000083	0.14	0.26	-0.027	0.037	0.005	0	0.022	0.025	0.086	0.098	0.009	0.013	0.006	0.014	0.021	0.043	0.032	0.05	1.96	0.84	180	170	0.041	0.036
Zircon_Sample-334.FIN2	0.031	0.089	0.005	0.017	0.009	0.017	0.052	0.054	-0.000157	0.000074	0.35	0.34	-0.0098	0.009	0.1	0	0.0026	0.0066	0.012	0.043	0.009	0.012	0.019	0.026	0.0024	0.0051	0.034	0.032	0.84	0.51	68	91	0.039	0.047
Zircon_Sample-335.FIN2	0.012	0.059	0.004	0.011	0.019	0.062	0.04	0.051	0.008	0.012	0.29	0.32	0.0112	0.0082	-0.029	0	0.011	0.014	-0.002	0.036	0.0072	0.0066	0.016	0.022	0.0026	0.0055	-0.0007	0.00025	1.9	1.2	140	180	0.088	0.097
Zircon_Sample-336.FIN2	0.013	0.027	0.013	0.007	0.065	0.012	0.017	0.036	-0.00013	0.000023	0.15	0.46	-0.013	0.032	0.02	0	0.02	0.02	0.042	0.086	-0.000146	0.000026	0.055	0.064	0.006	0.012	-0.00061	0.00011	0.659	0.086	-33	58	0.00083	0.00015
Zircon_Sample-337.FIN2	0.037	0.03	0.016	0.023	0.05	0.14	0.042	0.044	0.008	0.017	0.36	0.74	0.02	0.045	0.01	0	0.006	0.014	0.035	0.073	0.009	0.019	-0.00126	0.00038	0.0047	0.0098	-0.00071	0.00021	3.08	0.63	-110	150	0.083	0.095
Zircon_Sample-338.FIN2	0.022	0.041	0	0.013	0.021	0.068	0.033	0.039	-0.000117	0.000023	0.279	0.082	-0.015	0.024	0.01	0	0.01	0.014	-0.042	0.029	0.01	0.012	-0.00099	0.0002	0.0083	0.0099	-0.00056	0.00011	0.61	0.11	100	170	0.041	0.065

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5833			CONCENTRATIONS																									
Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s
BMB5833	Zircon_sample-007.FIN2	Fe-rich	700000		0.033	0.028	52	11	139	31	61	16	1380	510	429	74	1230	150	3.6	2.9	122	10	40.1	2.3	42.3	1.9	0	0.011
BMB5833	Zircon_sample-008.FIN2	Fe-rich	700000		0.042	0.026	46.3	3.2	140	17	55	13	1120	160	554	56	1420	110	8	13	153	43	36.2	6.4	56	18	0.004	0.022
BMB5833	Zircon_sample-009.FIN2	Fe-rich	700000		0.009	0.036	38.7	3.3	116.7	9.5	63	13	2643	61	560	30	1355	83	2.4	3	118.3	4.8	36.7	4.1	37.9	2.7	-0.0004	0.008
BMB5833	Zircon_sample-010.FIN2	Fe-rich	700000		0.03	0.033	39.6	5.2	120	19	58.3	4.5	1190	360	342	36	1320	150	3.4	1.4	102	20	37.4	6.2	41.3	5.9	0.005	0.021
BMB5833	Zircon_sample-011.FIN2	Fe-rich	700000		0.064	0.091	46	10	145	26	64.6	8.4	1320	330	422	59	1336	16	4.8	4.2	117	16	39.5	2.1	42.89	0.99	-0.024	0.017
BMB5833	Zircon_sample-012.FIN2	Fe-rich	700000		-0.019	0.03	200	300	430	130	104	13	1440	140	446	45	906	75	1	0.8	314	50	57.9	9.7	52.2	6	-0.0087	0.0078
BMB5833	Zircon_sample-013.FIN2	Fe-rich	700000		-0.004	0.027	24.7	2.2	68.9	6.4	38.3	4.8	738	54	182	20	1050	130	55	84	51.9	7.6	23.8	1.6	25.8	3.9	-0.0025	0.008
BMB5833	Zircon_sample-020.FIN2	Fe-rich	700000		0.27	0.13	11.5	2.4	44	3.4	18.2	2.7	502	37	82.3	4.3	276	15	2.25	0.48	34.3	7.3	13.42	0.93	15	1.5	0.008	0.059
BMB5833	Zircon_sample-021.FIN2	Fe-rich	700000		-0.07	0.14	10.3	3.8	25.2	2.4	12.3	1.4	531	29	123	12	407	60	3.4	1.9	19.4	4.9	10.2	1.9	13.6	3.3	-0.005	0.049
BMB5833	Zircon_sample-022.FIN2	Fe-rich	700000		0.08	0.12	360	580	25.7	6.5	15.1	3.2	472	42	95	16	429	87	2.9	2.6	21	12	13.7	4	13.5	4	0.02	0.11
BMB5833	Zircon_sample-023.FIN2	Fe-rich	700000		0.12	0.27	420	690	41	12	15.6	2.4	525	46	90	16	350	110	3	1.5	37	24	15.1	4.6	15.7	4	0.02	0.051
BMB5833	Zircon_sample-024.FIN2	Fe-rich	700000		-0.11	0.13	13.4	3.8	38.1	6.9	16.2	3	570	56	87.4	2.1	276	32	2.2	1	33	7.8	13.3	3.3	16.2	4.3	-0.038	0.043
BMB5833	Zircon_sample-025.FIN2	Fe-rich	700000		-0.158	0.096	11.2	5.4	18.2	1.6	13.5	2.1	519	81	106.3	4.9	480	29	10.6	4.8	11.9	3.2	10.4	1.7	13.4	2.3	0.022	0.064
BMB5833	Zircon_sample-026.FIN2	Fe-rich	700000		-0.19	0.13	590	330	78	18	23.9	3.9	610	270	104	25	380	140	4.2	2.9	47	18	17.5	5.2	20.9	5.4	-0.008	0.023
BMB5833	Zircon_sample-033.FIN2	Fe-rich	700000		0.36	0.11	15.6	9.1	31.1	3.3	14.6	2.1	524	15	92.9	2	338.9	7.3	2.82	0.22	19.7	1.6	11.18	0.93	12.2	1.5	-0.012	0.046
BMB5833	Zircon_sample-034.FIN2	Fe-rich	700000		0.312	0.083	9.6	3.4	27.5	1.1	12.5	1.8	454	31	88.4	3.1	374	10	2.4	0.52	21.1	2.3	10.13	0.9	11.74	0.64	-0.006	0.064
BMB5833	Zircon_sample-035.FIN2	Fe-rich	700000		0.024	0.069	12	2.5	41.1	5.5	18.2	3.1	550	43	79.8	2.8	267	13	2.3	0.85	32	5.4	13.2	1.8	14.4	1.3	0.008	0.046
BMB5833	Zircon_sample-036.FIN2	Fe-rich	700000		-0.01	0.11	9.8	3.3	21	3.2	11.8	2.9	471	62	92	9.3	425	35	3.4	1.9	16.8	4.6	10	0.34	11.5	1.4	-0.0269	0.007
BMB5833	Zircon_sample-037.FIN2	Fe-rich	700000		-0.023	0.092	11.2	4	18.3	1.8	11.34	0.63	428	29	110.3	5.6	474	40	3.22	0.5	12	1.9	7.89	0.76	10.4	2.2	-0.031	0.042
BMB5833	Zircon_sample-038.FIN2	Fe-rich	700000		-0.2	0.15	14	2.6	31.7	3.9	15.3	2.7	528	65	85.1	5.7	329	31	3.9	1.7	26	12	11.9	1.8	13.3	2	0.004	0.059
BMB5833	Zircon_sample-039.FIN2	Fe-rich	700000		-0.23	0.12	10.6	3.9	23.5	3.6	12.6	1.4	448	38	99.4	7.3	498	91	3.2	1.2	19	4.1	8.7	1.3	9.8	1.9	0.009	0.072
BMB5833	Zircon_sample-046.FIN2	Fe-rich	700000		0.39	0.12	9	2.7	24.7	2.1	14.7	2	458	70	95.3	6	377	18	3.8	2.1	23.1	2.6	13.1	3.7	13.5	3	0.056	0.096
BMB5833	Zircon_Sample-047.FIN2	Fe-rich	700000		0.24	0.074	9.5	6.1	22.2	3.6	13.2	2	424	59	95	9	410	49	2.7	1.5	18.7	3.2	10.05	0.49	11.65	0.88	0.037	0.052
BMB5833	Zircon_Sample-048.FIN2	Fe-rich	700000		-0.01	0.11	7.4	4.5	22.3	1.8	12.2	2.2	430	31	97.8	4.1	408	20	2.33	0.4	17.3	2.5	9.06	0.84	10.4	1.1	0.013	0.058
BMB5833	Zircon_Sample-049.FIN2	Fe-rich	700000		-0.11	0.13	16.2	6.6	25.1	2.1	13.7	2.2	465.1	7	89.8	5.4	409	32	2.65	0.45	20.4	2.9	9.79	0.83	11.8	1.8	0.017	0.079
BMB5833	Zircon_Sample-050.FIN2	Fe-rich	700000		-0.18	0.029	15.4	7.5	38.2	5.1	16.8	3.9	481	67	86.7	5.9	284	38	2.13	0.39	31.7	5.3	12.18	0.72	14.4	1.2	-0.013	0.044
BMB5833	Zircon_Sample-051.FIN2	Fe-rich	700000		-0.36	0.25	17.2	6.6	63	11	22	5.9	554	94	90.5	8.3	262	24	1.69	0.25	39	11	13	1.3	16.26	0.75	0.01	0.031
BMB5833	Zircon_Sample-052.FIN2	Fe-rich	700000		-0.27	0.17	12.2	4.3	20	1.8	13.1	2	435	33	94.3	7.8	445	46	2.6	1.1	16.7	3.3	9.5	1.3	11.2	1.7	0.02	0.035
BMB5833	Zircon_Sample-059.FIN2	Fe-rich	700000		0.49	0.27	48	62	46.5	3.6	18.1	4	500	23	93.7	7.9	322	22	3.72	0.35	33.1	4.3	12.56	0.98	15.7	1.1	0.048	0.076
BMB5833	Zircon_Sample-060.FIN2	Fe-rich	700000		0.26	0.26	80	140	19.9	2.1	14.4	1.7	516	79	86.6	6.2	466	37	1.82	0.49	16.1	5.6	9.8	1.1	11.5	2.1	-0.042	0.058
BMB5833	Zircon_Sample-061.FIN2	Fe-rich	700000		0.057	0.017	16.2	4.8	29.8	1.5	14.2	2.5	505	21	81	4.5	329	32	2.91	0.62	22.5	4.7	10.68	0.45	12.1	0.73	0.002	0.044
BMB5833	Zircon_Sample-062.FIN2	Fe-rich	700000		-0.04	0.11	11.2	3.8	23.9	3	12.8	3.4	489	33	107	18	484	97	4.2	2.2	16	2.8	9.5	1.9	11.7	1.9	-0.025	0.028
BMB5833	Zircon_Sample-063.FIN2	Fe-rich	700000		-0.15	0.16	15.7	2.7	38.4	4.3	20	2.2	549	48	80.9	4.9	315	18	2.72	0.56	31.2	4.6	12.8	1	13.64	0.95	-0.002	0.038
BMB5833	Zircon_Sample-064.FIN2	Fe-rich	700000		-0.188	0.089	11.8	3	19.2	2.6	11.9	1.4	434	30	96.7	4.5	487	38	3.8	1.7	15.1	1.4	9.7	1.9	10.7	1.5	0.025	0.031
BMB5833	Zircon_Sample-065.FIN2	Fe-rich	700000		-0.28	0.11	16.1	4.4	29.4	3.9	15.2	1.3	499	30	81.5	4.8	354	27	2.53	0.59	21.8	3.6	11.8	1.9	13.3	1.8	-0.005	0.032
BMB5833	Zircon_Sample-072.FIN2	Fe-rich	700000		0.19	0.037	12.5	5.9	31	12	14.4	3.9	462	88	86.4	3.2	409	38	2.74	0.73	25.8	5.7	12.1	2.6	12.8	3.7	0.016	0.022
BMB5833	Zircon_Sample-073.FIN2	Fe-rich	700000		0	0.1	12.5	7.2	28.9	4.8	14.4	3.2	528	37	100.6	3	399	20	3.6	1.2	23.2	4.5	9.5	1.1	11	1.2	0.043	0.05
BMB5833	Zircon_Sample-074.FIN2	Fe-rich	700000		0.03	0.17	9.8	3.8	19.3	3.3	15.6	4.9	379	35	88.4	7.7	508	17	2.59	0.91	17.6	5.1	10.3	3.6	12.7	5.4	0.011	0.029
BMB5833	Zircon_Sample-075.FIN2	Fe-rich	700000		0.016	0.088	13.3	4.9	45.1	3.1	21.5	1.4	457	37	72.9	3.9	266	19	1.92	0.15	36	3.7	14.1	2	15.9	3.8	-0.004	0.039
BMB5833	Zircon_Sample-076.FIN2	Fe-rich	700000		-0.05	0.1	10.01	0.66	17.52	0.84	11.8	2.3	411	20	93.1	3.2	502	33	2.34	0.52	13.1	2.1	8.42	0.66	9.4	1.2	0.01	0.039
BMB5833	Zircon_Sample-077.FIN2	Fe-rich	700000		-0.083	0.088	48	80	21.5	1.9	12.3	1.1	455	21	99.4	6.6	463	70	2.9	1.2	16.3	2.8	9.17	0.68	10.6	1.8	0.001	0.041
BMB5833	Zircon_Sample-078.FIN2	Fe-rich	700000		-0.11	0.11	7.2	4.4	27.5	1.9	14.7	1.8	488	25	91.9	9.9	378	42	2.7	0.54	25.9	3.9	11.1	2.4	13.7	2.6	-0.039	0.047
BMB5833	Zircon_Sample-085.FIN2	Fe-rich	700000		0.34	0.11	14.2	3.8	23.5	2.3	14	2.1	451	40	110.5	7.4	457	87	2.9	1.7	23.1	9	11.2	2.9	13.1	2.3	-0.069	0.079
BMB5833	Zircon_Sample-086.FIN2	Fe-rich	700000		0.104	0.089	11.2	5.4	26.2	4.2	13.7	3.8	500	42	110.5	7.2	374	37	2.97	0.58	17.8	2.4	9.48	0.62	11.3	1.1	-0.039	0.022
BMB5833	Zircon_Sample-087.FIN2	Fe-rich	700000		0.118	0.088	9.9	4.6	34.3	2	15.7	2.4	497	54	109	6.9	381	34	3.2	1.6	31.3	9.7	13.8	3.7	15.1	3.5	0.03	0.11
BMB5833	Zircon_Sample-088.FIN2	Fe-rich	700000		-0.055	0.067	9.4	2.8	16.9	2.6	11.1	2.5	393	34	106.1	4.6	512	62	2.59	0.88	15.3	3.3	8.4	1.3	9.7	1.2	0.044	0.05
BMB5833	Zircon_Sample-089.FIN2	Fe-rich	700000		-0.03	0.18	13.8	3.7	65.8	1.4	29.9	3	636	91	113.7	2.6	265	28	2.24	0.32	39.5	6.9	14.1	1.7	18.6	3.2	-0.013	0.078
BMB5833	Zircon_Sample-090.FIN2	Fe-rich	700000		-0.12	0.21	14.6	1.5	70.4	9.9	29.8	2.6	346	31	84.3	4.9	232	26	2.07	0.33	65	18	17.6	4	21	5	0.002	0.055
BMB5833	Zircon_Sample-091.FIN2	Fe-rich	700000		-0.21	0.15	14.2	5.2	27	2.7	15.8	2.1	520	38	118.7	2.6	406	22	2.9	1.3	20.3	3.5	11.1	2.2	13.5	3.2	-0.011	0.031

Analysis #	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
Zircon_sample-007.FIN2	0.004	0.012	0.0003	0.0044	0.0226	0.0038	0.0034	0.0075	0.0019	0.0024	-0.024	0.036	-0.0011	0.0031	0.015	0	0.0022	0.0031	0.003	0.015	-0.0000376	0.0000044	0.0027	0.0067	0.0009	0.0019	-0.005	0.012	36.8	1.4	60	200	0.29	0.36
Zircon_sample-008.FIN2	0.0052	0.0085	0.0009	0.004	0.016	0.024	0.007	0.014	0.006	0.0051	-0.024	0.073	0.0018	0.0077	0.01	0	0.0015	0.0027	-0.003	0.016	0.00032	0.00076	0.011	0.019	0.0007	0.0015	-0.013	0.014	51	17	150	120	0.141	0.049
Zircon_sample-009.FIN2	0.0011	0.0062	-0.0023	0.0028	-0.006	0.013	0.015	0.014	0.0019	0.0028	-0.015	0.055	0.0008	0.0027	0.009	0	0.0011	0.0019	0.013	0.027	0.0018	0.0024	0.0037	0.0055	0.0012	0.0015	-0.0103	0.0035	25.6	2	60	120	0.072	0.035
Zircon_sample-010.FIN2	0.0033	0.0097	-0.0012	0.003	-0.0026	0.0088	0.013	0.013	0.0057	0.0062	-0.033	0.071	-0.0029	0.0044	-0.0183	0	0.0015	0.0025	-0.012	0.018	0.0005	0.0012	0.015	0.032	-0.000063	0.000023	0.022	0.04	35.8	9.9	44	54	0.14	0.12
Zircon_sample-011.FIN2	-0.0032	0.0092	-0.0034	0.0094	0.017	0.029	0.041	0.043	0.009	0.013	-0.049	0.086	0.0053	0.0096	-0.0165	0	0.0049	0.0083	-0.017	0.023	0.0037	0.0076	0.009	0.023	-0.00012	0.00013	-0.007	0.037	36.3	5.1	40	240	0.096	0.033
Zircon_sample-012.FIN2	-0.0018	0.0091	-0.0023	0.0022	0.002	0.016	0.008	0.011	0.005	0.004	0.008	0.03	0.0055	0.0089	-0.0057	0	0.0031	0.0019	0.0047	0.0084	0.00033	0.00074	0.014	0.02	-0.000048	0.000019	0	0.018	57.5	7.1	-20	190	0.047	0.024
Zircon_sample-013.FIN2	-0.0005	0.0072	-0.0015	0.0035	0.008	0.024	0.006	0.0082	0.0008	0.0022	-0.066	0.057	0.0011	0.0081	0.004	0	0.0086	0.0081	0	0.025	0.003	0.0039	-0.00097	0.00026	0.0028	0.0027	-0.0008	0.0086	19.2	2.2	141	76	0.22	0.14
Zircon_sample-020.FIN2	-0.016	0.018	0.006	0.017	0.077	0.061	-0.0017	0.00037	0.0034	0.0087	-0.01	0.29	-0.002	0.033	0.059	0	0.02	0.028	0.02	0.035	0.0014	0.0033	0.044	0.073	0.008	0.011	-0.005	0.028	10.45	0.63	64	79	0.061	0.061
Zircon_sample-021.FIN2	-0.021	0.039	0.009	0.029	-0.03	0.13	0.025	0.035	-0.00108	0.00037	0.07	0.59	0.012	0.044	0.027	0	0.006	0.01	0.014	0.032	0.0059	0.0082	0.02	0.032	0.0109	0.0093	-0.005	0.029	7.7	2.9	80	200	0.071	0.073
Zircon_sample-022.FIN2	-0.002	0.021	0.002	0.014	-0.05	0.064	0.025	0.053	0.005	0.0078	-0.12	0.21	0.007	0.024	0.042	0	-0.0018	0.00073	0.12	0.11	0.0033	0.007	0.042	0.041	0.008	0.011	0.047	0.039	6.3	3.1	50	150	0.14	0.17
Zircon_sample-023.FIN2	-0.015	0.03	0.004	0.013	-0.06	0.035	0.026	0.035	0.0092	0.0093	0.08	0.26	0.004	0.032	0.028	0	0.023	0.043	0.027	0.053	0.0045	0.0095	0.047	0.048	0.004	0.0085	0.044	0.037	12.4	9	126	70	0.034	0.022
Zircon_sample-024.FIN2	0.011	0.013	0.008	0.02	-0.022	0.098	0.011	0.026	0.009	0.013	0.08	0.48	-0.012	0.027	0.07	0	0.035	0.059	0.09	0.091	-0.000218	0.000081	0.034	0.048	0.009	0.012	-0.001	0.023	11.5	3.9	30	100	0.06	0.098
Zircon_sample-025.FIN2	0.018	0.042	-0.007	0.011	0.031	0.081	0.062	0.081	0.0039	0.0095	-0.14	0.11	0.0089	0.0081	-0.002	0	0.009	0.012	0.03	0.077	0.0103	0.0096	0.026	0.036	-0.000235	0.000054	0.041	0.099	4.79	0.61	-19	79	0.3	0.29
Zircon_sample-026.FIN2	0.07	0.11	0.006	0.023	-0.045	0.092	0.016	0.037	-0.00119	0.00054	0.61	0.63	0.015	0.026	0.07	0	0.017	0.024	0.032	0.063	0.008	0.013	0.023	0.039	0.007	0.01	0.005	0.031	15.2	5.1	-30	210	0.045	0.034
Zircon_sample-033.FIN2	0.018	0.068	-0.006	0.012	-0.015	0.049	0.039	0.047	0.017	0.022	-0.21	0.18	-0.015	0.025	0.07	0	0.003	0.011	-0.024	0.047	0.008	0.0059	0.033	0.042	-0.000242	0.00005	0.035	0.042	6.8	1.3	30	140	0.05	0.036
Zircon_sample-034.FIN2	0.012	0.014	-0.0065	0.0055	0.05	0.11	0.021	0.029	0.0062	0.0091	0.15	0.21	-0.0124	0.0064	0.055	0	-0.00169	0.00032	0.072	0.031	0.011	0.013	0.025	0.035	0.007	0.015	0.052	0.065	6.3	0.51	-75	83	0.015	0.024
Zircon_sample-035.FIN2	-0.01	0.015	-0.0116	0.009	0.031	0.045	0.024	0.052	0.0028	0.0073	0	0.27	0.008	0.022	0.058	0	0.0012	0.0059	-0.012	0.086	0.01	0.013	0.008	0.023	0.009	0.018	0.053	0.046	11.1	2	-50	210	0.047	0.037
Zircon_sample-036.FIN2	-0.023	0.033	-0.0057	0.0083	0.043	0.065	0.06	0.12	0.004	0.0096	0.09	0.26	0.004	0.026	0.008	0	0.009	0.015	-0.026	0.049	0.0024	0.0052	0.048	0.05	0.016	0.015	0.028	0.038	6.4	3	120	130	0.14	0.11
Zircon_sample-037.FIN2	-0.005	0.021	-0.0096	0.0054	0.014	0.095	0.09	0.18	0.0024	0.0071	-0.15	0.28	-0.029	0.013	0.015	0	0.027	0.037	0.05	0.041	0.0115	0.0075	0.005	0.02	0.021	0.042	-0.000126	0.000047	6.1	2.1	140	220	0.013	0.03
Zircon_sample-038.FIN2	-0.015	0.03	0.002	0.034	0.03	0.11	-0.00188	0.00092	0.042	0.085	-0.077	0.088	-0.002	0.012	-0.034	0	-0.0004	0.0037	-0.012	0.095	0.011	0.018	0.049	0.066	0.008	0.017	0.144	0.099	9.6	5.4	60	140	0.47	0.66
Zircon_sample-039.FIN2	0.004	0.027	-0.004	0.021	0.07	0.11	0.053	0.07	0.008	0.017	0.02	0.22	0.008	0.015	0.088	0	0.007	0.017	-0.037	0.037	0.0036	0.0051	-0.00336	0.0009	0.0037	0.0078	0.028	0.035	5.3	1.1	20	180	0.068	0.07
Zircon_sample-046.FIN2	-0.023	0.028	0.013	0.024	-0.015	0.089	0.01	0.025	0.0062	0.0094	-0.11	0.22	-0.005	0.027	0.14	0	-0.0002	0.0041	0.018	0.075	0.0036	0.0075	-0.0037	0.0013	0.004	0.0086	0.07	0.14	7.9	2	60	110	0.041	0.03
Zircon_Sample-047.FIN2	0.018	0.041	0.001	0.015	-0.009	0.094	0.023	0.051	0.0015	0.0049	-0.11	0.2	-0.008	0.021	0.036	0	0.01	0.01	0.013	0.073	0.003	0.0041	0.151	0.06	-0.000244	0.000067	0.006	0.016	6.7	1.8	150	150	0.083	0.058
Zircon_Sample-048.FIN2	0.015	0.042	0.002	0.022	0.019	0.064	0.055	0.07	-0.0008	0.00016	0.01	0.18	0.022	0.024	0.117	0	0.004	0.0071	0.034	0.021	0.0028	0.0059	0.027	0.036	-0.00023	0.000046	0.025	0.054	5.12	0.55	60	160	0.089	0.067
Zircon_Sample-049.FIN2	0	0.031	0.015	0.018	-0.004	0.054	0.006	0.016	0.0025	0.0069	0.08	0.17	-0.013	0.035	0.09	0	0.0055	0.0096	-0.032	0.026	0.008	0.016	0.014	0.024	0.0034	0.0074	0.07	0.15	7.6	3.7	-30	190	0.047	0.04
Zircon_Sample-050.FIN2	-0.028	0.026	0.014	0.023	-0.024	0.085	0.012	0.028	0.007	0.0096	-0.06	0.33	0.003	0.039	0.09	0	0.0085	0.0058	0.006	0.047	0.004	0.0085	0.03	0.041	-0.000237	0.000054	0.07	0.15	8.7	1.2	10	270	0.073	0.063
Zircon_Sample-051.FIN2	0.044	0.044	0.001	0.028	0.04	0.092	0.021	0.046	0.012	0.025	0.14	0.37	0.009	0.021	-0.026	0	0.0047	0.0083	-0.032	0.022	0.0068	0.008	0.006	0.02	0.0034	0.0072	0.019	0.042	13.21	0.68	-150	180	0.118	0.067
Zircon_Sample-052.FIN2	-0.005	0.021	-0.003	0.019	-0.018	0.067	0.01	0.023	0.0032	0.0079	0.07	0.23	-0.003	0.023	0.043	0	0.018	0.014	0.035	0.069	0.0097	0.0071	-0.00306	0.00075	0.0081	0.0073	-0.00184	0.00045	5.16	0.47	-10	120	0.019	0.04
Zircon_Sample-059.FIN2	0.007	0.046	0.022	0.032	-0.048	0.09	0.016	0.037	-0.00109	0.0005	0.11	0.26	0.03	0.034	-0.008	0	0.02	0.017	0.041	0.09	0.012	0.019	0.062	0.038	0.029	0.049	0.032	0.067	14.1	6.4	-47	91	0.26	0.4
Zircon_Sample-060.FIN2	-0.013	0.017	0.006	0.022	0.069	0.071	0.11	0.11	-0.00093	0.00029	0.08	0.52	-0.007	0.013	0.023	0	0.0094	0.0067	-0.025	0.066	0.012	0.016	0.032	0.047	0.005	0.011	0.022	0.03	4.72	0.92	-20	230	0.19	0.11
Zircon_Sample-061.FIN2	0.031	0.036	0.008	0.012	0.006	0.072	0.017	0.038	0.0019	0.0054	0.09	0.15	0.002	0.026	0.05	0	0.012	0.012	0	0.035	0.0021	0.0045	0.018	0.027	-0.000231	0.000047	0.039	0.054	7.46	0.49	30	160	0.018	0.027
Zircon_Sample-062.FIN2	0.012	0.036	-0.0036	0.008	-0.08	0.051	0.066	0.059	-0.00082	0.00017	0	0.18	0.005	0.012	-0.009	0	0.01	0.016	-0.012	0.045	0.0055	0.007	0.028	0.038	0.0022	0.0049	0.008	0.02	6.18	0.75	90	230	0.005	0.013
Zircon_Sample-063.FIN2	0.002	0.028	0.0028	0.0095	-0.003	0.08	0.016	0.034	0.017	0.015	-0.02	0.15	-0.003	0.011	0.013	0	0.011	0.015	0.112	0.086	0.0016	0.0036	0.023	0.032	0.0068	0.0086	0.075	0.048	9.7	0.64	-5	97	0.037	0.033
Zircon_Sample-064.FIN2	0.004	0.046	-0.001	0.02	0.027	0.051	0.051	0.075	0.004	0.01	0.13	0.18	0.002	0.021	0.08	0	0.0048	0.008	0.046	0.068	0.014	0.017	0.029	0.039	0.006	0.012	0.05	0.063	5.6	1.3	90	190	0.066	0.032
Zircon_Sample-065.FIN2	-0.004	0.033	-0.0164	0.0044	-0.074	0.038	0.072	0.095	0.0025	0.0068	-0.06	0.12	-0.01	0.014	0.011	0	0.0028	0.0095	-0.006	0.09	0.0037	0.0077	-0.00322	0.00099	-0.000247	0.000076	0.031	0.065	8	1.2	90	100	0.034	0.071
Zircon_Sample-072.FIN2	-0.003	0.023	0.005	0.021	0.04	0.061	0.02	0.043	0.005	0.012	0.28	0.35	-0.005	0.031	0.04	0	0.0084	0.0069	0.023	0.078	-0.000173	0.000029	0.016	0.038	-0.000235	0.000039	0.032	0.04	7.3	1.9	-40	100	0.007	0.016
Zircon_Sample-073.FIN2	-0.012	0.034	0.018	0.032	0.05	0.16	0.031	0.066	0.013	0.018	-0.22	0.25	0.013	0.017	0.005	0	0.016	0.011	0.068	0.092	0.004	0.0054	0.043	0.04	0.0065	0.0084	0.022	0.031	7.3	1	-50	250	0.018	0.018
Zircon_Sample-074.FIN2	0.02	0.043	0.014	0.026	-0.092	0.095	0.1	0.13	0.012	0.019	0.1	0.33	-0.006	0.02	-0.013	0	0.011	0.023	0.004	0.09	-0.00022	0.00012	0.046	0.065	0.008	0.017	0.039	0.063	6.2	2.9	50	130	0.034	0.07
Zircon_Sample-075.FIN2	0.003	0.018	-0.001	0.012	0.027	0.072	0.022	0.047	0.011	0.018	0.08	0.54	0.018	0.023	0.037	0	0.0059	0.0097	0.001	0.051	0.0084	0.0073	0.005	0.017	-0.000259	0.000084	0.058	0.074	14.2	3	110	180	0.09	0.12
Zircon_Sample-076.FIN2	-0.016	0.023	-0.0091	0.0071	0.021	0.093	0.013	0.03	0.0061	0.0089	-0.03	0.1	-0.004	0.029	0.03	0	0.026	0.017	0.038	0.05	0.008	0.011	0.037	0.034	0.0017	0.0039	0.109	0.084	4.59	0.5	200	220	0.017	0.016
Zircon_Sample-077.FIN2	0.011	0.023	-0.003	0.016	0.07	0.13	0.033	0.043	0.01	0.017	0.07	0.35	0.01	0.015	0.07	0	0.008	0.011	-0.016	0.065	0.0023	0.005	0.046	0.067	0.0045	0.006	0.05	0.062	5.89	0.92	-10	170	0.005	0.012
Zircon_Sample-078.FIN2	-0.005	0.029	-0.004	0.012	0.032	0.087	0.015	0.034	0.0039	0.0093	-0.151	0.087	0.027	0.032	0.061	0	0.021	0.014	0.07	0.08	-0.000199	0.000078	0.009	0.026	-0.00027	0.00011	0.028	0.06	9	2.9	-60	200	0.1	0.12
Zircon_Sample-085.FIN2	0.042	0.062	0.011	0.02	0.115	0.072	0.031	0.042	-0.00084	0.00037	0.05	0.41	-0.008	0.02	-0.026	0	0.022	0.033	-0.008	0.084	0.006	0.012	0.007	0.023	0.0025	0.0057	0.007	0.017	8.3	4	-109	74	0.067	0.077
Zircon_Sample-086.FIN2	0.008	0.019	0.013	0.016	0.057	0.066	-0.00211	0.00053	0.007	0.01	0	0.2	-0.0222	0.0096	0.067	0	0.007	0.011	0.007	0.08	0.009	0.011	-0.00309	0.00078	0.0036	0.0077	0.01	0.021	7.97	0.25	-60	210	0.028	0.035
Zircon_Sample-087.FIN2	-0.012	0.017	0.013	0.02	-0.022	0.038	0.011	0.028	-0.00078	0.00028	-0.1	0.27	0.005	0.033	0.047	0	0.012	0.013	0.07	0.058	0.0153	0.0092	-0.0034	0.0012	0.0022	0.0051	0.02	0.042	9.8	3.4	0	270	0.021	0.02
Zircon_Sample-088.FIN2	-0.013	0.028	0.0032	0.0076	0	0.1	0.036	0.075	-0.00063	0.00016	-0.02	0.26	0.006	0.01	0.02	0	0.001	0.0049	-0.037	0.036	0.0018	0.004	0.02	0.028	-0.000225	0.000059	0.021	0.044	4.42	0.93	-10	190	0.034	0.034
Zircon_Sample-089.FIN2	-0.01	0.021	-0.0037	0.0091	0.15	0.12	0.044	0.093	-0.00072	0.00032	-0.12	0.27	0.01	0.022	-0.051	0	0.015	0.024	0.006	0.046	-0.000186	0.000082	0.043	0.054	-0.00026	0.00011	-0.0008	0.00035	17.19	0.56	0	150	0.021	0.044
Zircon_Sample-090.FIN2	0.027	0.049	-0.011	0.01	-0.023	0.03	0.033	0.044	-0.00081	0.00031	0.35	0.56	0.004	0.019	0.072	0	0.027	0.03	0.04	0.11	-0.000209	0.000081	0.039	0.052	0.009	0.014	0.05	0.078	20.1	6.3	50	89	0.091	0.087
Zircon_Sample-091.FIN2	-0.003	0.049	-0.003	0.015	0.04	0.12	-0.0027	0.001	0.005	0.011	-0.02	0.31	0.019	0.049	0.02	0	0.011	0.015	0.069	0.086	0.0044	0.0063	0.033	0.05	0.0042	0.0091	0.031	0.039	9.3	3	-90	100	0.07	0.1

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5837			CONCENTRATIONS																									
Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s
BMB5837	Zircon_Sample-098.FIN2	Fe-rich	700000		0.28	0.19	6.7	4.7	49.2	7.4	12.1	2.5	487	30	16.5	2.6	21	2.9	5.01	0.69	12.04	0.55	0.5	0.12	6.85	0.48	0.008	0.017
BMB5837	Zircon_Sample-099.FIN2	Fe-rich	700000		0.157	0.092	3.8	5.2	44.3	3.1	12.9	1	516	47	18.4	1.9	20.7	2.3	3.38	0.91	10.2	1.6	0.52	0.15	6.2	1	0.004	0.064
BMB5837	Zircon_Sample-100.FIN2	Fe-rich	700000		0.03	0.15	6.6	3.4	46.6	8.5	11.1	1.8	544	61	16.6	2.4	19.74	0.89	3.5	1.4	12	4	0.56	0.35	5.6	1.4	0.053	0.078
BMB5837	Zircon_Sample-101.FIN2	Fe-rich	700000		-0.092	0.086	6.1	2.7	45	3.4	11.5	1.8	462	24	15.1	1	19.29	0.61	2.61	0.24	13.5	2.2	0.606	0.077	5.77	0.61	0.007	0.062
BMB5837	Zircon_Sample-102.FIN2	Fe-rich	700000		-0.009	0.098	7.6	3.7	57.6	5.7	13.4	3.1	484	93	15.9	2.2	18.3	3.9	4.1	2.4	15.3	9	0.48	0.19	7.1	2.4	0.004	0.042
BMB5837	Zircon_Sample-103.FIN2	Fe-rich	700000		-0.04	0.1	15	12	190	110	25.8	3.7	429	80	13.9	1.1	13.8	1.7	4.05	0.91	35.8	8.9	0.647	0.095	9.9	2.2	-0.029	0.032
BMB5837	Zircon_Sample-104.FIN2	Fe-rich	700000		-0.2	0.11	5.6	2.4	43.2	6.7	12.1	2.2	442	48	15	1.7	22.5	2.7	3.8	1.7	9.6	2.7	0.19	0.24	5.1	1	-0.038	0.035
BMB5837	Zircon_Sample-111.FIN2	Fe-rich	700000		0.36	0.16	2.1	3.9	38	3	9.8	1	472	30	14.68	0.4	19.79	0.85	5.3	2.2	9.7	1.4	0.4	0.24	5.58	0.72	-0.004	0.055
BMB5837	Zircon_Sample-112.FIN2	Fe-rich	700000		0.29	0.12	5.5	2.6	48.1	3.7	12.7	3.3	501	25	13.3	1.4	18.2	2.1	3.75	0.6	10	2.1	0.37	0.3	5.98	0.41	-0.034	0.031
BMB5837	Zircon_Sample-113.FIN2	Fe-rich	700000		0.146	0.073	12.1	4.2	101.7	6.1	18.2	1.7	310	73	11.82	0.52	12.9	1.5	3.38	0.54	26.6	1.6	0.48	0.39	8.5	1	0.051	0.033
BMB5837	Zircon_Sample-114.FIN2	Fe-rich	700000		0.05	0.091	4.6	3.5	48.8	8.8	10.7	0.35	493	40	13.28	0.99	18.7	1.2	3.61	0.29	12.5	3.7	0.45	0.46	5.8	1.4	0.039	0.049
BMB5837	Zircon_Sample-115.FIN2	Fe-rich	700000		0.01	0.1	6.1	1.7	101	16	19.2	1.6	449	50	12	1.2	13.7	1.4	5	1.5	31	13	0.86	0.29	9	2.2	-0.028	0.062
BMB5837	Zircon_Sample-116.FIN2	Fe-rich	700000		-0.1	0.18	5.4	1.5	51.8	6.7	12.1	1.9	446	52	13.8	1.5	21.4	2.7	3.7	2.4	14.4	4.3	0.7	0.25	5.9	1.2	0.014	0.024
BMB5837	Zircon_Sample-117.FIN2	Fe-rich	700000		-0.138	0.031	7.5	4.4	37	14	13.2	3.5	560	110	12	1.3	160	140	16.8	7	7.74	0.98	0.66	0.36	4.8	1	0.032	0.054
BMB5837	Zircon_Sample-124.FIN2	Fe-rich	700000		0.19	0.15	2.9	2	37.4	5.7	9.35	0.99	477	68	14	1	23.1	5.2	3.7	2.5	11	3.8	0.35	0.34	5.6	1.6	-0.078	0.041
BMB5837	Zircon_Sample-125.FIN2	Fe-rich	700000		0.179	0.065	3	10	68.2	9.1	19.7	4.3	740	400	11.8	1.7	12.7	1.3	2.47	0.75	13.7	3.8	0.47	0.44	6.21	0.44	0.007	0.068
BMB5837	Zircon_Sample-126.FIN2	Fe-rich	700000		0.081	0.087	8	11	52	10	14.1	2	660	360	13.8	1.2	17.6	1.2	1.67	0.88	10.5	3.1	0.38	0.17	5.4	1.1	0.045	0.072
BMB5837	Zircon_Sample-127.FIN2	Fe-rich	700000		-0.007	0.092	2.5	3	28.6	2.3	9	2.4	432	58	14.2	1.3	21.6	2	2.8	0.89	9.7	2.8	0.35	0.22	5.03	0.82	0.051	0.053
BMB5837	Zircon_Sample-128.FIN2	Fe-rich	700000		-0.01	0.1	4.9	1.4	67	10	14.3	1.8	556	42	14.2	1.3	17.9	2.8	4.6	2.5	21	11	0.45	0.21	7.1	2.7	0.059	0.084
BMB5837	Zircon_Sample-129.FIN2	Fe-rich	700000		-0.183	0.073	7.9	3.5	87.3	7.2	17.3	2.4	558	82	11.9	1.1	12.28	0.39	2.8	0.38	18.64	0.68	0.57	0.3	7.58	0.56	-0.021	0.052
BMB5837	Zircon_Sample-130.FIN2	Fe-rich	700000		-0.06	0.13	6	4.8	35	3.7	15.7	5.6	539	79	14.2	1.6	28.7	7.8	1.9	2.5	9.5	6.6	0.54	0.26	5.9	2.8	0.003	0.019
BMB5837	Zircon_Sample-137.FIN2	Fe-rich	700000		0.28	0.18	5	5.1	25	3	8.9	1.3	463	27	16.1	1.3	26.7	3.4	3.7	2.4	5.9	2	0.36	0.16	5	2	-0.009	0.048
BMB5837	Zircon_Sample-138.FIN2	Fe-rich	700000		0.18	0.18	8.7	4.5	68	10	14.5	5.9	580	100	13.2	1.1	15	2	3.8	1.1	18.5	5.9	0.75	0.33	7.5	1.3	0.027	0.051
BMB5837	Zircon_Sample-139.FIN2	Fe-rich	700000		0.13	0.11	7	2.3	35	2.8	9.4	3.3	476	51	18.1	2.8	26.8	5.6	3.6	2.2	10	3.2	0.28	0.22	4.96	0.56	-0.011	0.055
BMB5837	Zircon_Sample-140.FIN2	Fe-rich	700000		0.08	0.2	5.2	2.7	47.2	2.1	15.5	1.5	580	190	14.3	2.1	17.3	0.37	3.71	0.94	10.55	0.92	0.63	0.24	6.4	1.2	-0.007	0.057
BMB5837	Zircon_Sample-141.FIN2	Fe-rich	700000		0.061	0.05	5.1	3.1	34.8	2.3	20.1	7.4	700	160	24	5.9	110	73	560	370	10.67	0.83	0.67	0.64	4.83	0.3	0.19	0.23
BMB5837	Zircon_Sample-142.FIN2	Fe-rich	700000		-0.12	0.12	35	55	85	21	24.5	2.2	620	280	12.4	1	15.29	0.89	5.4	1.6	17.2	3.7	0.58	0.29	9.9	2	-0.025	0.019
BMB5837	Zircon_Sample-143.FIN2	Fe-rich	700000		-0.247	0.043	11.3	3.3	117	6.8	25.1	2.4	273	16	12.3	0.94	10.3	1.3	3.26	0.77	30	6.7	0.89	0.53	9.8	2.1	0.052	0.092
BMB5837	Zircon_Sample-150.FIN2	Fe-rich	700000		0.186	0.066	8.5	6.6	61	13	14.8	4.4	533	49	15.8	3.6	24	10	5.6	5.5	14	3.6	0.55	0.11	6.9	2.4	0.02	0.1
BMB5837	Zircon_Sample-151.FIN2	Fe-rich	700000		0.12	0.14	6400	7400	1900	2100	34	12	540	130	14.1	1.2	16.7	1.4	1.9	1.1	110	110	0.89	0.44	11.7	2	-0.023	0.067
BMB5837	Zircon_Sample-152.FIN2	Fe-rich	700000		0.08	0.11	15	11	37	10	13.5	3.8	810	210	18.6	2.2	28.9	2.8	83	30	7.1	3.6	0.56	0.55	6.2	1.7	0.34	0.39
BMB5837	Zircon_Sample-153.FIN2	Fe-rich	700000		0.031	0.014	9.3	2.5	75	12	19.5	2.8	445	90	13.8	1.9	18.8	3.1	3.2	1.1	19.1	8.8	0.43	0.14	7.5	1.9	0.009	0.037
BMB5837	Zircon_Sample-154.FIN2	Fe-rich	700000		-0.03	0.12	3.6	2.6	40	11	13.8	1.4	473	57	15.1	1.3	25.6	3.3	5.7	2.5	11.4	2.4	0.39	0.2	5.09	0.62	0.008	0.058
BMB5837	Zircon_Sample-155.FIN2	Fe-rich	700000		-0.108	0.089	6.4	2.2	51.6	5.8	14	3.9	531	27	17.8	1	24.47	0.95	6.1	2	12.1	4.6	0.12	0.23	5.46	0.91	0.062	0.061
BMB5837	Zircon_Sample-156.FIN2	Fe-rich	700000		-0.106	0.091	5.8	6.3	42.6	3.9	11.8	2.4	531	38	15.58	0.69	23.5	2.3	3.1	1.1	10.5	2.9	0.53	0.29	6.8	2.3	-0.008	0.026
BMB5837	Zircon_Sample-163.FIN2	Fe-rich	700000		0.36	0.15	10.6	5.5	67.6	9.4	18.7	3.1	601	35	11.45	0.67	17.2	1.5	3.15	0.36	16.2	2.8	0.41	0.23	5.97	0.56	0.09	0.16
BMB5837	Zircon_Sample-164.FIN2	Fe-rich	700000		0.17	0.095	80	130	280	290	49	31	1300	2200	11.1	1.8	13.3	0.84	2.8	2	43.5	6.4	0.86	0.23	11.4	1.4	0.031	0.037
BMB5837	Zircon_Sample-165.FIN2	Fe-rich	700000		0.139	0.082	8.6	4.2	101	13	24	1.8	369	19	12.3	1.6	15.3	2.2	4.8	1.8	25.7	3.3	0.5	0.14	9.5	1.3	0.008	0.063
BMB5837	Zircon_Sample-166.FIN2	Fe-rich	700000		0.06	0.12	4.6	2.8	36.3	3.6	11	2.3	525	79	17.2	0.8	28.7	2.4	3.24	0.82	8	1.3	0.31	0.27	4.44	0.38	0.039	0.038
BMB5837	Zircon_Sample-167.FIN2	Fe-rich	700000		-0.014	0.056	6.5	2.5	67	13	16.5	2.7	366	60	14.24	0.83	23.7	1.2	3.4	1	20.4	4.5	0.45	0.13	6.04	0.49	-0.003	0.052
BMB5837	Zircon_Sample-168.FIN2	Fe-rich	700000		-0.13	0.067	7.9	2.3	37.3	5.9	12.5	2.2	479	43	12.86	0.63	23.6	1.6	3.6	1.4	9.8	1.1	0.61	0.28	5.27	0.8	0.017	0.036
BMB5837	Zircon_Sample-169.FIN2	Fe-rich	700000		-0.239	0.075	6.5	3.7	45.6	1.7	14.5	1.2	595	56	13.9	1	25.3	2	5.6	2.7	12.7	4.1	0.82	0.24	6.42	0.88	0.01	0.067
BMB5837	Zircon_Sample-176.FIN2	Fe-rich	700000		0.16	0.13	12.8	5.3	590	210	54	16	270	120	10.2	1.7	12.1	2.6	6.7	4.9	136	59	0.85	0.23	10.9	4.3	0.047	0.086
BMB5837	Zircon_Sample-177.FIN2	Fe-rich	700000		0.09	0.11	12	5.5	114	25	29.1	5.9	180	28	10.98	0.92	13.5	2.7	4.6	1.9	38.3	5.8	1.02	0.37	11.6	2	0.036	0.083
BMB5837	Zircon_Sample-178.FIN2	Fe-rich	700000		0.03	0.14	11.3	6.9	38.9	7.1	15.2	3.9	451	39	13.83	0.78	25.6	2.5	3.04	0.61	10.2	2	0.53	0.3	6.01	0.97	0.022	0.03
BMB5837	Zircon_Sample-179.FIN2	Fe-rich	700000		0.09	0.17	9.9	5.3	45.2	9.5	15.6	3.2	709	61	15.6	1.6	20.9	1.9	1.34	0.25	8.2	2	0.18	0.26	4.7	1.6	0.011	0.038
BMB5837	Zircon_Sample-180.FIN2	Fe-rich	700000		0.06	0.11	7.7	8.5	58.7	3.7	19.7	1.9	535	33	15.6	1.5	18.4	1.3	5.2	2.4	14.6	2.6	0.39	0.15	6.37	0.97	0.024	0.073
BMB5837	Zircon_Sample-181.FIN2	Fe-rich	700000		0.071	0.028	9	4.6	68	12	21.7	1.9	474	75	12.62	0.56	15.9	1.5	5.7	1.2	19.6	3.8	0.66	0.23	7.9	1.1	0.066	0.074

Analysis #	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
Zircon_Sample-098.FIN2	0.001	0.043	0.001	0.0087	0.12	0.11	0.037	0.046	0.009	0.011	0.11	0.22	-0.02	0.011	0.07	0	0.018	0.024	-0.031	0.073	-0.000183	0.000032	0.063	0.062	0.006	0.013	0.049	0.064	1.26	0.37	-50	130	0.065	0.034
Zircon_Sample-099.FIN2	0.007	0.043	0.01	0.02	0.005	0.054	0.007	0.02	-0.00075	0.00016	0.17	0.24	0.003	0.026	0.1	0	0.01	0.012	0.017	0.059	0.007	0.011	0.03	0.041	0.013	0.011	0.024	0.033	1.27	0.31	20	140	0.04	0.038
Zircon_Sample-100.FIN2	0.044	0.046	0.009	0.02	-0.002	0.04	0.031	0.047	0.01	0.01	0.167	0.075	0.015	0.017	0.012	0	0.008	0.013	0.025	0.055	0.013	0.016	0.086	0.064	-0.000256	0.000067	0.013	0.027	1.29	0.22	-170	180	0.054	0.068
Zircon_Sample-101.FIN2	0.011	0.034	-0.01	0.011	0.033	0.067	0.015	0.034	0.021	0.014	-0.02	0.18	0.009	0.019	0.118	0	0.018	0.016	0.007	0.045	0.0043	0.0089	0.014	0.033	0.0063	0.0086	0.021	0.028	1.075	0.07	20	160	0.021	0.028
Zircon_Sample-102.FIN2	0.005	0.039	0.001	0.014	0	0.11	0.062	0.054	0.01	0.021	0.21	0.14	0.01	0.038	0.12	0	0.019	0.014	-0.018	0.043	0.0018	0.0041	0.02	0.046	0.022	0.015	0.041	0.084	1.59	0.79	-50	110	0.13	0.14
Zircon_Sample-103.FIN2	-0.004	0.04	-0.0026	0.0068	0	0.11	0.03	0.064	0.01	0.014	0.16	0.3	0.014	0.015	-0.046	0	0.007	0.016	0.01	0.018	0.0018	0.004	0.01	0.025	-0.00025	0.000056	0.016	0.034	3.43	0.62	150	170	0.067	0.062
Zircon_Sample-104.FIN2	0.004	0.016	0.002	0.013	0.03	0.11	0.024	0.036	-0.00066	0.00019	0.11	0.29	0.021	0.017	0.109	0	0.009	0.014	0.021	0.087	0.0011	0.0026	0.044	0.06	-0.000259	0.000075	0.012	0.026	0.99	0.13	160	170	0.008	0.018
Zircon_Sample-111.FIN2	0.017	0.029	0.0001	0.0088	0.005	0.074	0.038	0.049	-0.00071	0.00016	0.08	0.35	0.012	0.063	0.034	0	0.0024	0.0079	0.16	0.18	0.0049	0.0068	0.062	0.094	0.0045	0.0095	-0.00232	0.00052	1.18	0.19	20	130	0.047	0.042
Zircon_Sample-112.FIN2	0.018	0.013	0.007	0.023	-0.003	0.093	-0.0025	0.00061	0.004	0.01	0.16	0.19	-0.006	0.026	0.015	0	0.015	0.024	-0.039	0.024	-0.000191	0.000047	-0.00322	0.00079	0.01	0.02	0.029	0.036	1.39	0.52	20	120	0.065	0.038
Zircon_Sample-113.FIN2	0.023	0.028	0.014	0.026	0.015	0.09	0.044	0.061	-0.00065	0.00015	0.18	0.17	-0.026	0.014	0.008	0	0.012	0.017	0.034	0.076	0.0131	0.0092	0.052	0.077	0.006	0.013	0.032	0.068	2.69	0.42	-40	260	0.078	0.08
Zircon_Sample-114.FIN2	0.036	0.035	-0.005	0.011	-0.019	0.081	0.068	0.081	0.011	0.013	0.05	0.56	0.011	0.037	0	0	0.009	0.013	-0.038	0.045	0.0034	0.0071	0.056	0.04	0.0024	0.0053	0.014	0.032	1.35	0.5	-50	180	0.028	0.04
Zircon_Sample-115.FIN2	0.027	0.047	-0.004	0.016	-0.069	0.067	0.063	0.057	0.0066	0.0098	-0.05	0.14	-0.006	0.013	0.08	0	0.0099	0.0073	-0.016	0.037	0.0043	0.009	0.016	0.025	0.014	0.013	0.064	0.079	3	1.5	204	63	0.08	0.066
Zircon_Sample-116.FIN2	0.006	0.019	0.013	0.026	0.15	0.12	0.019	0.028	0.009	0.014	-0.07	0.2	0.014	0.029	-0.021	0	0.0149	0.0084	-0.007	0.036	0.0019	0.0042	0.025	0.035	0.009	0.012	-0.00213	0.0008	1.2	0.54	60	160	0.103	0.06
Zircon_Sample-117.FIN2	-0.004	0.038	0.0066	0.004	0.048	0.089	-0.00199	0.00028	0.0028	0.0067	-0.03	0.28	-0.008	0.021	0	0	0.015	0.013	-0.03	0.034	-0.000149	0.000021	-0.0025	0.00035	-0.00022	0.000031	0.011	0.025	0.75	0.15	163	88	2	1.4
Zircon_Sample-124.FIN2	0.017	0.068	-0.01	0.021	-0.012	0.065	0.025	0.057	0.0071	0.0098	-0.1	0.49	-0.018	0.017	0.071	0	0.004	0.012	-0.009	0.083	0.01	0.016	0.018	0.045	-0.00034	0.00014	0.032	0.047	0.95	0.32	-70	180	0.028	0.036
Zircon_Sample-125.FIN2	0.03	0.034	0.009	0.025	0.113	0.045	0.15	0.13	0.016	0.02	-0.1	0.26	0.01	0.025	0.032	0	0.019	0.017	0.043	0.048	0.0036	0.0076	0.018	0.042	-0.000302	0.000092	0.036	0.043	1.6	0.18	136	76	0.11	0.15
Zircon_Sample-126.FIN2	-0.023	0.044	0.031	0.04	0.08	0.097	0.006	0.019	0.012	0.02	0.15	0.25	-0.022	0.045	0.14	0	0.009	0.011	0.048	0.065	0.007	0.012	0.018	0.043	0.009	0.012	-0.00184	0.00072	1.6	1	110	210	0.141	0.059
Zircon_Sample-127.FIN2	0.044	0.063	-0.0051	0.0059	0.035	0.095	0.053	0.076	0.019	0.019	0.21	0.48	0.02	0.04	0.02	0	0.0002	0.004	0.086	0.089	-0.000203	0.000063	0.045	0.042	0.027	0.026	0.023	0.049	0.9	0.55	-10	190	0.043	0.043
Zircon_Sample-128.FIN2	0.038	0.072	0.005	0.017	-0.004	0.051	0.038	0.06	0.0037	0.0089	0	0.19	-0.011	0.025	0.22	0	0.0051	0.0089	0.037	0.03	0.0063	0.0096	0.065	0.068	0.0072	0.0093	0.032	0.044	2.1	1.1	140	100	0.006	0.016
Zircon_Sample-129.FIN2	-0.022	0.042	-0.01	0.011	0.004	0.069	0.026	0.057	0.032	0.029	0.36	0.28	0.068	0.065	0.158	0	0.01	0.01	0.075	0.098	0.013	0.018	-0.0038	0.0012	0.01	0.013	0.019	0.04	1.86	0.81	-150	100	0.048	0.035
Zircon_Sample-130.FIN2	-0.024	0.054	0.01	0.043	-0.009	0.084	0.028	0.039	0.008	0.017	0.37	0.35	-0.019	0.03	0.09	0	0.015	0.014	-0.018	0.072	0.022	0.033	0.082	0.052	0.0019	0.0045	0.042	0.046	1.6	1.2	80	130	0.1	0.1
Zircon_Sample-137.FIN2	0.026	0.041	0.009	0.013	-0.063	0.041	0.12	0.11	0.005	0.011	-0.21	0.38	0.025	0.032	-0.03	0	0.014	0.016	-0.004	0.088	0.0149	0.0099	0.014	0.036	0.01	0.014	0.06	0.056	0.89	0.44	-17	85	0.046	0.044
Zircon_Sample-138.FIN2	0.059	0.023	-0.007	0.016	-0.03	0.086	-0.0033	0.001	0.027	0.032	0.07	0.42	0.05	0.029	0.06	0	0.022	0.026	-0.005	0.031	0.011	0.017	0.04	0.053	-0.00034	0.00011	0.038	0.076	2.12	0.57	20	200	0.065	0.064
Zircon_Sample-139.FIN2	0.028	0.035	-0.003	0.022	0.034	0.093	0.068	0.096	0.022	0.024	0.24	0.36	-0.007	0.021	0.042	0	0.012	0.017	0.091	0.089	-0.000207	0.000062	0.011	0.03	-0.000319	0.000095	0.024	0.033	1.18	0.25	100	130	0.094	0.048
Zircon_Sample-140.FIN2	-0.007	0.03	0.009	0.021	0.073	0.075	0.033	0.043	-0.00058	0.00019	-0.09	0.23	-0.01	0.034	0	0	0.0026	0.008	-0.032	0.041	-0.000185	0.000061	-0.0031	0.001	0.015	0.023	0.009	0.019	1.15	0.46	130	200	0.068	0.059
Zircon_Sample-141.FIN2	0.2	0.14	0.016	0.015	0.12	0.15	-0.00237	0.00087	0.017	0.027	0.35	0.41	0.042	0.058	0.23	0	0.0055	0.0088	0.01	0.044	-0.000162	0.000059	0.038	0.047	0.005	0.011	0.024	0.032	7.3	4.7	40	130	4.3	4.1
Zircon_Sample-142.FIN2	0.014	0.023	0.013	0.018	0.027	0.024	0.05	0.072	0.018	0.014	-0.04	0.31	0.011	0.021	0.07	0	0.017	0.018	-0.005	0.043	0.0053	0.0067	0.031	0.03	-0.000269	0.00006	0.05	0.036	2.01	0.37	40	110	0.053	0.032
Zircon_Sample-143.FIN2	0.023	0.021	-0.0026	0.0099	0.11	0.12	0.039	0.057	0.012	0.016	-0.23	0.11	0.006	0.031	0.024	0	0.017	0.032	0.062	0.054	0.0018	0.0041	0.056	0.073	-0.00033	0.00012	0.008	0.016	3.7	2	67	97	0.064	0.045
Zircon_Sample-150.FIN2	-0.003	0.029	0.001	0.016	-0.058	0.083	0.01	0.027	0.01	0.013	-0.04	0.34	0	0.03	0.04	0	0.022	0.027	0.017	0.041	0.008	0.013	0.145	0.089	0.009	0.018	0.008	0.027	1.9	1.1	-180	160	0.09	0.1
Zircon_Sample-151.FIN2	0.01	0.034	0.003	0.018	0.05	0.12	0.059	0.08	0.008	0.011	0.12	0.27	-0.004	0.027	0.034	0	0.009	0.011	-0.03	0.048	0.006	0.013	0.027	0.06	0.016	0.024	0.036	0.022	14	18	-30	230	0.051	0.035
Zircon_Sample-152.FIN2	0.51	0.67	0.04	0.062	0.31	0.38	0.124	0.092	0.0059	0.0087	-0.25	0.24	0.009	0.016	0.055	0	0.0084	0.0084	-0.02	0.055	0.0038	0.008	0.018	0.029	0.0033	0.0072	0.041	0.042	2.16	0.65	60	130	1.53	0.95
Zircon_Sample-153.FIN2	0	0.036	0.025	0.025	-0.012	0.09	0.12	0.11	0.009	0.019	-0.06	0.29	0.022	0.03	0.06	0	0.0062	0.0093	0.012	0.07	0.0034	0.0072	0.08	0.1	0.0046	0.0097	0.021	0.059	1.95	0.86	150	170	0.023	0.022
Zircon_Sample-154.FIN2	0.029	0.072	0.0003	0.0081	-0.039	0.081	0.07	0.11	0.002	0.0051	0.15	0.32	0.018	0.025	0.095	0	0.0166	0.0081	-0.008	0.029	0.0029	0.0062	0.047	0.069	0.0027	0.0059	0.002	0.023	0.92	0.15	-20	150	0.03	0.035
Zircon_Sample-155.FIN2	0.01	0.038	-0.002	0.012	0.12	0.17	0.044	0.063	-0.00057	0.00011	-0.15	0.3	0.001	0.023	0.13	0	0.0041	0.0072	0.05	0.1	0.0023	0.005	-0.0032	0.00062	0.007	0.014	-0.002	0.022	1.45	0.16	-83	97	0.053	0.041
Zircon_Sample-156.FIN2	-0.013	0.017	-0.0032	0.0098	-0.004	0.068	0.023	0.034	0.009	0.02	0.08	0.35	-0.013	0.018	-0.018	0	0.012	0.014	0.005	0.068	0.006	0.012	0.024	0.056	0.02	0.031	0.07	0.08	1.21	0.6	0	150	0.078	0.06
Zircon_Sample-163.FIN2	0.006	0.031	0.002	0.021	0.034	0.086	0.109	0.058	0.008	0.016	0.22	0.53	-0.004	0.021	-0.021	0	0.012	0.013	-0.002	0.05	-0.000217	0.000088	0.019	0.029	0.0027	0.0062	-0.012	0.03	2.1	1.6	80	100	0.025	0.027
Zircon_Sample-164.FIN2	0.024	0.034	-0.001	0.01	-0.013	0.03	0.014	0.032	0.015	0.02	-0.09	0.17	-0.011	0.014	-0.062	0	0.0019	0.0062	0.021	0.055	0.008	0.016	0.009	0.024	0.0033	0.0071	0.016	0.043	4.56	0.26	-60	140	0.048	0.035
Zircon_Sample-165.FIN2	0.004	0.024	0.034	0.028	0.02	0.11	0.166	0.069	0.008	0.011	0.13	0.46	0.013	0.018	0.025	0	0.005	0.013	0.001	0.059	0.0092	0.0099	0.09	0.11	0.01	0.013	0.035	0.051	2.93	0.78	150	300	0.04	0.036
Zircon_Sample-166.FIN2	0.039	0.046	0.001	0.017	-0.012	0.049	0.073	0.068	0.0038	0.0086	-0.12	0.21	0.013	0.029	0.023	0	0.0048	0.0075	-0.011	0.067	0.006	0.013	0.027	0.036	0.01	0.014	0.049	0.071	0.8	0.13	99	85	0.076	0.037
Zircon_Sample-167.FIN2	0.006	0.026	0.005	0.011	0.038	0.06	0.03	0.039	0.0029	0.0067	0.07	0.4	-0.017	0.016	0.027	0	0.0185	0.0096	0.026	0.067	0.01	0.01	0.025	0.034	0.0054	0.0073	0.014	0.024	2.09	0.55	140	140	0.056	0.061
Zircon_Sample-168.FIN2	0.008	0.028	0.007	0.014	-0.093	0.024	0.043	0.07	-0.00045	0.0001	-0.19	0.35	0.001	0.013	-0.037	0	0.008	0.019	0.017	0.08	-0.000167	0.000039	0.027	0.059	0.0016	0.0039	0.027	0.066	1.034	0.052	130	82	0.086	0.067
Zircon_Sample-169.FIN2	0.004	0.035	0.008	0.015	-0.065	0.087	0.016	0.039	0.013	0.021	0.08	0.39	-0.021	0.024	-0.019	0	0.004	0.012	0.039	0.088	0.012	0.013	0.01	0.028	-0.000334	0.000077	0.028	0.054	1.49	0.52	10	160	0.18	0.12
Zircon_Sample-176.FIN2	0.007	0.053	0.011	0.021	-0.04	0.22	0.033	0.073	0.012	0.018	0.07	0.45	0.001	0.055	-0.014	0	0.012	0.027	-0.026	0.077	0.023	0.013	0.08	0.12	0.022	0.022	0.07	0.095	9.9	2.2	-40	150	0.024	0.034
Zircon_Sample-177.FIN2	-0.0066	0.0077	0.015	0.024	-0.01	0.15	0.096	0.037	0.0034	0.0079	0.16	0.52	0.01	0.018	0.147	0	0.029	0.018	0.005	0.071	0.0016	0.0037	0.018	0.042	0.0055	0.0073	0.06	0.088	3.7	1.1	-50	130	0.046	0.069
Zircon_Sample-178.FIN2	0.017	0.042	-0.0005	0.0087	0.06	0.18	0.029	0.042	0.0021	0.0056	-0.04	0.26	0.002	0.033	0.04	0	0.018	0.028	-0.06	0.053	0.0022	0.0049	-0.0036	0.002	0.011	0.017	0.015	0.023	1.47	0.86	90	250	0.17	0.16
Zircon_Sample-179.FIN2	0.06	0.061	-0.003	0.017	-0.011	0.076	0.134	0.09	0.02	0.036	0	0.49	0.019	0.031	0.017	0	0.01	0.023	0.009	0.075	0.0027	0.0059	0.02	0.033	0.007	0.011	0.071	0.068	0.92	0.23	-40	110	0.33	0.29
Zircon_Sample-180.FIN2	0.033	0.046	0.003	0.017	0.03	0.15	-0.0039	0.0017	0.004	0.0093	0.28	0.43	0.018	0.029	-0.008	0	0.01	0.012	-0.03	0.15	0.015	0.012	0.07	0.12	0.0061	0.0083	0.02	0.027	1.83	0.91	30	54	0.023	0.034
Zircon_Sample-181.FIN2	0.004	0.02	0.008	0.018	-0.027	0.044	0.08	0.1	-0.00055	0.00012	-0.22	0.41	0.012	0.036	-0.018	0	0.009	0.013	0.051	0.04	0.0039	0.0082	0.031	0.043	0.0036	0.0079	0.015	0.032	1.92	0.56	10	150	0.021	0.028

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5837	Zircon_Sample-182.FIN2	Fe-rich	700000		-0.17	0.14	1100	2200	290	410	25	10	1600	2400	12.6	1.5	15.2	1.7	4.4	0.47	35	31	0.63	0.32	7.6	2.4	-0.018	0.019	0.013	0.029	-0.004	0.015	-0.005	0.027	-0.00309	0.0009	-0.00046	0.00013	0.17	0.44	0.013	0.043	-0.013	0	0.0038	0.0099	0.015	0.075	0.0025	0.0054	0.022	0.05	0.0073	0.0091	0.045	0.058	3.3	2.1	60	180	0.057	0.018

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5840 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5840	Zircon_Sample-267.FIN2	Fe-rich	700000		0.13	0.12	98	49	60	30	142	35	5840	870	6620	550	10900	3200	177	39	14.31	0.65	6	2.9	35	16	1.08	0.32	2.46	0.76	0.254	0.079	1.31	0.27	0.191	0.087	0.033	0.015	0.28	0.15	0.026	0.012	0.227	0	0.04	0.017	0.1	0.051	0.0113	0.0068	0.066	0.033	0.009	0.0035	0.047	0.044	4.23	0.61	1700	580	7.8	2.8
BMB5840	Zircon_Sample-268.FIN2	Fe-rich	700000		0.082	0.088	57	43	81	44	140	56	3870	940	5353	90	11300	1700	84	16	11.3	2.1	5.8	3.6	26.3	9.4	0.53	0.19	1.39	0.53	0.119	0.051	0.63	0.27	0.127	0.049	0.019	0.014	0.09	0.16	0.0109	0.0092	0.11	0	0.024	0.012	0.049	0.037	0.0101	0.0048	0.056	0.039	0.0086	0.0048	0.027	0.026	5.84	0.82	4100	1800	8.2	7.4
BMB5840	Zircon_Sample-269.FIN2	Fe-rich	700000		0.14	0.11	90	140	110	120	180	130	3900	1400	5300	1000	11200	3900	61	28	10.2	6	10	7.2	46	27	0.13	0.11	0.29	0.25	0.033	0.038	0.18	0.17	0.091	0.069	0.0119	0.0089	0.063	0.074	0.0042	0.0048	0.064	0	0.0059	0.0075	0.035	0.037	0.0035	0.0029	0.05	0.055	0.0021	0.002	0.044	0.051	10.4	2.5	880	270	0.86	0.76
BMB5840	Zircon_Sample-270.FIN2	Fe-rich	700000		0.094	0.049	27	14	57	30	104	22	4550	280	6240	530	12000	2000	90	38	7.97	0.67	3.56	0.82	34.4	2.2	0.337	0.059	0.75	0.18	0.087	0.031	0.43	0.15	0.098	0.017	0.0107	0.0059	0.088	0.041	0.013	0.012	0.063	0	0.0087	0.0024	0.05	0.032	0.0056	0.0039	0.033	0.025	0.0058	0.0076	0.0203	0.004	4.9	1.1	1760	660	0.79	0.18
BMB5840	Zircon_Sample-271.FIN2	Fe-rich	700000		0.051	0.038	160	130	107	38	191	34	3480	430	5230	190	9230	750	104	41	15.1	4.7	5.4	1.4	46.7	4.9	0.224	0.084	0.48	0.1	0.047	0.028	0.284	0.064	0.068	0.049	0.0108	0.0079	0.01	0.13	0.0085	0.0063	0.042	0	0.0093	0.0075	0.026	0.026	0.0056	0.0035	0.027	0.025	0.0058	0.0045	0.035	0.03	11.5	4.6	470	150	0.68	0.19
BMB5840	Zircon_Sample-272.FIN2	Fe-rich	700000		0.003	0.026	14.3	3.4	51	17	119	30	2430	200	3960	180	6790	670	95	52	35.5	9.1	2.43	0.39	45.9	9.8	0.002	0.012	0.0057	0.002	0.0001	0.0056	0.019	0.028	0.015	0.019	0.0006	0.0013	0.1	0.15	-0.0007	0.003	0.016	0	0.0076	0.0078	-0.011	0.02	0.00043	0.00095	0.0037	0.0086	0.0016	0.0023	0.014	0.011	9.9	1.9	280	230	0.2	0.19
BMB5840	Zircon_Sample-273.FIN2	Fe-rich	700000		-0.021	0.043	68	58	62	16	127.7	9	5200	1300	3770	280	10300	2400	27	24	34.8	2.4	3.68	0.32	51	10	0.02	0.012	0.005	0.019	0.001	0.0091	-0.011	0.022	0.021	0.028	0.009	0.013	0.085	0.06	0.006	0.01	0.023	0	0.007	0.01	-0.002	0.02	-0.000082	0.000038	0.026	0.018	0.0078	0.0075	0.013	0.019	7.8	1.6	240	430	0.78	0.28
BMB5840	Zircon_Sample-280.FIN2	Fe-rich	700000		-0.02	0.13	40	24	59	15	174	32	3500	180	5450	320	10900	2100	45.8	1.2	8.76	0.88	3.5	1.7	24.1	1.8	0.094	0.027	0.26	0.056	0.027	0.0055	0.105	0.063	0.035	0.034	0.0061	0.0045	0.15	0.21	0.007	0.012	0.058	0	0.0114	0.0099	0.037	0.033	0.0055	0.0039	0.026	0.015	0.0052	0.0037	0.006	0.014	10.4	3.5	510	210	0.6	0.26
BMB5840	Zircon_Sample-281.FIN2	Fe-rich	700000		0.138	0.045	53	28	140	59	171	41	3910	840	4840	130	8500	1700	18.2	3.8	19	2.5	4.14	0.51	65.8	5.2	0.063	0.035	0.23	0.038	0.027	0.011	0.144	0.069	0.01	0.017	0.0035	0.0033	0.038	0.09	0.014	0.012	0.03	0	0.0027	0.0018	0.004	0.017	0.0036	0.0052	0.023	0.022	0.0039	0.0027	0.035	0.024	13.08	0.86	10	160	0.43	0.19
BMB5840	Zircon_Sample-282.FIN2	Fe-rich	700000		0.174	0.038	106	65	125	20	183	22	3790	520	5980	360	9450	440	21.2	1.3	26	1.7	6.5	2.5	89	7.5	0.031	0.011	0.089	0.014	0.0073	0.0061	0.048	0.018	0.019	0.021	0.0125	0.0096	-0.027	0.077	0.006	0.012	0.022	0	0.0043	0.0028	0.024	0.023	0.0064	0.0039	0.017	0.018	0.0048	0.0041	0.036	0.025	15.7	1.4	30	230	0.56	0.24
BMB5840	Zircon_Sample-283.FIN2	Fe-rich	700000		0.19	0.11	48	53	47	13	121	29	3900	370	4700	310	9470	290	22	15	28	5.6	3.41	0.71	81	21	0.011	0.023	0.0107	0.007	0.0052	0.0026	0.028	0.041	0.007	0.017	0.0013	0.0017	-0.05	0.023	0.009	0.0073	0.034	0	0.0061	0.0058	0.005	0.014	0.001	0.0013	0.016	0.012	0.0023	0.003	0.01	0.0097	10.12	0.8	170	110	0.53	0.76
BMB5840	Zircon_Sample-284.FIN2	Fe-rich	700000		1.2	1.2	78	48	85	61	250	140	5200	2300	5070	470	11800	1300	49	18	25	15	6.7	2.9	66	45	0.14	0.39	1.01	0.27	0.138	0.084	1.2	1.2	0.024	0.059	0.052	0.071	0.03	0.62	-0.007	0.035	0.21	0	0.046	0.051	-0.12	0.24	0.06	0.11	0.09	0.13	0.08	0.13	0.07	0.15	6.8	4.7	149	51	28	43
BMB5840	Zircon_Sample-285.FIN2	Fe-rich	700000		0.07	0.1	14.8	4	56	17	149	45	6600	1000	4450	650	10900	1700	15.1	2.7	28.4	6.8	3.9	1.9	56	29	-0.021	0.026	0.025	0.031	0.0003	0.0051	0.037	0.062	0.0085	0.0099	0.0021	0.0044	0.09	0.11	0.0044	0.0039	-0.011	0	0.0052	0.0058	-0.005	0.016	-0.000075	0.000061	0.011	0.024	0.0021	0.0028	0.012	0.018	11.5	1.2	180	260	1.2	1.7
BMB5840	Zircon_Sample-286.FIN2	Fe-rich	700000		-0.13	0.13	17.1	3.2	48.4	9.6	210	200	4400	1500	4540	290	14300	7700	94	64	11.9	4.2	4.9	2.9	52.8	8.1	-0.14	0.25	-0.28	0.68	-0.09	0.22	-0.05	0.26	-0.012	0.06	0.0012	0.0053	-1.9	4	-0.09	0.22	-0.17	1	0.021	0.042	0.11	0.27	-0.0006	0.0024	0.06	0.13	0.19	0.38	-0.011	0.043	7.2	1.6	30	190	3.9	6.3
BMB5840	Zircon_Sample-293.FIN2	Fe-rich	700000		0.13	0.21	37	41	120	120	200	130	5150	860	6530	410	10570	610	41	8.7	10.5	4.1	3.8	2.4	38	21	-0.001	0.044	0.034	0.021	0.01	0.02	-0.07	0.14	0.008	0.02	0.0054	0.0049	-0.11	0.27	0.003	0.011	0.13	0	0.016	0.02	0.058	0.092	0.012	0.022	0.11	0.2	0.0014	0.0037	0.1	0.16	11.2	2.4	139	46	1	1.5
BMB5840	Zircon_Sample-294.FIN2	Fe-rich	700000		0.041	0.063	62	61	220	210	210	130	4100	1100	4420	330	9280	700	24.2	5.1	21.6	8.7	5.2	2.2	60	16	0.062	0.064	0.102	0.076	0.0123	0.0098	0.099	0.077	0.018	0.024	0.0009	0.0018	0.026	0.041	0.0032	0.0079	0	0	0.0137	0.0086	0.004	0.012	0.0027	0.0029	0.0128	0.0082	0.0059	0.0067	0.02	0.02	15.5	5.9	185	84	0.44	0.31
BMB5840	Zircon_Sample-295.FIN2	Fe-rich	700000		3.2	4.9	17	27	55	15	350	370	4400	1500	3570	520	13100	2200	25	10	35	23	3.48	0.85	60.7	9.9	-0.26	0.43	0.14	0.31	0.1	0.27	-0.7	1.7	1.2	1.5	0.0009	0.0066	-4.8	8	-0.31	0.57	0.25	0	0.14	0.27	-1.1	1.9	-0.0008	0.0045	0.1	0.24	-0.0022	0.0081	0.23	0.61	17.2	4.7	170	110	1.9	2
BMB5840	Zircon_Sample-296.FIN2	Fe-rich	700000		0.04	0.073	42	27	60	24	166	34	3870	710	4550	540	10900	1100	59.9	3.9	17.6	5.4	4.5	1.5	55	22	0.42	0.06	1.11	0.21	0.12	0.026	0.498	0.067	0.134	0.041	0.0159	0.0089	0.213	0.071	0.0091	0.0081	0.077	0	0.0302	0.0053	0.077	0.03	0.0105	0.0029	0.068	0.038	0.0054	0.0012	0.03	0.024	8.14	0.63	910	390	0.4	0.15
BMB5840	Zircon_Sample-297.FIN2	Fe-rich	700000		0.019	0.057	17.2	6	43.4	4.3	110.3	5.5	3180	250	4170	150	7530	330	21.8	3.3	9.6	1.7	2.83	0.31	36.4	2.9	0.029	0.015	0.062	0.02	0.0108	0.0022	0.097	0.066	0.024	0.04	0.0053	0.0042	0.047	0.06	0.0093	0.0088	0.046	0	0.0002	0.0011	-0.01	0.027	0.0016	0.0023	0.041	0.045	0.0022	0.0029	0.021	0.025	8.1	1.2	220	200	0.63	0.47
BMB5840	Zircon_Sample-298.FIN2	Fe-rich	700000		-0.02	0.022	40	22	117	60	158	40	3640	79	5050	530	10200	1200	107.5	5.5	12.88	0.94	3.54	0.42	56	15	0.086	0.047	0.218	0.045	0.0258	0.0076	0.17	0.12	0.052	0.023	0.0081	0.004	0.082	0.073	0.0045	0.0054	0.017	0	0.008	0.0069	0.0232	0.0099	0.0034	0.0027	0.028	0.025	0.0066	0.0037	0.009	0.014	9.1	1	280	240	0.48	0.13
BMB5840	Zircon_Sample-299.FIN2	Fe-rich	700000		-0.023	0.052	44	38	136	97	190	100	4500	1800	3660	220	8900	1500	17.4	3.4	36.3	6.8	4.25	0.86	61	12	0.0189	0.0081	0.045	0.014	0.0016	0.0037	0.033	0.023	0.026	0.025	0.0043	0.0037	0.025	0.086	0.0025	0.0092	0.034	0	0.0015	0.0034	0.002	0.022	0.0032	0.0028	0.0033	0.0081	0.0015	0.0021	0.0022	0.0059	13.1	2.6	90	160	0.39	0.24
BMB5840	Zircon_Sample-306.FIN2	Fe-rich	700000		0.029	0.055	9	1.3	30.7	2.8	121	16	2429	50	2270	120	8200	1100	33	11	11.3	2.4	2.09	0.2	33	1.5	-0.0043	0.0078	0	0.01	-0.0021	0.0039	0.018	0.031	0.008	0.012	0.0013	0.0027	-0.025	0.08	-0.0013	0.0066	0.012	0	0.0011	0.0026	0.005	0.015	0.0031	0.0044	0.0023	0.0061	0.0022	0.0028	0.0008	0.005	9.9	0.46	230	180	0.21	0.15
BMB5840	Zircon_Sample-307.FIN2	Fe-rich	700000		0.069	0.06	500	1000	123	71	188	75	4270	880	4370	250	8880	420	130	160	49	15	5.4	2.3	105	26	0.0176	0.0077	0.009	0.013	0.001	0.0034	0.022	0.021	0.0018	0.0062	0.012	0.017	0.08	0.1	-0.0022	0.0049	0.023	0	0.0036	0.0035	-0.006	0.012	0.0013	0.0016	0.022	0.038	0.0016	0.0021	0.02	0.03	15.5	1.6	290	240	0.4	0.25
BMB5840	Zircon_Sample-308.FIN2	Fe-rich	700000		0.14	0.028	46	11	41	10	64.8	5.1	1880	280	2440	44	9400	2700	166	26	82	13	4.39	0.7	108.5	6.3	1.42	0.17	4.13	0.29	0.366	0.055	1.574	0.097	0.3	0.1	0.0516	0.0095	0.207	0.076	0.0312	0.0083	0.316	0	0.044	0.012	0.094	0.016	0.018	0.011	0.114	0.016	0.0123	0.0029	0.036	0.029	3.96	0.64	1800	1000	1.211	0.067
BMB5840	Zircon_Sample-309.FIN2	Fe-rich	700000		0.133	0.093	47	52	101	72	185	91	4100	1100	4080	350	7910	310	18.26	0.82	50.4	3.6	4.6	2.5	73.2	1	0.004	0.03	0.0117	0.004	0.006	0.0034	0.014	0.022	0.0053	0.0086	0.0014	0.0017	0.08	0.16	0.0033	0.0094	-0.006	0	0.0122	0.0081	-0.002	0.017	0.0022	0.0021	0.033	0.049	0.0016	0.0023	0.012	0.013	13.3	2.2	520	180	0.54	0.53
BMB5840	Zircon_Sample-310.FIN2	Fe-rich	700000		0.04	0.033	20.3	8.6	71	19	162	34	3660	170	4090	200	7690	240	22.6	2.6	20.5	2	2.63	0.42	65.2	1.9	0.021	0.011	0.0475	0.0093	0.0051	0.0047	0.065	0.014	0.005	0.012	0.0058	0.0081	-0.002	0.049	0.0018	0.0047	0.0139	0	0.0049	0.0041	0.03	0.021	0.0033	0.002	0.015	0.015	0.005	0.0015	0.0056	0.0088	13.24	0.99	137	68	0.18	0.11
BMB5840	Zircon_Sample-311.FIN2	Fe-rich	700000		0.036	0.015	290	530	92	71	203	99	3630	280	4290	170	8710	570	37	11	16.1	3.5	4.8	3.9	53	12	0.092	0.04	0.154	0.078	0.033	0.022	0.091	0.064	0.032	0.036	0.006	0.0052	0.032	0.03	0.0042	0.0068	0.01	0	0.0051	0.0078	0.004	0.017	0.0025	0.0032	0.018	0.014	0.0049	0.0058	0.018	0.019	12.14	0.52	445	84	10	19
BMB5840	Zircon_Sample-312.FIN2	Fe-rich	700000		-0.002	0.025	25.1	5.1	79	14	166	15	3370	370	4090	220	10380	230	58	3.4	21.4	8.2	2.71	0.14	38.3	5.8	0.012	0.018	0.035	0.017	0.0047	0.0014	0.019	0.013	0.005	0.012	0.0036	0.0041	0.05	0.041	0.0036	0.006	0.036	0	0.0061	0.0045	0.015	0.033	0.0011	0.0022	0.023	0.022	-0.000082	0.00003	0.015	0.013	14.4	1.3	140	200	0.27	0.12
BMB5840	Zircon_Sample-319.FIN2	Fe-rich	700000		0.031	0.047	14.2	4.3	37.4	8.7	119	12	3640	320	4110	200	8920	470	34.9	4.6	6.5	1.8	3.11	0.29	28.6	4.8	0.044	0.015	0.131	0.012	0.0127	0.0085	0.034	0.017	0.031	0.025	0.0035	0.0036	0.03	0.11	-0.0044	0.0056	0.013	0	0.0047	0.0032	0.017	0.034	0.004	0.0052	0.013	0.021	0.0058	0.0088	0.005	0.011	9.1	1.3	20	170	0.177	0.026
BMB5840	Zircon_Sample-320.FIN2	Fe-rich	700000		0.217	0.073	37	31	66	31	184	67	3420	240	4180	290	9700	1500	30	1.7	8.8	1	3.6	1.4	21.7	2.3	0.022	0.021	0.071	0.043	0.0072	0.0085	0.046	0.04	0.016	0.027	0.0098	0.0098	0.057	0.057	0.013	0.017	0.011	0	0.0094	0.0083	-0.01	0.027	0.0006	0.0013	0.015	0.013	-0.00013	0.00003	0.015	0.02	10.79	0.69	200	200	0.44	0.21
BMB5840	Zircon_Sample-321.FIN2	Fe-rich	700000		0.35	0.3	66	64	180	140	230	100	4090	520	4420	760	12100	2200	123	25	15.9	6.3	5.6	3.5	48	15	0.189	0.051	0.321	0.083	0.029	0.037	0.166	0.067	0.048	0.029	0.0041	0.0048	0.06	0.27	0.017	0.026	0.09	0	0.0205	0.0096	0.033	0.053	0.0064	0.0076	0.1	0.1	0.008	0.011	0.034	0.045	11.3	2.4	370	220	6.3	8.6
BMB5840	Zircon_Sample-322.FIN2	Fe-rich	700000		0.016	0.092	17.5	4.2	50.7	4.4	142	12	5400	1400	2200	120	10660	620	32.4	5.9	38	10	3.48	0.82	74	20	0.001	0.016	0.027	0.02	0.005	0.011	0.011	0.054	0.015	0.023	0.0014	0.0017	0.11	0.23	-0.0029	0.0031	-0.003	0	0.01	0.012	0.003	0.015	0.0043	0.0087	0.004	0.01	0.0048	0.006	0.018	0.015	14.2	5.3	68	99	0.41	0.32
BMB5840	Zircon_Sample-323.FIN2	Fe-rich	700000		0.049	0.044	31	20	107	34	211	57	3100	440	3780	190	8710	490	35.1	6.8	21.8	3.7	3.25	0.96	61.3	8.6	0.026	0.016	0.06	0.028	0.0046	0.0092	0.033	0.041	0.026	0.015	0.0021	0.0027	0.003	0.015	0.006	0.006	-0.004	0	0.0026	0.0023	0.007	0.015	0.003	0.0034	0.022	0.02	0.0019	0.0027	0.021	0.013	18.8	2.1	60	120	0.107	0.065
BMB5840	Zircon_Sample-324.FIN2	Fe-rich	700000		0.029	0.024	130	220	57	16	163	30	2930	340	3400	650	10500	3500	53	35	11.1	1.9	4.6	1.2	37.1	7.2	0.105	0.034	0.262	0.081	0.023	0.0081	0.059	0.034	0.046	0.062	0.0082	0.0035	-0.005	0.025	0.0008	0.0041	0.033	0	0.013	0.015	0.004	0.044	0.0022	0.002	0.021	0.016	0.0017	0.0023	0.018	0.032	11.7	4.9	1200	430	0.57	0.27
BMB5840	Zircon_Sample-325.FIN2	Fe-rich	700000		0.053	0.047	16.7	4.5	58.2	9	175	23	10300	3700	2880	230	13400	1200	26.6	1.1	30.1	5.1	3.28	0.33	55.1	5.3	0.008	0.029	0.001	0.018	0.0041	0.0063	-0.011	0.036	0.032	0.055	0.0074	0.009	0.02	0.13	0	0.015	-0.021	0	0.008	0.0078	0.025	0.021	0.0009	0.002	0.015	0.017	0.0044	0.0053	0.0151	0.0091	18.3	3.6	220	130	0.41	0.31
BMB5840	Zircon_Sample-332.FIN2	Fe-rich	700000		0.15	0.099	15.6	2.3	45.6	2	155	12	2660	120	4190	370	10700	2100	38	16	10.8	3.2	3.36	0.98	26	7.5	0.061	0.053	0.111	0.051	0.007	0.01	0.088	0.097	0.07	0.073	0.0026	0.0032	-0.065	0.091	-0.001	0.0098	0.057	0	0.008	0.013	0.01	0.042	0.02	0.022	0.1	0.15	0.0081	0.0082	0.041	0.053	12.6	4.3	120	150	0.79	0.16
BMB5840	Zircon_Sample-333.FIN2	Fe-rich	700000		600	250	350000	100000	6200	1200	20200	4400	15400	3700	2110	720	7600	1700	8220	690	25000	4900	440	230	319	56	5000	1300	11100	2000	1140	280	3830	880	850	630	358	49	421	55	78	46	450	##	116	64	230	130	53	34	400	320	60	44	3300	1400	29000	11000	20	240	19300	4200
BMB5840	Zircon_Sample-334.FIN2	Fe-rich	700000		0.02	0.056	77	35	69	20	141	25	2590	420	2780	490	17700	2000	92	24	65	33	6.4	2.8	91	44	0.56	0.11	1.3	0.37	0.139	0.041	0.514	0.068	0.136	0.065	0.018	0.011	0.074	0.058	0.019	0.014	0.105	0	0.03	0.011	0.049	0.033	0.0061	0.0033	0.037	0.031	0.0041	0.0024	0.0273	0.0083	7.3	1.7	400	150	1.7	1.5
BMB5840	Zircon_Sample-335.FIN2	Fe-rich	700000		6	11	120	200	43.6	5.4	570	870	3400	2200	2770	410	15000	11000	40	44	37	42	5.1	5	54	31	0.48	0.95	-0.28	0.54	0.11	0.18	3.3	6.5	2.3	4.5	0.0012	0.0062	7	14	0.9	1.7	0.51	1	1.3	2.6	-0.7	1.3	-0.001	0.014	-0.06	0.15	-0.009	0.022	-0.029	0.063	22	17	190	250	9	18
BMB5840	Zircon_Sample-336.FIN2	Fe-rich	700000		0.063	0.022	41	22	70	16	194	46	3210	310	4670	610	13300	1700	31.9	4.2	20	12	3.6	1.3	76	29	0.056	0.02	0.109	0.014	0.0214	0.0085	0.07	0.024	0.0401	0.0059	0.0147	0.0041	0.037	0.035	0.0102	0.005	0.028	0	0.0035	0.0061	0.01	0.022	0.0013	0.0017	0.0401	0.0068	0.0049	0.0048	0.034	0.023	13.1	2.3	0	120	0.55	0.42
BMB5840	Zircon_Sample-337.FIN2	Fe-rich	700000		0.054	0.032	41	30	71	35	176	54	3290	310	3930	400	12800	1300	94.2	9.2	10.4	2.6	4.4	2.2	30	4.2	0.118	0.049	0.31	0.15	0.047	0.025	0.17	0.14	0.062	0.021	0.009	0.0078	0.037	0.073	-0.0012	0.0066	0.042	0	0.0118	0.0083	0.037	0.021	0.0067	0.0034	0.017	0.013	0.0084	0.0066	0.025	0.022	8.98	0.26	980	350	1.41	0.94
BMB5840	Zircon_Sample-338.FIN2	Fe-rich	700000		0.125	0.044	27.2	1.9	86.3	3.9	180.8	7.5	3500	250	4790	440	13800	1500	23.76	0.91	9.5	1.1	2.68	0.18	33.3	5.5	0.0567	0.007	0.1281	0.0037	0.017	0.0065	0.061	0.038	0.007	0.01	0.0099	0.0043	0.08	0.11	0.0065	0.007	0.006	0	0.0045	0.0019	0.031	0.028	0.0031	0.0028	0.0091	0.0082	0.0017	0.0023	0.013	0.013	12.34	0.44	240	170	0.358	0.087

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5843 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5843	Zircon_sample-007.FIN2	Fe-rich	700000		0.31	0.16	12	23	6.3	2.8	2.6	1.4	192.3	9.7	4.4	0.76	0.893	0.089	8.4	1.2	6.25	0.67	0.13	0.12	0.406	0.084	7.6	1.7	15.5	4.1	1.5	0.3	6	1.2	1.29	0.32	0.214	0.048	0.69	0.14	0.177	0.035	1.05	0	0.161	0.018	0.33	0.13	0.0669	0.0082	0.46	0.15	0.058	0.019	0.049	0.059	0.6	0.44	650	400	6.9	2.8
BMB5843	Zircon_sample-008.FIN2	Fe-rich	700000		0.43	0.24	35	63	7.7	7.2	2.7	3.1	232	12	3.44	0.17	1.26	0.7	8.59	0.35	5.66	0.92	0.51	0.6	0.294	0.081	7.5	1.2	15.4	2.8	1.36	0.22	5.3	1.2	0.86	0.3	0.174	0.042	0.65	0.2	0.14	0.048	0.89	0	0.138	0.03	0.321	0.097	0.066	0.021	0.45	0.19	0.052	0.016	0.077	0.089	1.5	1.4	190	370	6.7	2.4
BMB5843	Zircon_sample-009.FIN2	Fe-rich	700000		1.24	0.37	310	220	17.2	8.8	9.2	4.1	246	40	5.49	0.31	1.49	0.46	10.5	1.2	4.75	0.51	0.49	0.22	0.45	0.2	11.7	2.2	21.8	3.3	1.96	0.2	6.95	0.91	1.43	0.18	0.323	0.07	1.27	0.24	0.194	0.029	1.04	0	0.202	0.052	0.504	0.065	0.067	0.025	0.43	0.17	0.07	0.019	0.16	0.069	2.5	1	450	290	8.6	1.2
BMB5843	Zircon_sample-010.FIN2	Fe-rich	700000		0.177	0.035	1.8	2	0.19	0.15	1.5	1.8	221	16	3.46	0.43	0.897	0.084	7.1	1.8	5.01	0.52	0.122	0.077	0.331	0.071	8.8	1.6	19.8	2.2	1.99	0.25	7.6	1.1	1.43	0.37	0.272	0.05	0.97	0.25	0.194	0.032	1.121	0	0.205	0.059	0.5	0.15	0.0707	0.0099	0.391	0.056	0.044	0.018	0.019	0.019	0.196	0.086	420	310	5.53	0.74
BMB5843	Zircon_sample-011.FIN2	Fe-rich	700000		0.035	0.065	0.22	0.76	1.35	0.34	1.6	1.8	310	330	56	62	36	22	6.5	6.4	0.245	0.025	0.09	0.25	0.119	0.064	0.46	0.66	0.86	0.89	0.099	0.097	0.3	0.36	0.052	0.022	0.011	0.023	0.062	0.092	0.0006	0.0064	0.027	0	0.009	0.026	0.007	0.027	0.0028	0.0019	0.03	0.06	0.0048	0.0099	0.01	0.034	-0.00137	0.00096	790	660	4.3	3.9
BMB5843	Zircon_sample-012.FIN2	Fe-rich	700000		0.131	0.033	2.7	1.4	0.66	0.38	-0.05	0.11	433	26	37	17	40	41	17.8	6.4	0.76	0.19	0.11	0.11	0.169	0.073	1.97	0.53	3.3	0.49	0.284	0.045	1.3	0.3	0.182	0.02	0.048	0.025	0.137	0.027	0.0225	0.0096	0.137	0	0.0412	0.0068	0.084	0.03	0.0119	0.0097	0.054	0.024	0.0052	0.0022	0.024	0.021	0.19	0.15	1100	1200	2.74	0.6
BMB5843	Zircon_sample-013.FIN2	Fe-rich	700000		0.92	0.69	220	200	20	16	9.1	6.7	200	110	4.2	2.7	1.6	0.17	7.6	1.8	2.97	0.65	0.39	0.33	0.142	0.02	4.39	0.98	9.5	1.8	0.92	**0.16**	3.47	0.55	0.69	0.27	0.111	0.015	0.43	0.15	0.084	0.034	0.534	0	0.074	0.012	0.228	0.043	0.041	0.012	0.37	0.26	0.06	0.016	0.311	0.047	4.1	3.2	210	450	6.9	2.6
BMB5843	Zircon_sample-020.FIN2	P-rich	700000		450000	900000	3500000	6600000	-10000	17000	-3000000	5800000	-800000	280000	160000	330000	37000	70000	800000	140000	310000	650000	-41000	79000	800	3500	30000	54000	-18000	34000	90000	18000	36000	84000	37000	73000	50000	10000	-110000	240000	-3700	5900	16000	##	50000	10000	-1700	4400	70000	14000	37000	70000	500	2100	700000	140000	26000	51000	0	110	17000	34000
BMB5843	Zircon_sample-021.FIN2	P-rich	700000		-80000	68000	480000	660000	80000	11000	-10000000	1900000	60000	49000	300000	100000	-11000	20000	800000	140000	70000	25000	-15000	27000	-7100	9700	5200	9300	2200	9700	1500	4100	-30000	10000	-18000	36000	420	650	14000	51000	2100	7300	-10000	##	1100	1400	-500000	100000	1100	1900	-30000	10000	400	870	-12000	22000	900	3000	250	160	-1900	7500
BMB5843	Zircon_sample-022.FIN2	P-rich	700000		-60000	82000	-1000000	380000	-1600	5600	150000	430000	-20000	36000	-4000	110000	-9900	8200	-19000	35000	44000	63000	-15000	42000	-1900	2000	-300	3200	200	1800	970	960	20000	13000	2000	3900	-620	900	-4100	6400	-1300	3900	-600	##	-300	1300	2200	3400	900	2600	-600	4700	13	65	100	2500	-2800	5000	0	160	-400	7200
BMB5843	Zircon_sample-023.FIN2	P-rich	700000		-200000	110000	120000	190000	300	2100	190000	170000	-4800	7500	600000	120000	-900	6100	4600	9400	7800	2800	600	4300	-500	3900	2500	5700	900	1500	-50	640	2200	4600	1200	1200	-70	900	-17000	28000	-400	3500	3200	##	-20	520	-80000	14000	30	100	-1300	9500	230	320	-200	5100	900	1700	40	250	0	1800
BMB5843	Zircon_sample-024.FIN2	P-rich	700000		64000	89000	1100000	1300000	3400	7700	-120000	220000	-70000	23000	-500000	140000	6800	6200	20000	27000	33000	57000	-16000	25000	1900	3000	200	1600	-1500	2500	-1600	2900	300	5900	-1800	5500	500	1400	16000	21000	480	980	-2800	##	900	1100	-2900	5700	380	890	-4400	4700	-22	52	-3200	5300	100	780	-147	61	1200	3000
BMB5843	Zircon_Sample-025.FIN2	P-rich	700000		150000	280000	620000	660000	60000	11000	1100000	1600000	500000	120000	50000	73000	22000	53000	3900000	7700000	500000	140000	-37000	84000	1000	14000	-5800	3700	21000	36000	-400	8700	-80000	34000	1800	5600	900	1400	-44000	86000	-4100	5600	12000	##	200	2100	-5900	7800	-300	3700	1700	5900	1400	2600	60000	22000	90000	15000	-60	210	3000	2900
BMB5843	Zircon_sample-026.FIN2	P-rich	700000		-300000	160000	-10000000	2700000	-14000	29000	10000000	2000000	37000	77000	210000	340000	-600000	120000	140000	280000	90000	33000	700000	130000	-11000	22000	-6400	8400	3500	9000	-600	1900	19000	31000	7100	9300	-2700	5100	-15000	25000	-80000	18000	6500	##	-90000	19000	17000	36000	-1600	3300	-60000	16000	-2300	4700	-5500	7600	-22000	43000	190	230	1500	3500
BMB5843	Zircon_sample-033.FIN2	P-rich	700000		140000	290000	90000000	19000000	-3100	5100	390000	680000	50000	93000	12000	45000	80000	18000	170000	340000	-40000	11000	-14000	46000	2300	4300	4200	7500	-3900	8400	-1200	1400	-90000	20000	490	990	2100	4500	-20000	14000	30	750	70000	##	-400	1200	-60000	16000	-160	470	-40000	11000	60	210	-30000	10000	-200	2800	200	290	80000	16000
BMB5843	Zircon_sample-034.FIN2	P-rich	700000		-140000	160000	-13000000	16000000	-22000	28000	-9000000	1200000	-800000	260000	200000	270000	17000	65000	600000	140000	-600000	160000	-24000	33000	-14000	18000	-60000	50000	40000	13000	-21000	38000	19000	67000	-3300	9400	-6800	9200	35000	69000	-12000	27000	400000	##	40000	14000	24000	26000	-200	1900	16000	55000	-100	1200	-90000	16000	-31000	69000	300	200	-22000	44000
BMB5843	Zircon_sample-035.FIN2	P-rich	700000		100000	160000	210000	750000	-40000	14000	-210000	320000	60000	16000	30000	99000	25000	75000	57000	67000	-20000	92000	-11000	11000	80000	15000	-2300	8900	-500	3700	-100	2600	-12100	8500	-50000	16000	800	2000	10000	16000	-1200	4100	100000	##	-300	2000	90000	22000	400	2200	4200	8000	1500	6200	12000	21000	4900	6900	130	230	40000	12000
BMB5843	Zircon_sample-036.FIN2	P-rich	700000		-110000	160000	-10000000	1400000	-70000	14000	-190000	390000	-25000	48000	-700000	150000	80000	13000	11000	27000	-12000	16000	-60000	16000	30	380	-80000	16000	2300	4900	380	390	-4800	6700	-70000	14000	40	440	-11200	9400	-2100	4100	80000	##	-190	330	-4100	7900	-700	1300	2000	2600	-140	290	5000	9700	-3700	5900	170	350	500	1400
BMB5843	Zircon_Sample-037.FIN2	P-rich	700000		52	77	240	470	14.9	4.3	-700	1400	310	110	15	35	16	25	15	18	-10	30	-32	60	0.14	0.52	18	12	17.5	6.1	4.6	3.8	6.9	3.9	10	16	1.9	2.3	50	99	4	6.4	5.6	7	0.28	0.39	6.3	9	0	0.27	-1.3	3.2	1.2	2.3	-5	12	15	23	570	360	18	23
BMB5843	Zircon_Sample-038.FIN2	P-rich	700000		-36000	88000	-3200000	7000000	770	920	160000	270000	-60000	21000	10000	40000	-3100	2500	-300000	110000	-12000	31000	-5100	5000	-900	2100	1300	2200	100	1100	-1000	2100	0	1200	-700	3900	-80	340	-16000	30000	1100	2500	2500	##	-300	1000	-80000	16000	93	79	200	3900	72	89	1500	1300	-70000	14000	240	280	0	1400
BMB5843	Zircon_sample-039.FIN2	P-rich	700000		70000000	13000000	19000000	35000000	600000	110000	26000000	56000000	-6000000	1100000	-60000000	12000000	6000000	1100000	3000000	1100000	2600000	5500000	1500000	2800000	20000	18000	-270000	540000	-110000	230000	-800000	170000	8000000	1500000	140000	310000	-70000	13000	5000000	1200000	700000	120000	-270000	##	12000	14000	160000	380000	50000	21000	150000	240000	100000	180000	-700000	150000	-14000	57000	110	160	-22000	59000
BMB5843	Zircon_Sample-046.FIN2	P-rich	700000		38000	64000	2800000	3900000	-300	2000	3000	190000	40000	62000	-21000	12000	4200	8200	4200	3100	20000	26000	-1600	6500	-100	1600	1200	3000	1300	1800	90	830	-2600	6500	400	1800	180	260	-60000	31000	-590	760	-2700	##	-200	450	-200	4400	90	200	2200	3000	-10	470	-1200	1300	-800	4100	230	220	60000	11000
BMB5843	Zircon_Sample-047.FIN2	P-rich	700000		22000	44000	220000	520000	5000	9100	-5000000	1000000	2500	3300	33000	50000	33000	64000	-12000	35000	26000	61000	-18000	44000	10000	22000	2300	7100	1000	1100	50	530	-80000	17000	80000	14000	-600	1200	60000	19000	60000	11000	1200	##	-230	280	4100	8500	700	1300	2000	6100	-420	710	-2200	3500	3400	7400	-100	170	1700	3900
BMB5843	Zircon_Sample-048.FIN2	P-rich	700000		500000	130000	-6000000	1200000	-14000	26000	300000	120000	200000	110000	11000	23000	1000	35000	-40000	33000	-10100	8900	-3600	8800	-300	1900	-1100	5500	-1600	2200	500	2300	-1500	4700	1700	2900	0	1200	80000	32000	1000	2200	1700	##	-1100	1300	-1200	6500	-140	740	2000	5200	-200	1100	500	2400	-3600	4200	360	230	500	4100
BMB5843	Zircon_Sample-049.FIN2	P-rich	700000		-320000	530000	-3100000	4700000	-900	5700	-500000	850000	-220000	360000	400000	250000	12000	35000	-6000	150000	31000	16000	40000	57000	-20000	11000	1300	6700	-18000	23000	-1500	1400	-9300	9300	4500	9700	1600	4200	24000	58000	-50000	13000	-27000	##	800	4300	-50000	26000	380	440	90000	14000	-800	6300	3600	5800	-1000	21000	270	200	-8800	9300
BMB5843	Zircon_Sample-050.FIN2	P-rich	700000		35000	63000	300000	710000	0	2400	-240000	370000	11000	42000	-37000	51000	-2900	6300	-1000	46000	5900	6400	50000	18000	200	1000	-600	2000	1400	4100	1100	1300	20000	10000	6100	8700	-250	270	5600	9800	400	1400	-1700	##	100	1100	-900	6700	170	380	400	5000	590	890	400	1600	2000	2900	232	54	500	1100
BMB5843	Zircon_Sample-051.FIN2	P-rich	700000		29000	37000	80000	96000	100	1400	-400000	120000	33000	39000	60000	22000	-2600	3200	20000	13000	-30000	12000	300	3200	0	1100	1100	1400	300	1100	820	440	1200	3100	400	1600	130	540	-3900	4600	-300	1000	-700	##	-30	350	1400	1000	110	170	300	2400	50	120	1600	1300	600	1100	230	130	15000	22000
BMB5843	Zircon_Sample-052.FIN2	P-rich	700000		6000000	1100000	3000000	6200000	80000	15000	-4300000	7300000	-700000	140000	-240000	570000	470000	920000	-180000	390000	210000	460000	100000	230000	17000	32000	3600	4900	-32000	65000	-100000	21000	2900	3900	-33000	72000	-400	3100	-190000	390000	44000	89000	-800000	##	-500	1000	700000	150000	11000	22000	19000	45000	400	1200	-15000	29000	-20000	13000	100	240	36000	72000
BMB5843	Zircon_Sample-059.FIN2	Fe-rich	700000		1.25	0.16	80	130	9.3	1.6	29.8	1.9	219	53	4.21	0.31	29.9	3.4	57	11	1.9	0.46	0.13	0.18	0.92	0.1	11	1.4	17.1	2.2	2.02	0.2	8.2	0.78	1.65	0.27	0.413	0.084	1.53	0.23	0.259	0.037	1.8	0	0.21	0.026	0.91	0.13	0.096	0.016	0.56	0.17	0.063	0.016	0.25	0.065	0.93	0.23	200	180	5.18	0.66
BMB5843	Zircon_Sample-060.FIN2	Fe-rich	700000		1.1	0.69	350	330	15.8	9.7	41	36	730	250	2.89	0.98	1.48	0.42	13.3	4.1	2.1	0.18	0.43	0.32	0.062	0.023	6.3	1.1	12.8	1.8	1.67	0.27	6.89	0.33	1.349	0.093	0.297	0.07	1.22	0.19	0.199	0.035	1.14	0	0.159	0.024	0.49	0.14	0.052	0.011	0.242	0.046	0.056	0.012	0.22	0.16	0.94	0.22	330	170	7.91	0.15
BMB5843	Zircon_Sample-061.FIN2	Fe-rich	700000		0.52	0.15	370	440	3.1	1.5	9.8	5.3	790	110	27	3.9	5.8	5.6	61	9.4	0.76	0.36	0.18	0.11	0.0438	0.004	7.19	0.67	11.4	2.5	1.051	0.091	4.32	0.34	0.73	0.15	0.157	0.027	0.439	0.088	0.096	0.018	0.514	0	0.0678	0.0088	0.231	0.084	0.0327	0.0096	0.156	0.099	0.018	0.014	0.065	0.037	0.132	0.078	170	100	9.4	4.7
BMB5843	Zircon_Sample-062.FIN2	Fe-rich	700000		0.41	0.31	7.9	5.4	1.2	1.6	6.1	6.2	630	240	1.46	0.64	1.28	0.52	6.9	3.2	1.87	0.58	0.14	0.13	0.085	0.066	2.44	0.67	4	1.4	0.46	0.16	1.88	0.61	0.277	0.088	0.082	0.076	0.16	0.12	0.028	0.01	0.179	0	0.0307	0.0081	0.111	0.035	0.0069	0.0042	0.101	0.084	0.018	0.013	0.006	0.011	0.58	0.46	100	120	5.54	0.92
BMB5843	Zircon_Sample-062.FIN2	Fe-rich	700000		0.41	0.31	7.9	5.4	1.2	1.6	6.1	6.2	630	240	1.46	0.64	1.28	0.52	6.9	3.2	1.87	0.58	0.14	0.13	0.085	0.066	2.44	0.67	4	1.4	0.46	0.16	1.88	0.61	0.277	0.088	0.082	0.076	0.16	0.12	0.028	0.01	0.179	0	0.0307	0.0081	0.111	0.035	0.0069	0.0042	0.101	0.084	0.018	0.013	0.006	0.011	0.58	0.46	100	120	5.54	0.92
BMB5843	Zircon_Sample-063.FIN2	Fe-rich	700000		1.38	0.26	420	190	16.5	4.1	39	11	229	17	2.83	0.35	3.67	0.92	11.4	2.5	4.2	1.1	0.83	0.24	0.71	0.14	10	1.8	18.1	3	1.99	0.28	6.5	1.2	1.15	0.18	0.284	0.062	1.14	0.38	0.228	0.067	1.05	0	0.135	0.045	0.51	0.16	0.055	0.021	0.51	0.11	0.073	0.019	0.27	0.12	8.7	4.2	170	240	14.5	3.7
BMB5843	Zircon_Sample-064.FIN2	Fe-rich	700000		0.189	0.044	1.7	1.3	0.244	0.058	0.2	2.6	216	22	1.94	0.21	0.844	0.066	6.92	0.99	4.26	0.35	0.054	0.054	0.113	0.034	7.01	0.66	10.4	1	1.19	0.18	4.67	0.74	0.9	0.11	0.157	0.044	0.68	0.15	0.095	0.024	0.64	0	0.089	0.026	0.305	0.079	0.033	0.012	0.173	0.07	0.026	0.0078	0.04	0.02	0.33	0.1	170	150	11.97	0.87
BMB5843	Zircon_Sample-065.FIN2	Fe-rich	700000		0.171	0.048	1.3	1.3	0.61	0.54	0.5	2.9	711	73	8.3	2.6	2.4	1.2	10.4	2.4	3.26	0.45	0.015	0.034	0.088	0.053	6.7	1.2	10.7	1.9	1.31	0.14	5	1	0.93	0.17	0.202	0.032	0.77	0.1	0.169	0.027	1.09	0	0.135	0.045	0.4	0.041	0.035	0.011	0.237	0.061	0.047	0.037	0.029	0.016	0.26	0.14	440	170	2.09	0.38
BMB5843	Zircon_Sample-072.FIN2	Fe-rich	700000		0.165	0.059	-0.1	1.7	0.44	0.2	6.4	1.3	792	60	20	16	1.62	0.27	22	9.1	7.7	2	0.077	0.043	0.45	0.24	6.92	0.88	9.81	0.98	1.13	0.15	4.49	0.54	0.92	0.2	0.191	0.023	0.81	0.23	0.119	0.012	0.632	0	0.104	0.013	0.373	0.073	0.0214	0.008	0.228	0.078	0.036	0.027	0.0021	0.0088	0.156	0.091	160	220	5	1.2
BMB5843	Zircon_Sample-073.FIN2	Fe-rich	700000		0.55	0.35	66	72	15	14	14	13	430	100	49	24	5	2.4	19.5	5.8	5.8	2	0.18	0.12	2.4	1.3	10.71	0.51	16.7	1.5	1.88	0.22	8.1	1.6	1.79	0.43	0.38	0.1	1.36	0.23	0.256	0.095	1.34	0	0.244	0.029	0.58	0.21	0.047	0.015	0.4	0.19	0.053	0.019	0.066	0.075	2.4	1.9	240	300	5.6	2.1
BMB5843	Zircon_Sample-074.FIN2	Fe-rich	700000		1.33	0.22	290	130	127	32	141	45	190	16	22.2	3.2	4.89	0.75	17.5	2.2	16.8	2	0.93	0.39	2.58	0.48	7.98	0.97	16.95	0.85	2.35	0.19	8.83	0.88	2.11	0.36	0.44	0.082	1.66	0.37	0.325	0.04	1.93	0	0.291	0.061	0.81	0.11	0.062	0.013	0.5	0.17	0.072	0.025	0.35	0.13	19.3	5.6	150	170	9.4	1.1
BMB5843	Zircon_Sample-075.FIN2	Fe-rich	700000		1.37	0.29	88	85	115	79	101	63	216	37	22.3	4.2	8.2	3.1	33.2	9.4	15.3	1.4	0.29	0.32	3.86	0.92	6.83	0.89	12	1.5	1.38	0.18	4.91	0.68	1.18	0.17	0.273	0.064	1.08	0.37	0.198	0.049	1.1	0	0.188	0.049	0.48	0.091	0.053	0.013	0.36	0.11	0.059	0.021	0.17	0.14	14.3	9.8	460	250	12.7	5.6
BMB5843	Zircon_Sample-076.FIN2	Fe-rich	700000		0.73	0.11	64	67	12.5	0.72	18.1	5.6	646	75	9.27	0.8	5.56	0.31	19.9	3.4	10.44	0.98	0.15	0.12	1.8	1.2	11.4	1.2	18.7	1.3	2.3	0.19	9.51	0.68	2.31	0.34	0.504	0.037	1.77	0.088	0.402	0.057	2.11	0	0.408	0.037	0.9	0.11	0.0811	0.0047	0.619	0.076	0.08	0.015	0.095	0.024	6.7	0.91	260	150	7.2	1
BMB5843	Zircon_Sample-077.FIN2	Fe-rich	700000		1.16	0.85	900	1500	25	16	45	31	601	38	11.7	3.4	4.4	1.1	18.5	5.3	2.3	1.2	0.3	0.3	0.33	0.12	19.1	3.4	32.4	3.1	3.44	0.34	12.9	1.3	3.1	0.47	0.604	0.038	2.75	0.36	0.441	0.054	2.14	0	0.384	0.067	0.99	0.22	0.085	0.017	0.721	0.065	0.116	0.019	0.4	0.36	5.4	3.3	290	150	8.8	2.7
BMB5843	Zircon_Sample-078.FIN2	Fe-rich	700000		0.67	0.1	214	78	7.02	0.72	29.7	9.6	817	36	1.86	0.2	1.2	0.31	14.3	3.5	0.34	0.31	0.37	0.19	0.0188	0.0068	14.85	0.66	28.8	2.2	3.184	0.07	13.3	3	2.58	0.4	0.382	0.07	1.84	0.18	0.365	0.03	2.17	0	0.443	0.085	0.918	0.096	0.063	0.012	0.59	0.11	0.093	0.015	0.15	0.042	0.244	0.059	300	320	3.31	0.31

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5844 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5844	Zircon_Sample-189.FIN2	Fe-rich	700000		0.073	0.04	7.6	6.3	12.8	6.8	5.09	0.54	111.4	9.5	9.1	2.4	46	19	8	10	10.4	1.6	6.4	0.88	30	6.1	-0.0061	0.0045	-0.002	0.01	0.0018	0.005	0.035	0.019	0.006	0.013	0.0016	0.0034	-0.04	0.096	0.0009	0.0024	-0.006	0	-0.000366	0.000089	0.005	0.036	0.0022	0.0022	0.011	0.023	0.0028	0.0029	0.0265	0.0058	10.11	0.65	330	310	0.103	0.074
BMB5844	Zircon_Sample-190.FIN2	Fe-rich	700000		0.065	0.045	13.8	4.5	84.9	9.8	7	3.5	17.9	3.5	2.09	0.68	67	15	2.99	0.69	57.8	6.3	11.3	1.1	141	35	0.006	0.026	0.054	0.069	0.0074	0.0066	0.009	0.015	0.048	0.053	0.0043	0.0089	-0.1	0.2	-0.0032	0.008	-0.028	0	0.0003	0.0023	-0.0158	0.0079	-0.000097	0.000062	0.011	0.025	0.003	0.0064	-0.000055	0.000035	65	24	450	140	0.143	0.071
BMB5844	Zircon_Sample-191.FIN2	Fe-rich	700000		0.032	0.039	49	15	93	25	9.4	3.4	65	22	2.18	0.77	170	48	2.9	2	40	14	24.3	2.8	95	18	0.006	0.01	0.033	0.027	0.0023	0.0041	-0.0134	0.0058	0.009	0.011	0.0041	0.0048	-0.04	0.12	0.0015	0.0046	-0.004	0	0.0017	0.004	0.002	0.014	-0.000049	0.000028	0.013	0.016	-0.000083	0.000047	0.0033	0.0067	92	51	800	1400	0.36	0.2
BMB5844	Zircon_Sample-192.FIN2	Fe-rich	700000		0.048	0.015	11	12	21.1	9.1	1.66	0.87	40	23	1.85	0.24	57	17	3.3	5.5	7.2	2.7	6.1	4.6	29	17	0.038	0.021	0.014	0.0098	0.0012	0.0054	0.011	0.024	-0.00079	0.00036	0.0023	0.0048	0.049	0.041	0.007	0.017	0.026	0	0.0006	0.0019	0	0.014	-0.000045	0.000021	-0.00071	0.00033	0.002	0.0041	0.011	0.012	14.4	4.1	220	160	0.082	0.054
BMB5844	Zircon_Sample-193.FIN2	Fe-rich	700000		0.0229	0.0027	37	29	82	25	7	1.7	70	35	1.89	0.28	105	22	0.96	0.21	49	15	20.6	4.5	145	38	0.0444	0.0091	0.028	0.0061	0.0066	0.0067	0.003	0.012	-0.000613	0.000049	-0.0000815	0.0000065	-0.033	0.087	-0.0005	0.0091	-0.0052	0	0.0004	0.0014	0.001	0.015	0.0019	0.0013	0.0025	0.0062	0.0007	0.0016	-0.0000816	0.0000076	106	44	400	120	0.159	0.045
BMB5844	Zircon_Sample-194.FIN2	Fe-rich	700000		0.024	0.045	-0.15	0.52	1.53	0.47	0.27	0.66	112	10	3.32	0.63	3.15	0.3	1.5	2.6	2	1.2	0.209	0.025	1.4	0.65	-0.006	0.0025	0.0027	0.0024	0.0006	0.0053	0.022	0.016	-0.00073	0.0003	-0.000096	0.000039	-0.077	0.069	0.0008	0.0019	0.013	0	-0.00028	0.00011	0.006	0.024	-0.000041	0.000017	-0.00065	0.00027	0.005	0.011	-0.000119	0.000048	1.32	0.81	160	130	0.04	0.042
BMB5844	Zircon_Sample-195.FIN2	Fe-rich	700000		5.8	8	95	82	116	12	340	500	65	23	1	16	203	75	36	13	27.3	6.8	27	14	123	38	0.9	1.2	0.4	1.2	0.39	0.89	5	8.7	-0.08	0.13	-0.011	0.016	-1	2	0.05	0.45	-2.2	3	0.6	1.1	-1.1	2.1	0.5	1	1.7	2.5	-0.004	0.016	1.4	2.2	35	15	190	200	0.51	0.72
BMB5844	Zircon_Sample-202.FIN2	Fe-rich	700000		0.034	0.021	2.8	1.3	13.7	5.4	1.74	0.48	167	12	4.7	1	8.8	5.4	0.41	0.32	3	1.4	2.4	1.2	11.7	7.7	-0.001	0.01	-0.004	0.0029	-0.0007	0.0021	0.026	0.026	0.013	0.016	-0.000083	0.000022	0.08	0.13	-0.0054	0.0015	-0.0154	0	0.0044	0.0034	-0.006	0.014	-0.0000374	0.0000097	0.0022	0.0057	0.0019	0.0024	-0.000285	0.000075	3.2	1.4	10	180	0.033	0.03
BMB5844	Zircon_Sample-203.FIN2	Fe-rich	700000		0.11	0.11	10.4	3.1	27.3	7.8	3.63	0.82	18.2	3	1.68	0.47	58.9	8	2.5	3.1	13.3	2.5	8.37	0.63	33	13	0.018	0.045	0.07	0.048	0.0057	0.0067	0.074	0.063	0.008	0.011	0.0009	0.002	-0.083	0.06	0.004	0.01	0.035	0	0.004	0.0037	-0.005	0.02	0.0027	0.0039	0.012	0.011	0.0027	0.0035	0.022	0.023	13.8	3.1	200	230	0.052	0.045
BMB5844	Zircon_Sample-204.FIN2	Fe-rich	700000		0.002	0.074	11.2	1.6	30.6	4.8	2.6	1.1	13.8	6.7	1.84	0.36	36.9	8.3	2.3	2.1	15.1	5.5	7.6	1.7	48	5.7	0.035	0.024	0.051	0.023	0.0022	0.0073	0.015	0.048	0.024	0.039	0.0102	0.0088	0.05	0.11	0.011	0.015	0.013	0	0.0056	0.0057	0	0.029	0.0028	0.0036	0.025	0.025	0.001	0.0023	0.025	0.032	16.8	3.6	80	120	0.079	0.029
BMB5844	Zircon_Sample-205.FIN2	Fe-rich	700000		-0.025	0.064	8.8	5.5	27	10	3.2	2	15	6.1	2.05	0.19	57	29	1.32	0.51	10.8	1.3	6.8	1.3	54	12	0.085	0.036	0.097	0.04	0.0081	0.0058	0.021	0.03	0.019	0.018	0.0008	0.0019	0.047	0.085	0.008	0.011	0.018	0	0.0004	0.0017	0.025	0.046	0.0015	0.003	0.011	0.015	0.0075	0.0078	0.014	0.013	16.4	4.4	119	54	0.074	0.047
BMB5844	Zircon_Sample-206.FIN2	Fe-rich	700000		-4.4	9.8	-9	28	40	17	440	530	45	18	-28	48	67	23	13	7.3	53	23	15.9	7.1	84	53	-0.4	1.4	-0.34	0.92	0.19	0.31	-1.1	2.2	-0.11	0.13	0.26	0.54	5.1	8.4	-0.6	1.1	-0.3	4	0.5	1	3	5.1	0.7	1.4	0.9	1.8	-0.008	0.014	0.8	1.6	30.4	6.9	30	200	2.4	2.8
BMB5844	Zircon_Sample-207.FIN2	Fe-rich	700000		0.052	0.067	27.9	9.8	89.5	7	19	26	33	23	0.6	2.1	97	24	1.15	0.26	31.6	4.7	16.6	4.8	66.8	4.1	0.0586	0.0066	0.04	0.024	-0.018	0.047	0.1	0.15	0.01	0.022	-0.00056	0.00088	0.18	0.36	0.006	0.018	-0.014	0	0.0007	0.0049	-0.1	0.24	0.0013	0.0022	0.09	0.15	0.041	0.082	0.021	0.037	51.3	7.6	230	320	0.167	0.031
BMB5844	Zircon_Sample-208.FIN2	Fe-rich	700000		0.02	0.15	0.6	2.5	1.35	0.8	5.1	6.2	111	15	5.41	0.77	35	14	5	1.3	1.7	1.3	1.09	0.52	3	1.6	-0.002	0.014	0.008	0.021	0.0016	0.009	0.065	0.037	0.08	0.12	-0.0002	0.00016	-0.02	0.26	-0.0013	0.0062	0.07	0	0.0009	0.0031	-0.014	0.021	0.0006	0.0015	0.0022	0.0079	0.0081	0.008	0.029	0.035	0.89	0.74	150	180	0.3	0.15
BMB5844	Zircon_Sample-215.FIN2	Fe-rich	700000		0.105	0.079	7.6	2.9	23	8.1	1.93	0.77	131	15	7.72	0.76	64	36	0.89	0.47	13.8	1.6	7.4	2.1	42.4	7.6	0.04	0.055	-0.004	0.023	0.0044	0.0073	0.03	0.11	-0.00205	0.00053	0.0027	0.0057	-0.05	0.12	0.001	0.011	0.019	0	0.0022	0.004	-0.01	0.033	0.0017	0.0035	0.035	0.038	0.0071	0.0059	-0.00061	0.00016	10.7	1.7	134	99	0.039	0.022
BMB5844	Zircon_Sample-216.FIN2	Fe-rich	700000		0.017	0.02	4.9	2.2	12.3	6.4	1.27	0.61	138	11	4.37	0.11	24	13	3.7	2.9	10.7	1.6	2.42	0.69	15.8	5	0.039	0.02	0.041	0.02	0.0002	0.0039	0.04	0.036	0.006	0.014	0.0034	0.0041	0.08	0.11	0.005	0.0032	0.018	0	0.0044	0.0029	0.014	0.016	0.0017	0.002	0.029	0.028	0.0015	0.0019	0.0056	0.0067	7.9	3.5	350	280	0.058	0.05
BMB5844	Zircon_Sample-217.FIN2	Fe-rich	700000		0.1	0.15	7.5	4.5	15.2	1.3	6.6	2.6	129	12	4.13	0.53	27.7	3.5	3.7	2.1	9.5	1.8	5.3	1.1	25.8	4.3	0.015	0.063	0.037	0.016	-0.0023	0.0083	-0.008	0.094	0.025	0.038	0.015	0.021	-0.14	0.41	-0.017	0.024	-0.025	0	0.032	0.018	0.02	0.11	0.0025	0.0053	0.075	0.068	0.008	0.016	0.17	0.17	9.92	0.8	170	210	0.077	0.083
BMB5844	Zircon_Sample-218.FIN2	Fe-rich	700000		0.038	0.011	5.8	5.6	25	19	2.2	1.6	25	4.3	0.86	0.35	37	28	0.512	0.097	4.9	3.1	7.3	4.8	16	12	0.0019	0.0071	0.0139	0.0058	0.00272	0.00079	0.014	0.018	0.013	0.015	0.0026	0.0054	0.03	0.1	0.0002	0.0028	-0.002	0	0.0017	0.0019	0.0072	0.0037	-0.0000331	0.0000045	0.0041	0.0092	0.0008	0.0018	0.017	0.033	7.3	4.5	230	120	0.049	0.032
BMB5844	Zircon_Sample-219.FIN2	Fe-rich	700000		0.05	0.13	4.4	2.4	13.8	2.7	4.4	4	154	15	3.68	0.69	32.2	3.6	5.6	2.5	6.6	2.5	4.8	1.3	23.2	3.6	-0.001	0.023	0.036	0.022	0.008	0.019	0.09	0.13	0.034	0.073	-0.000327	0.000081	0.03	0.14	0.029	0.018	0.06	0	0.026	0.015	0.05	0.11	0.0057	0.0072	0.043	0.037	0.007	0.01	0.12	0.18	7.8	1.4	-10	88	0.084	0.07
BMB5844	Zircon_Sample-220.FIN2	Fe-rich	700000		-0.05	0.13	89	32	175	35	1350	130	7100	1500	66	5.4	983	73	10.1	1.9	215	47	92	10	15.6	1.3	0.11	0.14	0.39	0.36	0.038	0.033	0.17	0.17	0.072	0.016	0.009	0.018	0.19	0.49	0.003	0.027	0.011	0	0.0067	0.0069	0.061	0.068	0.009	0.012	0.027	0.037	0.012	0.011	0.037	0.031	7.9	1.4	-25	91	3	1.1
BMB5844	Zircon_Sample-221.FIN2	Fe-rich	700000		-0.14	0.12	8.3	5.8	16.07	0.73	4.8	2.5	213	86	6.8	5.6	29.6	4.3	5.1	2.8	7.6	1.3	4.66	0.75	23.2	3.4	0.035	0.035	-0.009	0.023	0.02	0.015	0.021	0.088	0.059	0.059	0.009	0.011	0.28	0.21	0.014	0.017	-0.026	0	0.009	0.011	-0.01	0.032	0.0051	0.0065	-0.00255	0.00037	0.0064	0.0082	0.06	0.065	8.6	1.3	182	69	0.13	0.12
BMB5844	Zircon_Sample-228.FIN2	Fe-rich	700000		0.018	0.059	39.1	5.2	90	13	7.82	0.64	119	17	4.65	0.45	122	23	3.63	0.75	40	14	16.5	1.1	79.4	7.4	0	0.022	0.013	0.018	0.0054	0.0069	-0.005	0.026	0.013	0.017	0.001	0.0022	0.04	0.14	0.0059	0.0068	0.023	0	0.0031	0.0067	-0.009	0.024	0.0007	0.0015	0.014	0.022	-0.00009	0.000039	0.0028	0.006	47	13	330	200	0.97	0.35
BMB5844	Zircon_Sample-229.FIN2	Fe-rich	700000		0.16	0.25	4.2	1.5	12.9	4.9	5.1	7.4	90	16	6.16	0.66	24	19	2.3	1.7	7.9	2.8	2.3	1.1	11.7	4.8	0.011	0.042	-0.007	0.017	0.007	0.016	0.017	0.035	0.04	0.051	-0.00018	0.00018	-0.036	0.044	0.0047	0.0072	0.011	0	0.01	0.02	0.025	0.053	0.0007	0.0017	0.07	0.14	0.006	0.012	0.033	0.038	6.9	2.8	-10	170	0.059	0.073
BMB5844	Zircon_Sample-230.FIN2	Fe-rich	700000		0.049	0.021	6.9	5.3	16.4	4.8	5.38	0.62	48.1	1.9	8.86	0.51	42.6	0.86	0.98	0.34	15.6	4.8	2.8	1.1	28	13	0.023	0.025	0.019	0.012	0.0022	0.0026	0.003	0.02	0.014	0.012	0.0016	0.0019	0.002	0.05	0.0011	0.0036	0.011	0	0.0005	0.0013	0.014	0.019	-0.0000315	0.0000015	0.0027	0.0063	0.0022	0.0028	0.0025	0.0054	19.7	5.7	-30	280	0.138	0.04
BMB5844	Zircon_Sample-231.FIN2	Fe-rich	700000		0.007	0.025	9.5	2.9	23.1	9.8	2.55	0.93	86	4.5	3.35	0.15	21.9	4.5	1.2	1.1	11.9	6.8	4.5	1.1	24	11	0	0.021	0.0077	0.003	-0.0028	0.0027	-0.008	0.018	0.009	0.014	0.0049	0.0098	0.034	0.029	0.0001	0.0063	0.0001	0	0.001	0.0024	-0.0104	0.0096	0.0027	0.0044	0.0069	0.0097	-0.000074	0.000031	0.0019	0.0044	9.4	3.2	210	180	0.047	0.026
BMB5844	Zircon_Sample-232.FIN2	Fe-rich	700000		0.052	0.028	52.9	9.7	94	8.2	8.64	0.47	48	5.9	2.123	0.027	169	17	0.652	0.074	27.8	1.7	23.1	1.4	63.1	6.1	0.008	0.011	0.005	0.0045	-0.00102	0.00095	0.027	0.014	0.011	0.015	0.0009	0.002	-0.005	0.068	0.0017	0.007	0.002	0	-0.000203	0.000012	0.023	0.038	-0.0000339	0.000002	0.0027	0.0064	-0.0000611	0.0000036	0.013	0.018	33.9	3.8	80	100	0.074	0.018
BMB5844	Zircon_Sample-233.FIN2	Fe-rich	700000		2.9	5.7	68	50	81.2	6.8	110	180	189	44	8.7	5.4	132	33	5.5	5.6	31	13	19.7	6.9	67	12	0.53	0.84	0.45	0.77	0.08	0.15	-0.14	0.34	-0.024	0.045	-0.0021	0.004	-2.2	4.6	-0.11	0.24	-0.6	1	0.09	0.18	0.7	1.4	0.09	0.17	0.43	0.83	0.11	0.21	0.42	0.8	36	9.3	330	410	2.2	2.4
BMB5844	Zircon_Sample-234.FIN2	Fe-rich	700000		14	22	380	580	65	45	800	1100	6	30	-110	160	82	20	-2	24	43	34	9	19	59	26	-0.3	0.41	-0.8	1.1	0.27	0.37	3.5	8.3	1.1	2.5	-0.017	0.022	-2	16	-0.32	0.42	8	15	1.1	2.1	2.9	4.8	-0.01	0.013	1	2.2	0.26	0.54	2.3	4.7	19.4	9.6	-40	240	0.8	1.1
BMB5844	Zircon_Sample-241.FIN2	Fe-rich	700000		0.042	0.017	9.2	3.5	23.5	8	2.16	0.45	219	14	3.9	0.49	31	8.1	35.3	9.7	14	1.2	4.5	2.5	27.4	9.8	3.6	1.1	2.16	0.53	0.14	0.02	0.53	0.19	0.051	0.015	0.019	0.013	0.16	0.15	0.0103	0.0034	0.104	0	0.022	0.013	0.066	0.062	0.0077	0.0061	0.029	0.014	0.0092	0.0046	0.008	0.02	19.5	6.2	-50	210	0.055	0.023
BMB5844	Zircon_Sample-242.FIN2	Fe-rich	700000		0.27	0.18	28.4	4.4	89	21	60	73	85	50	62	80	100	60	2.9	4.6	96	72	18	15	63	55	0.006	0.021	0.004	0.012	0.0065	0.0053	-0.006	0.043	0.02	0.025	0.0015	0.0034	-0.13	0.24	0.002	0.0058	0.09	0	0.0072	0.0039	-0.011	0.02	0.0057	0.0051	-0.00124	0.00086	0.008	0.014	0.029	0.049	87	51	19	60	0.074	0.09
BMB5844	Zircon_Sample-243.FIN2	Fe-rich	700000		0.51	0.83	4.9	6.6	4.8	7.7	11	18	25	17	2	1.2	26	27	13	11	1.6	2.9	2.4	1.8	5.3	9.1	-0.018	0.086	0.0211	0.0092	0.024	0.032	-0.07	0.12	0.012	0.022	0.013	0.019	-0.21	0.51	-0.006	0.0053	0.045	0	0.002	0.0059	0	0.024	0.0005	0.0013	0.017	0.032	0.0008	0.0021	0.031	0.058	4.3	7.6	100	310	0.46	0.39
BMB5844	Zircon_Sample-244.FIN2	Fe-rich	700000		0.052	0.078	23	16	49	26	5	2.2	173	53	14.08	0.68	70	24	1.6	2.3	26.4	9.5	10.5	2.6	66	20	-0.004	0.0027	0.01	0.019	0.0076	0.0098	-0.004	0.025	0.013	0.016	0.0024	0.0048	-0.021	0.035	0.0002	0.0029	0.022	0	0.0005	0.0015	0.007	0.032	-0.000046	0.000028	0.0023	0.0061	0.0006	0.0015	0.012	0.014	34	17	140	160	0.14	0.081
BMB5844	Zircon_Sample-245.FIN2	Fe-rich	700000		0.03	0.016	13.5	7	39	12	4.1	2	19.9	3.9	1.78	0.51	54	15	0.56	0.15	57	3.1	7.4	2.5	105	11	0.007	0.012	0.016	0.015	-0.0008	0.0039	0.009	0.015	0.009	0.013	0.0015	0.0032	0.048	0.029	0.0046	0.0047	0.001	0	0.0033	0.0044	-0.004	0.019	0.0019	0.0026	0.021	0.025	0.0036	0.0027	-0.0031	0.001	61	13	220	170	0.0728	0.0037
BMB5844	Zircon_Sample-246.FIN2	Fe-rich	700000		1.2	2.4	29.7	9.4	48	13	49	87	133	24	1.6	3	74	75	2.8	2.4	18	9.8	13.4	2.2	57	15	0.002	0.056	0.14	0.29	0.006	0.018	-0.18	0.42	-0.005	0.035	0.07	0.14	0.47	0.94	-0.06	0.14	0.6	1	0.05	0.1	-0.37	0.7	-0.0007	0.0013	0.024	0.078	0.06	0.12	0.21	0.37	12.9	5.5	410	180	0.6	1.1
BMB5844	Zircon_Sample-247.FIN2	Fe-rich	700000		1	1.4	-180	420	22	14	1000	1600	81	43	-15	29	140	120	2300	1400	34	63	-1	11	28	18	-0.4	2.3	0.7	1.1	1.4	3.3	-3.5	4.6	-0.16	0.29	-0.013	0.021	0.4	3	-0.02	0.68	3.3	5	0.28	0.66	2.1	2.6	-0.008	0.014	-0.11	0.21	-0.016	0.024	4.3	9	18	22	280	160	4.1	5.3
BMB5844	Zircon_Sample-254.FIN2	Fe-rich	700000		0.04	0.18	10.6	7	19.7	2.3	1.1	1.5	129.2	9.1	2.4	1.8	25.4	2.1	3.3	1.2	11.7	4.6	5.4	3	24.3	9.6	0.03	0.044	-0.004	0.053	0.014	0.011	0.04	0.15	0.11	0.064	0.0023	0.0053	0.3	0.39	0.015	0.031	0.07	0	0.0022	0.0069	-0.042	0.015	0.003	0.0064	0.071	0.069	0.015	0.03	0.04	0.07	12.3	6.5	58	65	0.021	0.034
BMB5844	Zircon_Sample-255.FIN2	Fe-rich	700000		0.018	0.0078	-1.09	0.64	0.166	0.071	0.37	0.22	96	13	1.94	0.39	1.37	0.31	0.57	0.25	1.05	0.12	0.025	0.064	0.164	0.019	0.06	0.04	0.048	0.025	0.0081	0.0041	0	0.03	0.005	0.011	0.0013	0.0027	-0.03	0.14	0.0035	0.0071	0.021	0	0.0029	0.0036	-0.008	0.01	0.0008	0.0018	0.0177	0.0077	0.0023	0.0047	0.0013	0.0086	1.31	0.77	-40	160	0.021	0.015
BMB5844	Zircon_Sample-256.FIN2	Fe-rich	700000		0.148	0.087	18.1	5.4	47.9	9.5	3.2	1.7	528	99	12.1	3.3	62	36	42	12	16	7.5	5.7	2.6	26	20	10.8	8	18	14	1.7	1.3	8	6.2	0.94	0.76	0.17	0.13	1.06	0.87	0.119	0.092	0.87	1	0.17	0.11	0.5	0.32	0.052	0.032	0.29	0.22	0.044	0.027	0.031	0.05	14	10	3100	2800	34	32
BMB5844	Zircon_Sample-257.FIN2	Fe-rich	700000		0.066	0.018	-0.5	1.1	0.47	0.81	0.7	1.1	92.8	9.2	3.21	0.14	2.1	3.9	0.3	0.13	1.7	1.7	0.28	0.42	0.62	0.89	0.0118	0.0035	0.0081	0.0075	0.0038	0.002	0.003	0.019	0.006	0.014	-0.0000587	0.0000086	0.073	0.085	0.002	0.012	-0.009	0	0.0043	0.0015	0.001	0.022	-0.0000419	0.0000062	-0.000625	0.000092	-0.000079	0.000012	0.011	0.016	0.7	1.2	182	45	0.0056	0.006
BMB5844	Zircon_Sample-258.FIN2	Fe-rich	700000		0.06	0.079	7.5	5.3	15.8	5.7	2.46	0.75	198	34	14.83	0.59	21.5	9.3	0.63	0.31	10.4	1.7	8.2	3	22.3	2.8	-0.002	0.014	-0.0028	0.0066	0.0063	0.0062	0.01	0.028	-0.00094	0.00023	0.0014	0.0028	-0.028	0.096	-0.0002	0.0044	0.001	0	0.0044	0.0055	-0.005	0.014	0.0005	0.0012	0.021	0.026	0.0006	0.0014	0.006	0.012	17.3	2.3	171	70	0.033	0.013
BMB5844	Zircon_Sample-259.FIN2	Fe-rich	700000		0	0.11	7.5	4.1	16.7	2.2	1.24	0.57	136	19	4.3	1.3	31.4	6.3	1.9	0.69	5.6	1.7	3.99	0.46	19.3	2.9	0.051	0.04	0	0.02	-0.003	0.019	-0.008	0.078	0.039	0.038	-0.000233	0.000057	-0.05	0.15	-0.012	0.029	0.07	0	0.0069	0.0071	-0.001	0.062	0.0027	0.0057	0.024	0.033	0.0077	0.0099	0.018	0.034	8.2	1.5	-10	94	0.063	0.049
BMB5844	Zircon_Sample-260.FIN2	Fe-rich	700000		0.31	0.94	10.7	4.3	13.3	3.2	0.1	1.1	146	14	4.4	1.4	31.1	4.5	6.7	2.6	7.9	1.1	4.7	1.1	24.2	3.8	2.1	3.1	3.3	4.9	0.37	0.58	1.7	2.7	0.57	0.66	0.049	0.075	0.55	0.94	0.07	0.1	0.48	1	0.11	0.15	0.17	0.19	0.047	0.053	0.13	0.18	0.022	0.024	0.24	0.34	7.99	0.64	182	82	0.084	0.029

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5845 — **CONCENTRATIONS**

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5845	Zircon_sample-007.FIN2	Fe-rich	700000		0.016	0.043	5	1.4	12.9	1.5	34.8	4.7	2102	88	1820	86	5500	1800	5.1	1.4	9.8	2.7	4.52	0.62	46.6	8.3	0.0018	0.0072	0.002	0.012	0.0056	0.0057	0.005	0.049	0.019	0.037	0.0021	0.0037	-0.02	0.17	-0.0049	0.0069	-0.008	0	0.0052	0.004	-0.006	0.028	-0.00007	0.000017	0.0038	0.009	0.0019	0.0025	0.011	0.019	2.09	0.48	170	76	0.037	0.021
BMB5845	Zircon_sample-008.FIN2	Fe-rich	700000		0.49	0.69	10.9	9.4	23.5	6.3	150	170	6200	1100	2570	320	11400	6500	14.8	8.3	16.6	6.2	8.3	1.5	70	21	-0.09	0.2	-0.11	0.29	0.011	0.013	-0.08	0.27	2.8	5.6	0.006	0.012	6	12	0.32	0.6	-0.5	1	0.25	0.5	-0.6	1.4	0.14	0.28	0.7	1.4	0.16	0.32	-0.6	1.2	4.9	2.6	120	160	3.6	6.2
BMB5845	Zircon_sample-009.FIN2	Fe-rich	700000		0.033	0.022	9.3	8.7	31	15	55	16	4660	640	2900	420	8400	1700	5.6	1.4	22.9	7.2	99	22	84	25	0.0115	0.0099	0.0208	0.0079	0.0051	0.0038	0.032	0.093	1	1.9	0.0034	0.0042	-0.006	0.065	0.0049	0.0089	0.025	0	-0.000187	0.000063	0.0171	0.008	0.0006	0.0014	0.0062	0.008	0.0007	0.0015	-0.011	0.01	4.2	2.1	-40	190	1.4	0.33
BMB5845	Zircon_sample-010.FIN2	Fe-rich	700000		0.0042	0.0074	4.37	0.23	14.6	1.3	34.7	5.6	5660	630	3020	410	15900	5300	17.4	2.2	18.4	4.8	42.6	2.8	65	15	-0.008	0.02	0.01	0.015	0.012	0.018	-0.021	0.045	0.015	0.023	0.009	0.0094	0.02	0.14	0.004	0.014	-0.0189	0	0.0056	0.0046	0.008	0.027	0.0008	0.0018	0.032	0.053	-0.00003	0.000017	-0.016	0.0089	2.93	0.47	70	77	0.69	0.19
BMB5845	Zircon_sample-011.FIN2	Fe-rich	700000		0.038	0.032	3.8	1.5	13.1	1	32	2.3	3320	130	2380	480	9680	520	12.6	4.5	14.2	3.4	6.3	3	86	28	0.004	0.014	0.0028	0.0031	0.0002	0.0014	-0.016	0.03	0.01	0.018	0.000154	0.000057	-0.01	0.11	0.007	0.015	-0.013	0	0.0071	0.0085	0.002	0.033	-0.000071	0.000026	0.015	0.019	0.0006	0.0013	-0.005	0.018	3.2	1	240	150	0.114	0.058
BMB5845	Zircon_sample-012.FIN2	Fe-rich	700000		0.012	0.034	3.92	0.65	12.5	1.6	33.7	6.5	3480	190	1980	540	4010	710	4.6	1.4	17.8	1.8	60	28	75	16	0.025	0.014	0.0185	0.0067	0.0035	0.0035	0.007	0.022	0.004	0.016	0.0072	0.0069	0.11	0.11	0.0021	0.0057	0.005	0	-0.000185	0.000077	0.012	0.023	-0.000048	0.00002	0.0025	0.0061	0.0007	0.0014	-0.0019	0.0062	2.74	0.32	80	120	1.45	0.48
BMB5845	Zircon_sample-013.FIN2	Fe-rich	700000		0.009	0.013	7.8	3	28.9	4	61.8	9.4	5270	540	3430	230	12950	990	13.1	2.7	23.9	4.2	5.18	0.36	97	10	0.007	0.012	0.0049	0.0076	0.0042	0.0047	-0.012	0.017	0.017	0.027	0.0032	0.004	-0.039	0.024	0.0019	0.0087	-0.003	0	0.0041	0.0039	-0.002	0.0092	0.0016	0.0023	0.011	0.023	0.0016	0.0021	0.007	0.041	4.3	0.65	590	240	0.47	0.28
BMB5845	Zircon_sample-020.FIN2	Fe-rich	700000		-0.016	0.059	7.6	6	15.7	3	27.3	2.8	1725	35	827	99	4320	760	14.6	4.5	6.9	2.4	4.2	1.1	128	20	0.019	0.039	0.003	0.012	0.004	0.012	0.043	0.068	0.035	0.037	0.0065	0.0086	-0.07	0.14	0.005	0.026	0.039	0	0.0113	0.0086	0.001	0.068	0.001	0.0024	0.013	0.027	0.003	0.0036	0.006	0.021	1.152	0.095	-50	170	0.13	0.1
BMB5845	Zircon_sample-021.FIN2	Fe-rich	700000		-0.03	0.15	9.7	3.3	9.9	4.5	15	3.6	1318	56	596	38	2060	460	12.5	4.3	4.3	1.1	1.08	0.33	33.6	6.4	0.036	0.051	0.012	0.045	0.013	0.03	0.061	0.076	0.059	0.047	0.034	0.019	-0.04	0.24	0.004	0.032	0.035	0	0.003	0.0086	-0.059	0.055	0.012	0.017	0.026	0.057	0.0031	0.0064	0.02	0.11	0.56	0.19	36	48	0.075	0.016
BMB5845	Zircon_sample-022.FIN2	Fe-rich	700000		0.001	0.061	1.8	4	5.6	1	12.96	0.97	1262	94	660	70	2180	240	15	3.4	2.11	0.5	1.07	0.22	40.3	5.3	0.016	0.057	-0.002	0.011	0.01	0.02	0.072	0.06	0.19	0.19	0.0065	0.0079	0.06	0.25	0.004	0.035	0.03	0	0.009	0.011	0.03	0.087	0.0023	0.005	-0.0016	0.00055	-0.000088	0.000031	0.005	0.024	0.47	0.13	42	56	0.04	0.038
BMB5845	Zircon_sample-023.FIN2	Fe-rich	700000		-0.051	0.074	8.1	6	7.6	1.4	11.1	1.1	1283	68	586	23	1957	58	27	17	2.01	0.77	0.77	0.17	40.2	3.9	0.052	0.035	0.044	0.039	0.008	0.016	0.1	0.13	0.003	0.034	0.028	0.049	-0.21	0.15	0.004	0.029	-0.059	0	0.0074	0.0074	-0.028	0.036	0.0072	0.0091	0.048	0.049	0.0135	0.0072	-0.025	0.029	0.407	0.062	-120	170	0.025	0.033
BMB5845	Zircon_sample-024.FIN2	Fe-rich	700000		-0.004	0.099	-0.3	3.2	4.38	0.69	9.7	0.7	1290	130	595	28	2270	260	15.8	3.6	2.14	0.93	0.69	0.22	41.9	5.7	-0.021	0.021	-0.002	0.019	0.004	0.022	0.002	0.067	0.068	0.041	0.004	0.0082	0.23	0.24	0.017	0.05	0.068	0	0.014	0.019	-0.016	0.049	0.008	0.016	0.025	0.053	0.013	0.017	0.028	0.043	0.32	0.13	-82	89	0.024	0.032
BMB5845	Zircon_sample-025.FIN2	Fe-rich	700000		0.051	0.067	17.3	5.2	30	12	20.9	5.9	1780	220	564	22	1820	210	12.4	2.9	14.4	7	1.54	0.67	90	24	0.037	0.077	-0.006	0.041	0.001	0.016	-0.041	0.062	0.054	0.099	0.0044	0.0091	-0.07	0.3	-0.002	0.036	0.031	0	0.009	0.015	0.015	0.094	0.016	0.016	0.018	0.039	0.0029	0.0061	0.012	0.066	1.39	0.46	40	130	0.024	0.034
BMB5845	Zircon_sample-026.FIN2	Fe-rich	700000		0	0.079	2.2	4.2	3.02	0.19	8.1	1.8	1261	68	636	27	2640	200	23.8	2.9	1.78	0.72	0.64	0.13	51.2	7.3	0.027	0.053	-0.011	0.014	0.015	0.021	-0.024	0.059	0.036	0.043	0.015	0.012	-0.03	0.31	-0.004	0.022	0.04	0	0.0024	0.005	0.011	0.086	0.004	0.0053	0.029	0.061	0.015	0.015	-0.001	0.032	0.361	0.083	-11	90	0.021	0.033
BMB5845	Zircon_sample-033.FIN2	Fe-rich	700000		0.47	0.84	46	17	79	32	120	59	4200	890	3690	450	12100	3000	2500	3400	9.9	8.2	6.9	6.4	700	270	0.28	0.1	0.42	0.35	-0.01	0.18	0.79	0.81	-0.04	0.14	0.004	0.012	0.7	1.3	-0.013	0.029	-0.47	1	-0.001	0.021	-0.26	0.64	0.0037	0.0068	0.29	0.55	0.0069	0.0091	0.29	0.5	2.3	1.7	900	580	2.7	2.8
BMB5845	Zircon_sample-034.FIN2	Fe-rich	700000		0.12	0.21	7.6	4.3	15.3	3.8	28.9	2	4510	290	2380	300	7650	880	18	17	11.5	4.1	4.72	0.98	1260	200	0.015	0.027	0.019	0.018	0.019	0.031	0.021	0.041	0.034	0.032	0.01	0.012	0.06	0.21	0.008	0.03	-0.021	0	0.0011	0.0043	-0.046	0.057	-0.000099	0.000093	0.019	0.04	-0.000057	0.000054	0.017	0.034	1.33	0.61	220	250	0.35	0.35
BMB5845	Zircon_sample-035.FIN2	Fe-rich	700000		0.067	0.062	48	28	26.1	5.7	31	4.8	3460	500	1740	490	5600	1900	18	17	12.3	1.4	3.8	0.99	2580	340	-0.003	0.032	0.009	0.01	0.0043	0.0069	0.05	0.11	0.056	0.075	0.0016	0.0039	0.06	0.2	0.021	0.014	-0.036	0	0.0023	0.004	-0.021	0.033	-0.000107	0.000031	0.007	0.015	0.0037	0.0049	0.016	0.019	1.395	0.068	260	230	0.19	0.11
BMB5845	Zircon_sample-036.FIN2	Fe-rich	700000		0.019	0.031	5	2.8	15.5	5.8	26.5	4	4010	190	2870	200	7320	800	9.5	1.5	12.3	1.3	3.25	0.62	6350	550	-0.005	0.012	0.006	0.013	0.0013	0.0038	0.046	0.042	0.0042	0.0095	0.0019	0.0042	-0.01	0.023	0.0028	0.0089	-0.009	0	-0.0004	0.00014	-0.013	0.019	0.0008	0.0017	0.014	0.022	0.0006	0.0013	0.000015	0.0000048	1.65	0.24	-16	56	0.131	0.018
BMB5845	Zircon_sample-037.FIN2	Fe-rich	700000		-0.013	0.015	12	11	14.6	2.8	22.9	2.6	4190	610	2230	430	9000	1800	13.09	0.94	18.8	3.2	2.2	0.1	-44000	29000	-0.003	0.019	0.004	0.016	0.005	0.015	0.01	0.045	-0.0043	0.0014	0.0041	0.0047	-0.038	0.09	-0.0004	0.0045	-0.016	0	0.0026	0.0063	0.035	0.049	0.0017	0.0036	-0.00061	0.0002	0.0029	0.0033	0.008	0.015	1.45	0.25	398	84	0.102	0.033
BMB5845	Zircon_sample-038.FIN2	Fe-rich	700000		3.9	5.7	-20	110	52.6	7.2	210	170	5100	1200	1980	930	48000	61000	21.2	7.9	-1	35	22	21	-6700	5700	-0.04	0.86	0.09	0.5	0.53	0.98	1.3	2.5	1.1	2.4	-0.015	0.022	-1.1	2.1	-0.01	0.18	0	2	0.18	0.38	3.5	5.6	0	0.013	0.24	0.48	0.36	0.44	3.5	5.7	5.2	3.3	220	160	17	25
BMB5845	Zircon_sample-039.FIN2	Fe-rich	700000		0.56	0.92	14	13	37	13	96	48	5450	490	2620	470	11080	550	16.4	6.8	15.1	4.5	4	1	-2700	1000	-0.05	0.15	-0.018	0.062	0.06	0.12	0.27	0.53	1	2	0.047	0.092	-0.4	0.83	-0.06	0.14	-0.16	0	0.13	0.25	-0.07	0.11	0.03	0.058	0.007	0.02	0.0015	0.0037	0.037	0.068	1.53	0.44	160	130	1.4	1.8
BMB5845	Zircon_sample-046.FIN2	Fe-rich	700000		0.15	0.14	4.2	3.4	4.36	0.9	9.5	2.8	1265	48	584	42	1880	140	16.1	1.6	1.8	1.1	1.07	0.29	-230	59	0.021	0.069	-0.015	0.024	-0.003	0.015	-0.014	0.06	0.06	0.14	0.009	0.013	-0.03	0.16	0.025	0.028	-0.009	0	0.003	0.011	0.052	0.077	0.0112	0.0095	0.03	0.04	-0.000134	0.000026	-0.00168	0.00036	0.441	0.076	100	250	0.019	0.036
BMB5845	Zircon_Sample-047.FIN2	Fe-rich	700000		0.016	0.066	15	16	7.5	3.9	10.1	3.8	1320	190	555	16	1790	150	15.7	3.3	3.3	1.1	0.68	0.25	-208	24	0.009	0.051	-0.0253	0.0063	0.023	0.017	0.003	0.083	0.021	0.042	0.016	0.018	0.09	0.15	-0.005	0.03	0.11	0	0.0033	0.0067	-0.008	0.058	0.0081	0.0071	0.024	0.031	0.0028	0.0059	0.07	0.11	0.51	0.18	30	270	0.061	0.028
BMB5845	Zircon_Sample-048.FIN2	Fe-rich	700000		0.03	0.13	0.1	5.3	3.19	0.23	5.87	0.88	1374	83	606	40	2157	90	18.9	2.5	1.4	1.8	0.59	0.16	-185	21	0.025	0.078	0.004	0.022	0.0101	0.0086	0.006	0.092	0.087	0.095	0.004	0.011	0.02	0.11	0.006	0.024	0.086	0	0.012	0.018	-0.023	0.055	0.007	0.014	0.041	0.035	0.0071	0.0089	0.009	0.027	0.39	0.25	0	110	0.001	0.019
BMB5845	Zircon_Sample-049.FIN2	Fe-rich	700000		-0.03	0.11	-1	2	4.36	0.42	8.7	1.8	1187	41	575	40	1790	180	13.1	1.4	2.25	0.6	0.52	0.15	-198	31	-0.002	0.047	0.018	0.032	0.0015	0.0094	0.08	0.12	0.062	0.077	0.012	0.027	-0.16	0.19	0.009	0.025	0.053	0	0.009	0.011	-0.052	0.051	0.01	0.013	0.006	0.016	0.016	0.014	0.03	0.03	0.51	0.2	0	120	0.051	0.032
BMB5845	Zircon_Sample-050.FIN2	Fe-rich	700000		-0.006	0.039	26.7	8.2	17.4	5.3	14.8	3.4	1580	220	577	20	1790	190	12.1	2.1	11	5.8	1.044	0.037	-280	100	0.064	0.075	-0.006	0.044	0.005	0.013	0.014	0.04	0.005	0.038	0.01	0.014	-0.22	0.17	-0.005	0.022	-0.013	0	0.0043	0.0075	0.008	0.03	0.0057	0.007	0.018	0.038	0.005	0.01	0.074	0.087	0.98	0.19	-112	38	0.096	0.057
BMB5845	Zircon_Sample-051.FIN2	Fe-rich	700000		0.06	0.13	0.6	6	3.18	0.53	6.3	1	1224	58	637	16	2118	82	17.1	2.8	0.7	0.7	0.83	0.38	-203	17	-0.001	0.044	0.0108	0.0087	0.031	0.029	0.049	0.036	0.018	0.04	0.008	0.011	-0.14	0.23	0.001	0.026	0.031	0	0.022	0.017	0.07	0.11	0.0044	0.0091	0.035	0.042	0.0031	0.0065	-0.0083	0.002	0.313	0.056	-190	200	0.019	0.032
BMB5845	Zircon_Sample-052.FIN2	Fe-rich	700000		0.09	0.079	1.9	3.8	4.16	0.39	7.9	1.4	1197	83	579	31	1830	150	13.8	4.3	1.39	0.64	0.84	0.23	-223	24	-0.005	0.037	0.016	0.037	0.002	0.016	0.038	0.078	-0.0129	0.002	-0.00126	0.00019	0	0.16	0.017	0.027	-0.005	0	0.0015	0.007	0.015	0.078	-0.000184	0.000028	0.067	0.053	0.0041	0.0084	0.086	0.087	0.54	0.18	50	150	0.039	0.044
BMB5845	Zircon_Sample-059.FIN2	Fe-rich	700000		0.1	0.097	19	8.2	32.2	5.3	51	11	4050	300	2846	91	7500	1200	11.7	4.2	21.5	6.5	5.1	1.1	-12100	4600	-0.002	0.017	0.014	0.012	0	0.012	0.046	0.051	0.018	0.036	0.0051	0.0064	0.07	0.17	-0.006	0.014	-0.015	0	0.0098	0.0084	0	0.031	0.0011	0.0024	0.004	0.01	0.002	0.0042	0.005	0.018	2.83	0.71	2440	570	0.39	0.14
BMB5845	Zircon_Sample-060.FIN2	Fe-rich	700000		0.084	0.053	16.6	5.9	23.5	4.3	30.8	4	3440	620	1600	340	4300	1000	46	29	9.5	1.1	2.47	0.57	17700	5700	-0.0084	0.009	0.0095	0.0059	-0.0023	0.0035	0.053	0.087	0.01	0.018	0.0043	0.0057	-0.059	0.068	0.0009	0.0099	0	0	0.0041	0.0047	-0.004	0.019	0.0017	0.0034	0.005	0.012	0.0014	0.0028	0.009	0.013	1.21	0.21	3000	1900	0.079	0.081
BMB5845	Zircon_Sample-061.FIN2	Fe-rich	700000		-0.007	0.02	3.53	0.1	10.8	3.2	19.4	6.1	2979	42	2220	200	5450	920	11.1	2.9	10	1.7	2.31	0.82	3680	740	-0.0009	0.0026	0.0056	0.0065	0.0022	0.0024	0.03	0.027	0.0014	0.0097	0.0025	0.0058	0.005	0.092	0.0094	0.0076	0.01	0	0.0009	0.0032	-0.013	0.023	0.0017	0.0035	0.0033	0.0074	-0.000029	0.000012	0.0014	0.0067	0.93	0.19	-40	100	0.044	0.024
BMB5845	Zircon_Sample-062.FIN2	Fe-rich	700000		0.027	0.032	4.01	0.74	12.6	2.2	24.7	3.9	2400	1000	1820	880	3800	2200	10.9	3.9	11.9	3.8	7.6	1.1	1850	480	0.009	0.0077	0.0116	0.006	0.0017	0.004	-0.013	0.014	0.015	0.018	-0.00047	0.00021	-0.036	0.063	0.003	0.016	-0.013	0	0.0026	0.0031	-0.007	0.015	0.0018	0.0036	0.007	0.016	-0.000032	0.000015	-0.00158	0.00075	1.89	0.49	-130	410	0.216	0.086
BMB5845	Zircon_Sample-063.FIN2	Fe-rich	700000		0.043	0.04	151	67	40	22	30.3	4	3780	320	2050	740	5300	2000	12	3.7	26	9.4	54	16	2630	550	0.035	0.033	0.012	0.029	0.005	0.01	0.002	0.062	0.077	0.023	0.013	0.02	-0.05	0.23	0.008	0.014	0.017	0	0.0029	0.0047	0.004	0.038	-0.000089	0.000047	0.024	0.051	0.0039	0.0079	-0.0021	0.0011	3.15	0.49	154	73	0.81	0.13
BMB5845	Zircon_Sample-064.FIN2	Fe-rich	700000		0.06	0.06	61	59	28	10	29.7	3.1	3520	130	2230	210	2730	190	410	260	16.7	7.4	44.3	4.6	1180	170	0.016	0.02	0.018	0.01	0.0012	0.0035	-0.018	0.013	0.002	0.013	0.0055	0.0088	-0.012	0.059	0.0051	0.0098	-0.012	0	0.0025	0.0042	0.002	0.026	0.0009	0.0018	0.0036	0.0083	0.0013	0.0027	0.012	0.021	1.91	0.56	82	84	0.64	0.21
BMB5845	Zircon_Sample-065.FIN2	Fe-rich	700000		0.065	0.034	30	41	37	32	62	47	5500	1000	2560	660	6600	2900	21	16	14.3	5	14.4	5.8	960	220	-0.004	0.029	-0.003	0.038	0.0024	0.0084	0.022	0.039	0.018	0.029	0.005	0.011	-0.06	0.1	0.0103	0.0084	-0.003	0	0.002	0.0055	0.05	0.11	0.0036	0.0074	0.004	0.0097	0.0025	0.0027	0.036	0.045	2.3	1.6	20	170	0.24	0.22
BMB5845	Zircon_Sample-072.FIN2	Fe-rich	700000		-0.01	0.12	2.6	2.8	5.9	1	12	1.9	1610	230	890	210	2250	470	13.7	2.7	2.8	1.1	1.67	0.35	142	47	0.003	0.038	0.007	0.018	0.001	0.01	-0.052	0.044	0.067	0.081	-0.00222	0.00066	-0.12	0.28	0.03	0.042	0.021	0	0.011	0.011	-0.022	0.062	0.032	0.023	0.029	0.037	-0.000121	0.000036	0.045	0.046	0.465	0.073	-50	150	0.056	0.061
BMB5845	Zircon_Sample-073.FIN2	Fe-rich	700000		-0.063	0.079	6.2	4.1	11.5	3.5	17	3.7	1600	160	630	110	1580	300	44	46	3.6	2.1	1.68	0.46	75.2	6.9	4.2	8.5	0.014	0.032	2.2	4.4	-0.028	0.055	0.014	0.034	0.0007	0.0062	3	5.8	0.005	0.016	0	0	0.015	0.021	-0.004	0.068	0.26	0.53	0.036	0.039	0.008	0.01	0.038	0.038	0.63	0.29	50	170	0.094	0.065
BMB5845	Zircon_Sample-074.FIN2	Fe-rich	700000		0.109	0.085	-0.8	4.2	3.14	0.27	7.8	1.8	1244	76	638	19	1770	110	14.3	1	1.7	1.1	0.71	0.25	49.8	3.4	0.035	0.07	0.029	0.033	0.03	0.027	-0.008	0.08	0.045	0.068	0.017	0.038	-0.13	0.22	-0.005	0.022	0.038	0	0	0.0077	-0.011	0.093	0.0095	0.0085	0.044	0.037	0.0053	0.0071	0.03	0.041	0.29	0.032	-10	150	0.014	0.039
BMB5845	Zircon_Sample-075.FIN2	Fe-rich	700000		-0.012	0.076	-0.8	3	4.3	0.76	8.5	2.8	1307	79	652	38	1700	190	16.6	3	1.49	0.39	1.1	0.27	57.9	9.5	0.002	0.049	0.017	0.023	-0.0083	0.0084	0.013	0.087	0.053	0.036	0.019	0.022	0.24	0.27	0.02	0.018	0.031	0	0.0134	0.0097	0.15	0.14	0.0036	0.0075	0.022	0.029	0.005	0.01	0.029	0.071	0.417	0.078	30	130	0.01	0.033
BMB5845	Zircon_Sample-076.FIN2	Fe-rich	700000		0.023	0.079	0.9	1.6	5.2	1.8	9.52	0.86	1164	60	605	51	1640	210	12.5	1.7	2.3	1.3	0.92	0.36	53.3	7.8	-0.024	0.064	0.023	0.036	0.008	0.013	0.008	0.03	0.046	0.076	-0.00237	0.00053	-0.14	0.48	0.014	0.016	0.011	0	0.008	0.014	-0.025	0.057	0.0024	0.0051	0.016	0.035	0.0041	0.0083	-0.017	0.0038	0.39	0.1	20	120	0.32	0.22
BMB5845	Zircon_Sample-077.FIN2	Fe-rich	700000		0.092	0.061	-0.2	6.3	3.31	0.55	9.2	1.6	1350	120	660	25	1908	81	21.23	0.94	1.44	0.86	1.03	0.4	52.4	2.7	0.002	0.051	0.021	0.037	0.0151	0.0025	0.04	0.14	0.06	0.12	-0.00269	0.00046	-0.17	0.3	-0.001	0.02	0.031	0	0.01	0.013	0.02	0.13	0.0038	0.0079	0.017	0.036	0.018	0.015	-0.005	0.028	0.246	0.05	90	230	0.026	0.038
BMB5845	Zircon_Sample-078.FIN2	Fe-rich	700000		0.077	0.094	17.3	5.6	19.39	0.56	19.1	2.6	1720	130	635	57	1150	240	9.93	0.67	5.1	1.1	2.1	1.2	43.2	2.7	0.029	0.041	0.01	0.035	0	0.015	0.02	0.13	-0.004	0.023	-0.00272	0.0005	0.02	0.3	-0.007	0.022	-0.05	0	0.0019	0.0065	0.07	0.11	-0.000188	0.000034	0.025	0.053	0.0036	0.0075	-0.007	0.023	0.57	0.12	110	160	0.13	0.11
BMB5845	Zircon_Sample-085.FIN2	Fe-rich	700000		0.11	0.1	3.1	3.2	3.62	0.37	8.4	1.3	1386	95	713	44	1690	140	14.8	2.7	0.88	0.49	1	0.63	27.1	4.2	-0.018	0.023	0.01	0.024	0.015	0.022	0.13	0.2	-0.0149	0.0026	0.002	0.01	-0.25	0.3	0.007	0.014	-0.05	0	0.007	0.01	-0.051	0.081	0.0034	0.0073	0.025	0.034	0.006	0.0076	0.043	0.065	0.42	0.1	-50	160	0.027	0.056
BMB5845	Zircon_Sample-086.FIN2	Fe-rich	700000		0.096	0.036	24	18	25	17	22	2.9	2250	370	774	87	1640	160	10.4	5.1	16	18	2.5	1.5	39	15	-0.006	0.016	0.011	0.019	-0.0005	0.0086	0.02	0.14	0.031	0.054	0.009	0.013	-0.16	0.28	0.023	0.043	-0.02	0	0.0017	0.0062	0.01	0.1	-0.000149	0.000038	-0.00124	0.00032	0.01	0.013	0.049	0.024	1.5	1.3	51	83	0.078	0.079
BMB5845	Zircon_Sample-087.FIN2	Fe-rich	700000		0.12	0.11	18.5	4.6	14.2	5.7	15.8	2.6	1520	160	674	45	1504	68	11.2	1.8	3.7	1.3	2.25	0.75	35.8	4.6	-0.011	0.042	0.019	0.035	0.006	0.012	-0.085	0.061	0.059	0.071	0.0014	0.0099	-0.11	0.21	0.007	0.033	0.15	0	0.0017	0.007	-0.009	0.058	0.008	0.017	0.035	0.032	0.006	0.011	-0.00118	0.00027	0.78	0.2	80	160	0.029	0.042
BMB5845	Zircon_Sample-088.FIN2	Fe-rich	700000		0	0.19	-1.2	4.3	4.19	0.77	10.6	2.4	1390	120	750	140	1930	460	17.1	5.7	0.38	0.66	1.33	0.49	26.8	7.3	0.004	0.05	-0.039	0.038	-0.001	0.021	-0.11	0.13	0.014	0.064	0.004	0.016	0.17	0.51	-0.017	0.039	0	0	0.016	0.01	0.064	0.034	0.022	0.027	0.028	0.039	0.0025	0.0054	0.047	0.067	0.36	0.12	10	100	0.002	0.037
BMB5845	Zircon_Sample-089.FIN2	Fe-rich	700000		0.01	0.11	7	11	4.35	0.64	8.5	2	1349	47	686	24	1723	93	14.7	1.7	1.5	1	1.93	0.72	30.6	7	-0.022	0.041	0.027	0.05	-0.001	0.018	-0.077	0.079	0.064	0.067	0.005	0.018	0	0.44	-0.028	0.035	0.27	0	0.009	0.014	0.013	0.074	-0.000202	0.000043	0.038	0.035	0.0023	0.005	0.01	0.028	0.5	0.18	60	250	0.03	0.014
BMB5845	Zircon_Sample-090.FIN2	Fe-rich	700000		-0.02	0.11	7.2	5.5	5	2.2	10.6	1.5	1440	140	662	43	1680	210	18.9	3.7	3	1.3	1.91	0.61	29.9	3.3	0.045	0.042	0.024	0.03	-0.007	0.016	-0.09	0.15	0.02	0.05	0.004	0.015	-0.24	0.17	0.004	0.018	0.084	0	0.008	0.023	0.029	0.041	-0.000181	0.000044	0.038	0.079	0.0038	0.008	0.051	0.078	0.37	0.1	110	130	0.101	0.04
BMB5845	Zircon_Sample-091.FIN2	Fe-rich	700000		0.09	0.1	6	3.4	12.7	6.3	19.5	4.4	2160	220	887	78	2390	450	260	150	4	2.6	2.74	0.89	37.4	4	0.025	0.052	0.01	0.037	0.0038	0.0045	-0.031	0.09	0.068	0.077	0.011	0.012	-0.163	0.084	0.033	0.044	0.06	0	0.007	0.011	-0.039	0.029	-0.000158	0.000027	0.016	0.034	0.0046	0.0059	0.025	0.017	1.11	0.11	-90	160	0.26	0.18

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5846 — **CONCENTRATIONS**

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5846	Zircon_Sample-059.FIN2	Fe-rich	700000		0.03	0.12	10.8	4.7	47	1.9	10.7	1.5	331	4.5	16.54	0.8	43.3	3.5	1.68	0.61	16.7	2.6	0.5	0.4	6.67	0.66	0.045	0.047	-0.015	0.04	0.0153	0.0099	0.2	0.24	0.09	0.14	-0.0165	0.0094	0.1	0.24	0.019	0.051	-0.075	0	0.021	0.014	0.1	0.13	0.0028	0.0059	0.077	0.046	0.0028	0.0075	0.159	0.028	0.7	0.17	-60	210	-0.007	0.033
BMB5846	Zircon_Sample-060.FIN2	Fe-rich	700000		0.029	0.089	9.5	1.1	47.6	9.1	10	2.1	308.7	9	15.29	0.8	45.7	3.3	1.31	0.23	22.7	3.9	0.225	0.082	7.31	0.53	-0.017	0.029	0.005	0.012	0.007	0.032	0	0.12	-0.05	0.13	-0.005	0.021	0.09	0.8	0.03	0.02	-0.059	0	-0.0009	0.0075	-0.011	0.04	0.0023	0.0049	0.11	0.1	0.0033	0.0083	0.17	0.14	0.7	0.17	100	170	0.14	0.3
BMB5846	Zircon_Sample-061.FIN2	Fe-rich	700000		0.105	0.067	11.6	7.4	38.8	8.6	8.33	0.9	336	12	15.3	1.5	46.4	7.2	8.6	5.2	18.5	2.5	0.29	0.27	6.2	1.1	0.02	0.11	0.004	0.025	0.022	0.016	0.04	0.19	-0.028	0.047	-0.0133	0.0092	0.07	0.45	0.006	0.031	0.06	0	0.021	0.023	-0.124	0.081	0.0115	0.0089	0.056	0.043	0.0043	0.0065	0.053	0.06	0.48	0.11	-80	140	0.017	0.039
BMB5846	Zircon_Sample-062.FIN2	Fe-rich	700000		-0.023	0.073	7.5	2.6	58.4	7.8	13.3	1.1	317	12	14.8	1.5	41.4	2.6	0.61	0.1	27.8	7.6	0.32	0.18	7	1.2	0.046	0.041	-0.027	0.032	0	0.015	0.09	0.15	0.079	0.081	-0.015	0.01	-0.28	0.38	-0.02	0.018	0.044	0	0.002	0.01	-0.01	0.16	0.009	0.013	0.044	0.044	0.017	0.023	0.06	0.088	0.9	0.26	-20	190	0.03	0.06
BMB5846	Zircon_Sample-063.FIN2	Fe-rich	700000		0.08	0.12	9.9	1.9	49.7	7.1	10.7	2.6	375	26	19.23	0.79	48.2	3.4	0.79	0.31	16.8	7.2	0.49	0.22	6.94	0.43	0.029	0.061	0.036	0.052	-0.001	0.017	-0.02	0.24	0	0.16	-0.003	0.022	0.16	0.47	0.051	0.04	-0.03	0	0.009	0.018	0.05	0.18	0.013	0.018	0.083	0.075	0.006	0.0085	0.051	0.065	0.68	0.2	-94	88	-0.004	0.026
BMB5846	Zircon_Sample-064.FIN2	Fe-rich	700000		-0.085	0.08	20.9	8.3	105	22	20.2	3	403	27	14	2.1	31	2.4	0.4	0.18	46.3	7.7	0.78	0.37	11.1	1.1	0.02	0.041	-0.009	0.046	-0.004	0.027	-0.07	0.05	-0.09	0.11	-0.018	0.002	-0.06	0.21	-0.009	0.037	-0.007	0	0.0015	0.008	0.01	0.24	0.009	0.019	0.03	0.033	0.013	0.016	0.04	0.061	1.78	0.59	20	330	0.04	0.042
BMB5846	Zircon_Sample-065.FIN2	Fe-rich	700000		-0.01	0.1	10.5	5.5	226	67	20.9	2.6	242	43	12.5	1.6	26	2.3	0.46	0.23	123	44	0.67	0.16	11.9	3.1	0.005	0.02	0.001	0.051	0.002	0.024	-0.03	0.073	-0.09	0.051	-0.0068	0.0098	0.43	0.7	-0.019	0.036	-0.01	0	0.019	0.015	0.035	0.037	0.015	0.013	0.067	0.067	0.0057	0.0077	0.094	0.044	2.8	1	-50	100	0.01	0.022
BMB5846	Zircon_Sample-072.FIN2	Fe-rich	700000		0.04	0.14	8.7	3.9	91.6	5.6	15.59	0.66	367	31	13.6	1.8	27.9	5.8	0.84	0.29	35.1	4	0.43	0.28	8.6	1.2	0.04	0.053	0.01	0.056	0.009	0.027	0.06	0.18	0.11	0.16	-0.0006	0.0099	0.36	0.49	-0.015	0.036	-0.02	0	0.012	0.017	0.02	0.14	0.006	0.011	0.043	0.071	0.024	0.028	0.044	0.084	1.33	0.18	60	130	0.03	0.022
BMB5846	Zircon_Sample-073.FIN2	Fe-rich	700000		-0.01	0.1	5.5	3.4	35	3.4	6.7	1.8	282	27	16.85	0.51	52.9	2.9	0.74	0.3	13.1	1.7	0.36	0.12	6.04	0.76	0.006	0.032	0.017	0.028	-0.0133	0.0097	-0.107	0.05	-0.095	0.076	0.023	0.024	0.56	0.69	-0.023	0.022	0.06	0	-0.0005	0.0073	-0.08	0.13	0.013	0.011	0.091	0.046	-0.0007	0.00018	0.034	0.032	0.66	0.17	-50	230	0.016	0.02
BMB5846	Zircon_Sample-074.FIN2	Fe-rich	700000		-0.062	0.06	7.2	5.2	39.6	6.6	9	1.2	298	18	15.68	0.47	44.8	1.7	0.84	0.22	14.8	2.8	0.32	0.33	6.02	0.45	0.001	0.056	-0.026	0.026	-0.003	0.021	-0.087	0.071	0.11	0.24	0.0012	0.0078	0.05	0.54	0.009	0.027	-0.035	0	-0.0004	0.0065	0.11	0.19	0.0078	0.0098	0.042	0.033	0.0155	0.0036	0.045	0.064	0.564	0.077	-60	100	-0.008	0.013
BMB5846	Zircon_Sample-075.FIN2	Fe-rich	700000		0.02	0.11	38	24	67.2	9	12.6	1.2	329	37	14.72	0.87	37.2	3.6	0.47	0.25	25.7	3.1	0.55	0.46	7.74	0.92	-0.001	0.035	0.033	0.03	-0.003	0.01	-0.01	0.15	0.08	0.11	0.012	0.019	-0.02	0.63	0.013	0.027	0.06	0	0.0017	0.006	-0.026	0.042	0.017	0.028	0.047	0.039	0.007	0.016	0.101	0.071	0.81	0.11	0	120	0.071	0.065
BMB5846	Zircon_Sample-076.FIN2	Fe-rich	700000		0.2	0.16	17.2	4.2	410	100	29.5	3.9	153	77	12.01	0.67	23.5	5.4	1.36	0.73	207	64	0.91	0.2	12.4	1.8	-0.01	0.053	-0.019	0.013	-0.0049	0.0061	-0.064	0.05	0.12	0.16	0.0025	0.006	-0.16	0.33	-0.008	0.021	0.01	0	0.009	0.016	0.1	0.2	0.0056	0.0072	0.032	0.042	0.005	0.012	0.147	0.034	4.4	1.2	143	34	0.06	0.13
BMB5846	Zircon_Sample-077.FIN2	Fe-rich	700000		0.06	0.085	14.5	5.9	640	160	44.3	9.7	122	32	10.9	1.4	19.3	4	1.78	0.89	264	26	0.75	0.38	11.7	3.2	-0.021	0.06	0.013	0.067	0.025	0.035	-0.133	0.071	0.018	0.09	0.005	0.01	0	0.42	0.007	0.07	0.04	0	-0.001	0.016	-0.047	0.098	-0.000187	0.000032	0.078	0.085	0.0121	0.0089	0.059	0.066	6.1	0.98	190	120	0.057	0.049
BMB5846	Zircon_Sample-078.FIN2	Fe-rich	700000		0.06	0.14	6.3	4	49	6.9	9.1	1.1	338.5	3.3	15.6	1.4	45.8	5.3	1.62	0.45	22	9.5	0.36	0.41	7.07	0.79	0.012	0.053	-0.024	0.041	0.012	0.023	-0.023	0.099	-0.035	0.086	0.01	0.012	0.28	0.22	-0.008	0.028	0.03	0	0.001	0.016	-0.068	0.095	0.017	0.027	0.01	0.047	0.011	0.014	0.14	0.12	0.74	0.3	-4	86	-0.008	0.041
BMB5846	Zircon_Sample-085.FIN2	Fe-rich	700000		0.05	0.17	5.6	2.9	128	27	14.6	1.3	291	21	12.8	1.2	32.2	8	1.2	0.46	64	12	0.64	0.16	10.62	0.85	-0.054	0.032	0.005	0.08	0.017	0.012	0.07	0.15	-0.005	0.052	0.0196	0.0078	-0.2	0.29	0.007	0.055	-0.044	0	0.018	0.017	0.08	0.1	0.013	0.017	0.016	0.032	-0.000406	0.000068	0.08	0.11	1.88	0.51	80	100	-0.00479	0.00081
BMB5846	Zircon_Sample-086.FIN2	Fe-rich	700000		0	0.13	2.8	2.9	30.3	2.4	7.34	0.68	289	12	15.1	1.8	54.1	6.9	1.63	0.49	11.8	3	0.29	0.35	5.64	0.74	0	0.041	0.013	0.036	0.014	0.017	0.04	0.066	0.15	0.15	0.0002	0.0092	-0.1	0.38	-0.005	0.034	0.04	0	-0.0046	0.0069	-0.12	0.11	0.0037	0.0077	0.1	0.05	0.018	0.018	0.021	0.048	0.49	0.16	-43	85	-0.019	0.017
BMB5846	Zircon_Sample-087.FIN2	Fe-rich	700000		0.065	0.053	3.7	4.6	29.1	2.1	6.9	1.9	295	36	16.1	1.2	51.7	6	0.87	0.27	10.8	2.1	0.33	0.12	5.16	0.57	0.028	0.068	-0.021	0.016	0.009	0.019	0.17	0.19	0.09	0.12	-0.0043	0.0011	0.196	0.075	-0.006	0.014	-0.03	0	0.005	0.012	-0.02	0.19	0.006	0.013	0.048	0.072	0.015	0.019	0.145	0.04	0.52	0.1	70	200	0.019	0.05
BMB5846	Zircon_Sample-088.FIN2	Fe-rich	700000		-0.02	0.16	12.5	6.4	73.3	9.9	13.1	1.7	350	31	13.3	1.3	34	5.1	0.56	0.15	29.1	4.6	0.501	0.06	10.4	1.4	0.028	0.055	0.047	0.06	-0.001	0.021	0	0.14	0.24	0.14	0.007	0.01	-0.1	0.36	-0.016	0.04	0.09	0	0.004	0.01	0.11	0.14	-0.000194	0.000054	0.032	0.05	0.0069	0.0098	0.085	0.06	1.11	0.14	-100	120	-0.002	0.044
BMB5846	Zircon_Sample-089.FIN2	Fe-rich	700000		-0.009	0.071	3.5	3.4	36	5.5	7.65	0.87	283.1	3.7	14.7	1.3	51	5.8	0.548	0.06	14.7	3.1	0.29	0.22	5.63	0.52	0.013	0.054	-0.016	0.051	-0.004	0.013	-0.04	0.11	0.04	0.1	0.01	0.02	0.09	0.13	-0.01	0.025	0.09	0	0.003	0.017	-0.031	0.066	0.0018	0.0041	0.069	0.069	0.013	0.018	0.093	0.072	0.7	0.24	180	140	0.034	0.038
BMB5846	Zircon_Sample-090.FIN2	Fe-rich	700000		0.14	0.14	7.1	3.5	60.8	5.5	14.2	2.3	338	43	14.9	1.1	47.7	4.1	0.54	0.21	21.7	3.8	0.51	0.14	6.98	0.43	0.039	0.055	-0.005	0.045	-0.008	0.019	0.13	0.15	0.012	0.09	0.007	0.012	0.15	0.49	0.003	0.035	-0.008	0	0.02	0.021	0.01	0.12	-0.00021	0.000034	-0.006	0.029	0.007	0.015	0.17	0.13	1.052	0.098	100	120	0.026	0.023
BMB5846	Zircon_Sample-091.FIN2	Fe-rich	700000		0.07	0.13	8.6	5.4	58	10	10.2	1.7	389	21	16.1	1.1	39.3	3.5	0.53	0.26	19	3.8	0.43	0.2	6.8	1	-0.018	0.041	-0.006	0.037	0.01	0.0051	0.11	0.13	-0.033	0.042	0.037	0.032	0.15	0.4	0.011	0.022	0.13	0	0.027	0.016	-0.037	0.091	0.0032	0.0067	0.055	0.079	0.02	0.025	0.134	0.082	1.09	0.14	10	180	0	0.022
BMB5846	Zircon_Sample-098.FIN2	Fe-rich	700000		0.11	0.16	8	11	40.3	5.3	8.3	1.8	328	67	13.8	1.4	43.4	7.9	0.59	0.3	12.5	2.5	0.3	0.2	5.6	1.5	0.004	0.079	-0.003	0.063	-0.005	0.019	-0.05	0.12	-0.054	0.035	0.001	0.011	-0.28	0.1	-0.01	0.014	-0.081	0	-0.0006	0.0064	-0.02	0.11	0.0079	0.0094	0.0215	0.0018	0.008	0.017	0.052	0.054	0.691	0.095	-30	120	0.08	0.063
BMB5846	Zircon_Sample-099.FIN2	Fe-rich	700000		0.039	0.047	5.6	6.5	52	13	8.8	1.4	298	40	13.8	1.5	43.8	9.5	0.574	0.071	19	7.2	0.56	0.47	6.85	0.42	-0.0206	0.0096	0.012	0.064	0.007	0.029	0.1	0.11	-0.094	0.032	0.002	0.011	0.03	0.16	0.023	0.038	-0.003	0	0.011	0.02	0	0.26	0.0083	0.0086	0.038	0.066	0.014	0.016	0.12	0.11	0.78	0.24	-20	340	0.067	0.02
BMB5846	Zircon_Sample-100.FIN2	Fe-rich	700000		-0.02	0.1	12.9	1.9	218	73	17.3	1.4	284	68	13.3	1.6	27.9	3	0.6	0.26	89	39	0.48	0.18	11.4	1.3	0.093	0.082	-0.014	0.045	-0.011	0.011	-0.03	0.13	-0.09	0.14	0.002	0.011	0.11	0.35	-0.02	0.014	0.16	0	0.017	0.022	-0.08	0.13	-0.000211	0.000058	-0.04	0.011	0.016	0.024	0.1	0.11	2.79	0.81	59	59	0.1	0.12
BMB5846	Zircon_Sample-101.FIN2	Fe-rich	700000		0.005	0.097	10	5.9	82	26	12.4	2.3	375	35	13.2	1.8	34.4	7.9	0.52	0.26	26.9	8.4	0.53	0.29	8.88	0.91	-0.001	0.068	-0.011	0.02	0	0.01	0.068	0.042	0.01	0.11	0.006	0.016	-0.14	0.44	0.014	0.026	0.048	0	-0.002	0.012	-0.069	0.098	0.0031	0.0066	0.011	0.072	0.018	0.017	0.099	0.029	1.57	0.39	50	140	0.038	0.023
BMB5846	Zircon_Sample-102.FIN2	Fe-rich	700000		-0.01	0.13	11.5	4.7	45.3	3.8	8.4	1.8	332	25	13.7	0.82	44.2	6.7	0.92	0.42	16.3	4.1	0.21	0.35	6.7	1.3	0.015	0.047	-0.001	0.041	0.004	0.014	0.06	0.16	0.031	0.089	0	0.011	0.01	0.39	-0.005	0.018	0.03	0	-0.0112	0.003	-0.04	0.18	0.025	0.03	0.071	0.071	0.018	0.036	0.2	0.19	0.85	0.31	0	270	0.062	0.016
BMB5846	Zircon_Sample-103.FIN2	Fe-rich	700000		0.1	0.11	8.3	6.2	165	43	16	3	242	58	12	3.2	28.8	6.2	0.9	0.28	84	30	0.39	0.11	7.4	1.1	0.016	0.029	-0.014	0.035	-0.008	0.015	-0.014	0.048	-0.028	0.072	0.013	0.02	0.01	0.21	0	0.016	-0.001	0	0.01	0.026	0.039	0.054	0.009	0.011	0.024	0.093	-0.0000105	0.0000015	0.028	0.05	2.95	0.97	-220	36	0.054	0.061
BMB5846	Zircon_Sample-104.FIN2	Fe-rich	700000		0.03	0.19	13.1	9.1	79	28	9.8	2.9	304	49	14.6	3.2	43.7	3.8	1.04	0.36	37	22	0.69	0.35	8.8	2	0.05	0.17	-0.031	0.059	0.016	0.037	-0.11	0.19	0.11	0.19	0.0163	0.0044	-0.17	0.22	-0.001	0.043	-0.129	0	-0.0068	0.0096	0.21	0.25	0.014	0.028	0.09	0.081	0.023	0.026	0.103	0.086	1.43	0.56	121	84	0.057	0.069
BMB5846	Zircon_Sample-111.FIN2	Fe-rich	700000		-0.07	0.31	4.2	2.4	89	30	11.4	1.4	289	39	12.65	0.93	36.2	3.3	1.01	0.23	44	20	0.58	0.35	9.5	0.26	0.001	0.038	-0.008	0.035	0.031	0.027	0.01	0.13	-0.011	0.046	0.009	0.018	-0.07	0.29	0.028	0.046	-0.056	0	0.007	0.015	0.064	0.053	-0.000196	0.000044	0.029	0.043	0.035	0.024	0.048	0.067	1.97	0.75	70	170	0.052	0.039
BMB5846	Zircon_Sample-112.FIN2	Fe-rich	700000		0.047	0.076	6.7	1.3	68	14	9.6	1.8	409	52	17.3	1.9	44.8	4.2	1.02	0.11	21.1	4.7	0.36	0.22	7.5	1.3	-0.006	0.028	0.012	0.046	-0.013	0.018	-0.02	0.2	-0.026	0.075	0.016	0.021	0.11	0.47	-0.007	0.051	0.09	0	-0.001	0.012	0.01	0.091	-0.000246	0.000062	0.05	0.18	0.027	0.02	0.11	0.13	1.62	0.3	80	190	0.085	0.069
BMB5846	Zircon_Sample-113.FIN2	Fe-rich	700000		0.02	0.15	870	850	410	160	29.3	6.1	500	480	12.8	1.4	24.05	0.9	1.52	0.58	93	20	1.14	0.7	10.98	0.68	0.027	0.09	-0.005	0.054	0.004	0.015	-0.074	0.087	0.05	0.19	0.006	0.011	0.01	0.62	-0.019	0.037	0.07	0	-0.002	0.013	0.09	0.19	0.02	0.028	0.03	0.13	0.025	0.035	0.132	0.054	5.8	2.7	-62	85	0.035	0.041
BMB5846	Zircon_Sample-114.FIN2	Fe-rich	700000		0.1	0.14	2.9	4.7	29.5	2.2	7.49	0.65	292	8	16.3	2	56.5	3.8	1.84	0.57	10.5	1.8	0.5	0.2	5.07	0.56	0.019	0.033	-0.021	0.045	0	0.022	-0.016	0.063	0.05	0.11	0.009	0.018	0.09	0.29	0.012	0.031	0.037	0	-0.001	0.012	-0.026	0.054	0.012	0.01	-0.012	0.065	0.023	0.035	0.045	0.058	0.85	0.16	20	110	0.066	0.018
BMB5846	Zircon_Sample-115.FIN2	Fe-rich	700000		0.04	0.12	3.7	5.8	55	13	9	1.1	383	26	17.5	1.1	46.5	2.8	2.33	0.38	24	14	0.57	0.22	6.14	0.86	-0.037	0.066	-0.008	0.039	0.023	0.033	0.02	0.11	0.03	0.16	0.011	0.014	-0.17	0.32	0.026	0.051	0.013	0	0.002	0.016	0.04	0.15	0.0063	0.0082	-0.022	0.035	0.014	0.011	0.14	0.15	1.51	0.58	0	82	0.039	0.038
BMB5846	Zircon_Sample-116.FIN2	Fe-rich	700000		-0.04	0.17	7	3.7	114	40	11.3	1.7	241	22	16.7	1.8	43	5	2.45	0.79	45	13	0.53	0.28	7.73	0.43	-0.002	0.076	-0.001	0.048	0.004	0.03	-0.064	0.079	0.13	0.32	0.02	0.041	-0.2	0.32	0.023	0.024	0.019	0	-0.0034	0.0082	-0.01	0.21	-0.000205	0.000044	0.05	0.12	0.032	0.044	0.079	0.041	2.31	0.77	190	240	0.001	0.021
BMB5846	Zircon_Sample-117.FIN2	Fe-rich	700000		-0.14	0.15	90	140	790	280	49	14	900	1600	11.4	1.7	12.5	7.5	1.79	0.31	220	54	0.36	0.12	7.2	1.3	0.049	0.079	-0.033	0.066	0.0065	0.0021	-0.13	0.15	-0.101	0.074	0.01	0.02	0.08	0.21	-0.013	0.045	0.07	0	0.006	0.022	-0.16	0.21	0.0041	0.0088	-0.045	0.053	0.012	0.012	0.071	0.043	11.4	2.9	149	44	0.042	0.064

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5847 — **CONCENTRATIONS**

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5847	Zircon_sample-007.FIN2	Fe-rich	700000		0.212	0.024	23.1	4.3	17.8	1.4	10.1	1.2	1266	86	1.54	0.22	1.62	0.34	10.9	2	1.99	0.42	0.079	0.062	0.574	0.04	3.7	5	7.8	9.6	0.68	0.66	3.6	3.5	1	1	0.164	0.094	0.6	0.43	0.12	0.12	0.82	1	0.106	0.054	0.32	0.16	0.065	0.027	0.42	0.22	0.046	0.028	0.108	0.056	1.37	0.18	550	190	0.67	0.16
BMB5847	Zircon_sample-008.FIN2	Fe-rich	700000		0.256	0.062	50	71	13.6	4.1	7.4	2	1930	120	0.85	0.31	1.59	0.45	13.5	3.5	1.08	0.18	0.085	0.024	0.2	0.12	1.39	0.28	3.34	0.7	0.38	0.11	2.15	0.74	0.499	0.068	0.121	0.017	0.45	0.1	0.056	0.023	0.391	0	0.081	0.02	0.41	0.11	0.0499	0.0048	0.302	0.067	0.038	0.012	0.081	0.022	0.89	0.42	360	350	0.84	0.19
BMB5847	Zircon_sample-009.FIN2	Fe-rich	700000		0.237	0.03	22.2	3.4	21	3.3	9.6	1.3	1830	190	2.46	0.78	1.91	0.78	8.5	1.2	2.29	0.87	0.118	0.048	0.182	0.055	0.79	0.12	2.28	0.31	0.237	0.028	1.1	0.27	0.314	0.071	0.056	0.02	0.317	0.071	0.04	0.015	0.28	0	0.0474	0.005	0.185	0.027	0.024	0.017	0.235	0.049	0.035	0.012	0.123	0.065	1.74	0.35	370	240	0.73	0.12
BMB5847	Zircon_sample-010.FIN2	Fe-rich	700000		0.042	0.016	1.8	1.3	1.884	0.093	1.4	1.3	1850	140	0.24	0.12	1.8	1.7	11.5	4.2	0.445	0.079	0.033	0.071	0.035	0.011	1.52	0.16	3.69	0.32	0.453	0.091	2.2	0.39	0.53	0.17	0.1325	0.0037	0.513	0.092	0.074	0.015	0.413	0	0.062	0.013	0.334	0.074	0.0461	0.0077	0.23	0.035	0.043	0.023	0.003	0.015	0.035	0.01	230	210	0.55	0.15
BMB5847	Zircon_sample-011.FIN2	Fe-rich	700000		0.1	0.032	15.1	4.3	2.09	0.95	2.54	0.83	1260	100	0.34	0.53	1.64	0.99	7.4	3.8	0.3	0.31	0.07	0.047	0.026	0.035	0.83	0.23	2.21	0.61	0.31	0.1	1.7	0.47	0.33	0.13	0.081	0.027	0.298	0.016	0.033	0.02	0.285	0	0.05	0.014	0.176	0.058	0.037	0.026	0.121	0.031	0.0252	0.0028	0.033	0.031	0.048	0.047	260	280	2.5	2.9
BMB5847	Zircon_sample-012.FIN2	Fe-rich	700000		28	56	340	660	0.62	0.64	-26	54	1050	190	5	10	0.07	0.91	7.9	5.3	1.4	2.6	-0.38	0.77	-0.36	0.71	-0.27	0.92	1.8	3.2	1	2	1.1	1.8	0.7	1.2	-0.01	0.042	2.2	4.3	0.024	0.039	0.086	0	0.16	0.3	-0.36	0.84	0.13	0.24	0.8	1.6	0.11	0.21	0.5	1.1	0.38	0.74	90	240	1.4	2.4
BMB5847	Zircon_sample-013.FIN2	Fe-rich	700000		0.32	0.13	147	96	10.1	1.2	11.3	2.2	1060	210	5.86	0.85	1.75	0.32	8.3	1.5	1.95	0.8	0.184	0.082	0.45	0.21	1.33	0.39	1.85	0.68	0.203	0.054	1.17	0.2	0.31	0.12	0.05259	0.00047	0.267	0.091	0.0208	0.0062	0.202	0	0.0497	0.0078	0.22	0.12	0.033	0.015	0.102	0.039	0.0198	0.0091	0.122	0.042	0.47	0.13	430	430	4.22	0.94
BMB5847	Zircon_sample-020.FIN2	Fe-rich	700000		0.0743	0.0092	3.9	2.7	0.69	0.33	1	0.83	360	210	0.301	0.043	0.097	0.092	3.63	0.71	0.59	0.36	0.025	0.013	0.075	0.097	0.59	0.25	0.78	0.16	0.089	0.012	0.7	0.22	0.115	0.037	0.029	0.028	0.13	0.17	0.0164	0.0031	0.119	0	0.025	0.011	0.098	0.043	0.015	0.012	0.065	0.051	0.0126	0.0013	0.021	0.013	0.105	0.041	290	310	0.29	0.26
BMB5847	Zircon_sample-021.FIN2	Fe-rich	700000		0.0529	0.009	5.9	7.4	0.52	0.22	0.89	0.7	650	230	0.1	0.073	0.206	0.092	2.43	0.84	0.33	0.25	0.069	0.021	-0.0048	0.0053	0.69	0.11	1	0.16	0.126	0.04	0.519	0.076	0.089	0.013	0.023	0.011	0.131	0.023	0.021	0.012	0.125	0	0.025	0.021	0.092	0.018	0.009	0.01	0.074	0.03	0.0145	0.004	0.0069	0.0064	0.038	0.017	160	160	0.053	0.083
BMB5847	Zircon_sample-022.FIN2	Fe-rich	700000		0.069	0.041	11	6.1	1.46	0.9	1.44	0.32	2000	110	0.251	0.063	1	0.13	10.66	0.6	0.28	0.14	-0.006	0.042	0.0189	0.0077	1.07	0.38	2.33	0.63	0.249	0.062	1.35	0.33	0.29	0.081	0.088	0.018	0.46	0.23	0.055	0.017	0.225	0	0.0442	0.009	0.223	0.087	0.043	0.011	0.162	0.051	0.034	0.015	0.019	0.016	0.045	0.029	300	260	0.55	0.54
BMB5847	Zircon_sample-023.FIN2	Fe-rich	700000		0.167	0.054	49	21	3.3	1.1	3.57	0.92	1320	140	7.3	3.6	3.4	2.2	23	11	1.02	0.44	0.17	0.21	0.42	0.23	0.82	0.3	2.3	1.4	0.28	0.15	1.44	0.78	0.216	0.079	0.054	0.029	0.35	0.19	0.018	0.011	0.257	0	0.049	0.032	0.137	0.067	0.0192	0.0058	0.116	0.046	0.0293	0.0043	0.03	0.018	0.0432	0.0082	240	280	1.84	0.77
BMB5847	Zircon_sample-024.FIN2	Fe-rich	700000		0.227	0.077	97	72	7.4	1.8	9.7	2.6	1290	130	11.1	2.9	1.7	0.29	16.5	3	1.23	0.4	0.16	0.055	0.56	0.16	1.18	0.6	2.3	1	0.268	0.09	1.59	0.27	0.212	0.066	0.054	0.023	0.54	0.24	0.0323	0.0063	0.244	0	0.065	0.011	0.199	0.043	0.022	0.0062	0.163	0.042	0.029	0.018	0.132	0.085	0.179	0.043	320	250	1.11	0.16
BMB5847	Zircon_sample-025.FIN2	Fe-rich	700000		0.12	0.14	80	120	6.4	6.8	4.1	4.3	1550	170	0.9	0.78	0.88	0.4	9.8	3.4	0.82	0.54	0.102	0.093	0.036	0.038	0.93	0.73	2.8	2.2	0.35	0.29	1.5	1.2	0.33	0.27	0.067	0.055	0.3	0.3	0.05	0.035	0.34	0	0.057	0.043	0.15	0.1	0.031	0.019	0.18	0.14	0.032	0.021	0.059	0.049	0.4	0.45	340	130	0.47	0.37
BMB5847	Zircon_sample-026.FIN2	Fe-rich	700000		0.27	0.15	73	35	8.7	5.2	5.2	3.8	2090	150	13.8	3.9	1.27	0.22	17.9	1.3	2.16	0.61	0.089	0.073	0.58	0.22	1.78	0.12	4.46	0.51	0.47	0.1	2.23	0.28	0.446	0.082	0.129	0.028	0.64	0.24	0.065	0.028	0.42	0	0.088	0.028	0.33	0.11	0.05	0.021	0.249	0.019	0.031	0.01	0.092	0.03	0.51	0.43	570	240	1.87	0.5
BMB5847	Zircon_sample-033.FIN2	Fe-rich	700000		0.222	0.092	72	29	3.8	2.3	4.2	1.5	1420	190	0.73	0.5	2.7	1.7	13	10	0.47	0.26	0.085	0.035	0.027	0.02	0.908	0.093	2.01	0.49	0.239	0.056	1.55	0.37	0.281	0.042	0.067	0.034	0.31	0.16	0.035	0.015	0.25	0	0.051	0.015	0.157	0.05	0.022	0.011	0.124	0.047	0.0327	0.0052	0.044	0.011	0.093	0.051	390	230	1.04	0.24
BMB5847	Zircon_sample-034.FIN2	Fe-rich	700000		0.225	0.086	24	23	7.7	1.1	6.2	1.3	1189	92	6.8	2.7	1.19	0.27	8.6	1.2	1.23	0.48	0.151	0.086	0.39	0.17	0.72	0.14	1.92	0.27	0.188	0.025	1.06	0.24	0.169	0.053	0.059	0.022	0.059	0.083	0.032	0.014	0.239	0	0.045	0.02	0.171	0.046	0.0285	0.0083	0.228	0.034	0.03	0.017	0.057	0.043	0.51	0.14	120	110	3.88	0.42
BMB5847	Zircon_sample-035.FIN2	Fe-rich	700000		0.155	0.057	13	8.4	10.7	4.4	4.3	1.5	1099	34	1.27	0.54	1.288	0.071	9.8	1.7	1.27	0.64	0.066	0.053	0.174	0.053	0.98	0.23	2.78	0.52	0.359	0.06	1.78	0.31	0.301	0.064	0.089	0.015	0.26	0.06	0.06	0.015	0.433	0	0.0642	0.0093	0.197	0.029	0.0382	0.0088	0.24	0.11	0.048	0.017	0.048	0.027	0.68	0.28	260	250	0.5	0.37
BMB5847	Zircon_sample-036.FIN2	Fe-rich	700000		0.054	0.032	2.5	2.1	1.9	1	0.65	0.75	1530	170	4	2.7	1.3	0.43	10.7	1.3	0.96	0.5	0.027	0.026	0.68	0.61	0.82	0.13	2.21	0.33	0.224	0.038	1.1	0.27	0.2	0.047	0.082	0.031	0.22	0.12	0.042	0.015	0.235	0	0.047	0.019	0.106	0.037	0.029	0.015	0.231	0.069	0.0113	0.0051	0.024	0.031	0.071	0.05	250	120	1.58	0.94
BMB5847	Zircon_sample-037.FIN2	Fe-rich	700000		0.31	0.17	89	54	6	3	4.5	2.1	4.00E+03	1.20E+03	2.5	0.76	1.79	0.82	29.6	7.7	0.63	0.18	0.089	0.023	0.24	0.16	6.9	5	13.8	7.9	1.57	0.92	6.5	3.8	1.35	0.95	0.32	0.17	1.8	1.7	0.17	0.063	0.93	0	0.139	0.053	0.5	0.18	0.095	0.041	0.74	0.4	0.069	0.012	0.16	0.18	0.071	0.036	380	340	4	1.6
BMB5847	Zircon_sample-038.FIN2	Fe-rich	700000		0.095	0.03	3.47	0.57	8.8	2	3.4	1.1	1150	120	0.47	0.1	0.37	0.1	7.17	0.46	1.22	0.21	0.015	0.052	0.094	0.058	0.92	0.17	2.42	0.45	0.3	0.029	1.461	0.051	0.292	0.043	0.089	0.03	0.36	0.12	0.053	0.017	0.338	0	0.0521	0.0062	0.166	0.099	0.036	0.019	0.236	0.048	0.04	0.013	0.0307	0.0065	0.602	0.083	290	290	0.189	0.058
BMB5847	Zircon_sample-039.FIN2	Fe-rich	700000		0.65	0.32	90	120	27.6	4.4	11.2	5	402	96	0.82	0.12	1.63	0.11	24.2	6.5	4.21	0.21	0.056	0.021	0.55	0.27	0.96	0.52	2.5387	0.0028	0.412	0.098	1.55	0.22	0.11	0.16	0.0861	0.0077	0.32	0.14	0.071	0.025	0.46	0	0.089	0.024	0.26	0.19	0.035	0.016	0.49	0.37	0.0597	0.0044	0.2	0.18	2.34	0.2	190	180	2.1	1.6
BMB5847	Zircon_sample-046.FIN2	Fe-rich	700000		0.39	0.12	124	97	11.8	2.4	9.3	2.1	970	86	2.29	0.47	1.89	0.31	10.3	6.3	2.04	0.39	0.165	0.044	0.345	0.083	0.72	0.18	1.92	0.29	0.264	0.044	1.402	0.082	0.279	0.085	0.054	0.02	0.193	0.077	0.023	0.011	0.299	0	0.056	0.017	0.171	0.022	0.0244	0.0085	0.124	0.035	0.0272	0.0072	0.115	0.048	1.02	0.22	400	100	1.06	0.14
BMB5847	Zircon_Sample-047.FIN2	Fe-rich	700000		0.33	0.052	32	21	15.7	4.3	8	2.1	970	52	2.79	0.42	1.06	0.32	9.9	1	3.09	0.9	0.099	0.038	1.16	0.27	0.85	0.22	2.51	0.65	0.277	0.044	1.58	0.37	0.4	0.21	0.085	0.019	0.216	0.069	0.0411	0.0099	0.309	0	0.051	0.014	0.238	0.072	0.0371	0.0077	0.259	0.025	0.0309	0.0077	0.091	0.028	2.05	0.79	120	270	1.18	0.26
BMB5847	Zircon_Sample-048.FIN2	Fe-rich	700000		0.228	0.093	46	23	6.5	1.3	6.1	2.9	5900	710	86	95	6.4	1.9	67	77	11.7	4.6	0.176	0.057	3.9	2.6	1.51	0.22	5.4	1.4	0.73	0.15	3.41	0.73	0.64	0.17	0.117	0.03	0.34	0.11	0.072	0.034	0.468	0	0.078	0.012	0.191	0.089	0.0331	0.005	0.185	0.082	0.04	0.018	0.052	0.024	0.047	0.021	500	190	12	9.1
BMB5847	Zircon_Sample-049.FIN2		700000		2.30E+03	1.70E+03	7.30E+04	4.20E+04	-100	140	-7.00E+04	1.40E+04	6.80E+03	2.90E+03	40	710	3.20E+04	5.10E+04	2.50E+03	2.00E+03	500	1200	90	270	300	430	1740	780	1300	750	-11	39	150	140	-80	110	44	40	-180	280	-30	50	-170	##	6	29	54	73	3.9	8.4	25	71	33	58	31	54	1.60E+03	3.20E+03	140	230	2.90E+04	3.20E+04
BMB5847	Zircon_Sample-050.FIN2	Fe-rich	700000		210	380	5.40E+03	9.30E+03	2.9	1.5	110	590	600	230	2	35	60	110	90	170	-120	270	45	84	-1	13	140	230	120	210	2.8	4.9	16	36	0.31	0.39	110	180	4.7	7.1	0.2	1.1	1.3	3	1.1	1.6	6.5	7.9	-0.008	0.034	3.3	8.2	3.3	6.5	0.79	0.89	0.02	0.43	-40	180	9.00E+04	1.50E+04
BMB5847	Zircon_Sample-051.FIN2		700000		4.20E+03	2.60E+03	2.24E+05	6.30E+04	170	250	1.20E+03	9.60E+03	5.10E+03	5.60E+03	800	1100	760	390	1.10E+03	1.30E+03	#######	3.70E+03	390	930	200	250	2.20E+04	1.10E+04	1.51E+04	7.10E+03	460	360	1.20E+03	1.00E+03	170	700	5.20E+03	2.10E+03	-310	680	110	120	-200	##	53	19	320	670	22	44	140	230	38	48	-190	200	42	55	20	120	2.93E+05	9.50E+04
BMB5847	Zircon_Sample-052.FIN2	Fe-rich	700000		860	280	5.70E+04	2.40E+04	19	71	-4.40E+03	7.70E+03	200	810	-10	590	450	390	1000	1500	-300	100	80	670	140	700	5.60E+03	2.40E+03	3.70E+03	1.50E+03	106	56	610	760	150	400	910	270	-160	420	27	59	-20	##	25	36	240	190	-0.28	0.19	118	79	20	26	-220	150	11	30	130	100	4.00E+04	1.20E+04
BMB5847	Zircon_Sample-059.FIN2	Fe-rich	700000		4	4.6	49	43	8.6	1.2	3.8	3.4	960	120	8.4	5.9	0.2	1	10.4	2.5	10.2	8.4	-1.6	3.4	14	22	0.69	0.16	1.68	0.68	0.08	0.24	0.4	1.1	0.02	0.4	0.101	0.082	-0.5	2	0	0.17	0.59	1	0.09	0.11	0.099	0.096	0.016	0.012	0.13	0.13	0.015	0.021	0.23	0.23	0.24	0.18	50	170	1.1	1.6
BMB5847	Zircon_Sample-060.FIN2	Fe-rich	700000		0.27	0.34	1.7	1.3	1.15	0.37	0.3	1.9	1210	110	3.8	3.3	0.78	0.17	6.4	1.7	0.92	0.44	0.092	0.052	0.6	0.15	0.76	0.26	2.19	0.74	0.27	0.1	1.15	0.27	0.274	0.086	0.072	0.032	0.3	0.17	0.039	0.02	0.202	0	0.039	0.018	0.096	0.035	0.0184	0.0089	0.101	0.04	0.0217	0.0082	0.028	0.058	0.02	0.011	210	190	0.186	0.079
BMB5847	Zircon_Sample-061.FIN2	Fe-rich	700000		0.135	0.068	28.3	5	0.71	0.14	0.6	1.3	1170	130	0.54	0.35	0.96	0.72	3.6	1.5	0.75	0.22	0.118	0.079	0.18	0.45	0.122	0.012	0.312	0.038	0.0375	0.0069	0.211	0.095	0.028	0.037	0.008	0.0048	0.01	0.098	0.0093	0.0084	0.068	0	0.0097	0.007	0.034	0.028	0.0049	0.0046	0.04	0.021	0.0145	0.0033	0.0186	0.0093	0.029	0.011	12	96	0.295	0.098
BMB5847	Zircon_Sample-062.FIN2	Fe-rich	700000		0.312	0.089	61.2	9.1	3.71	0.36	3.02	0.85	1750	160	0.82	0.24	4.31	0.66	7	3.5	1.03	0.37	0.23	0.26	0.38	0.25	0.419	0.059	1.08	0.28	0.143	0.045	0.56	0.16	0.116	0.016	0.02	0.016	0.136	0.054	0.011	0.015	0.113	0	0.026	0.021	0.074	0.025	0.021	0.012	0.124	0.062	0.038	0.018	0.083	0.016	0.069	0.032	160	200	1.14	0.27
BMB5847	Zircon_Sample-063.FIN2	Fe-rich	700000		0.187	0.077	23.8	6.9	1.27	0.4	1.8	1	1541	82	0.13	0.17	0.58	0.68	3.9	2.6	0.51	0.16	0.17	0.15	-0.02	0.1	0.215	0.056	0.51	0.12	0.062	0.01	0.34	0.16	0.079	0.044	0.025	0.01	0.098	0.086	0.017	0.01	0.071	0	0.0196	0.0058	0.065	0.041	0.0096	0.0055	0.05	0.034	0.0113	0.0071	0.026	0.02	0.025	0.011	-50	94	0.31	0.3
BMB5847	Zircon_Sample-064.FIN2	Fe-rich	700000		0.133	0.032	11	13	1.56	0.41	0.85	0.66	580	160	0.62	0.27	0.97	0.7	7.9	7.6	0.29	0.26	0.24	0.32	0.14	0.18	0.47	0.1	0.64	0.21	0.064	0.024	0.31	0.12	0.06	0.023	0.0241	0.0067	0.105	0.048	0.006	0.011	0.06	0	0.0182	0.0082	0.052	0.034	0.0076	0.0032	0.052	0.028	0.0142	0.0081	0.022	0.016	0.274	0.081	130	180	0.4	0.38
BMB5847	Zircon_Sample-065.FIN2	Fe-rich	700000		0.36	0.17	150	100	8.4	3.1	7.9	2.6	1520	270	5.1	1.9	1.35	0.37	13.4	4.4	1.21	0.68	0.37	0.15	2.5	1.6	1.53	0.54	4.1	1.3	0.55	0.21	3	1.3	0.74	0.36	0.114	0.082	0.64	0.57	0.17	0.22	1.4	2	0.28	0.37	0.71	0.96	0.1	0.13	0.7	1.1	0.13	0.17	0.113	0.069	0.39	0.26	310	210	1.78	0.8
BMB5847	Zircon_Sample-072.FIN2	Fe-rich	700000		0.072	0.074	1.87	0.48	2.3	1.5	1.29	0.78	605	90	3.7	1.1	0.94	0.27	10.2	5.6	0.86	0.39	0.105	0.07	0.67	0.19	0.44	0.26	1.7	1.1	0.24	0.12	1.29	0.65	0.18	0.1	0.037	0.026	0.38	0.3	0.028	0.034	0.23	0	0.039	0.018	0.089	0.073	0.0146	0.0085	0.053	0.042	0.021	0.013	0.028	0.027	0.14	0.16	380	250	2.1	1.2
BMB5847	Zircon_Sample-073.FIN2	Fe-rich	700000		0.5	0.27	132	80	10.3	5.2	4.8	2.4	1040	160	4.5	1.5	1.61	0.3	23.2	9.1	1.4	0.27	0.26	0.16	0.48	0.057	1.35	0.47	3.02	0.59	0.373	0.034	1.5	0.2	0.324	0.084	0.078	0.03	0.47	0.23	0.056	0.023	0.292	0	0.046	0.01	0.142	0.039	0.042	0.018	0.158	0.038	0.0223	0.0053	0.116	0.085	0.8	0.45	363	88	2.36	0.11
BMB5847	Zircon_Sample-074.FIN2	Fe-rich	700000		0.12	0.078	13.9	7.5	4.9	2.7	1.82	0.61	500	140	8.4	3	1.3	0.26	9.8	2.9	2.45	0.91	0.082	0.019	0.63	0.17	0.322	0.051	0.94	0.16	0.114	0.035	0.65	0.32	0.087	0.043	0.0241	0.0073	0.15	0.19	0.0228	0.0058	0.148	0	0.025	0.011	0.047	0.022	0.015	0.01	0.044	0.014	0.0171	0.004	0.033	0.051	0.045	0.017	30	140	0.6	0.17
BMB5847	Zircon_Sample-075.FIN2	Fe-rich	700000		0.073	0.085	5.7	3.6	2.77	0.15	1.22	0.63	580	150	2.99	0.34	1.74	0.22	5.07	0.83	1.24	0.29	0.02	0.075	0.334	0.053	0.27	0.11	0.89	0.22	0.108	0.021	0.47	0.14	0.12	0.1	0.0209	0.0022	0.08	0.1	0.0289	0.0089	0.107	0	0.0257	0.0098	0.052	0.029	0.0088	0.0022	0.079	0.022	0.007	0.01	0.0399	0.0055	0.075	0.026	150	150	1.87	0.15
BMB5847	Zircon_Sample-076.FIN2	Fe-rich	700000		0.167	0.061	4.4	2	1.72	0.39	1.38	0.47	840	130	5.9	1.2	0.88	0.43	6.76	0.85	1.4	0.37	0.097	0.041	0.68	0.23	0.43	0.18	1.44	0.6	0.148	0.075	0.79	0.4	0.16	0.1	0.0336	0.0095	0.32	0.29	0.025	0.026	0.134	0	0.03	0.021	0.042	0.039	0.021	0.0095	0.103	0.036	0.0204	0.0089	0.05	0.013	0.034	0.024	300	190	1.21	0.4
BMB5847	Zircon_Sample-077.FIN2	Fe-rich	700000		0.07	0.016	1.78	0.96	1.68	0.23	1.18	0.51	1116	90	2.87	0.34	0.8	0.23	14.4	3	1.22	0.32	0.083	0.083	0.283	0.062	0.553	0.097	1.94	0.8	0.24	0.13	1.02	0.47	0.18	0.1	0.053	0.04	0.44	0.3	0.037	0.025	0.16	0	0.042	0.017	0.1	0.049	0.013	0.01	0.131	0.032	0.0186	0.0089	0.023	0.016	0.038	0.014	50	210	1.48	0.11

BMB5847	Zircon_Sample-078.FIN2	Fe-rich	700000		4.6	8	140	130	7.8	4.6	-13	34	1340	200	4.9	4.3	1.29	0.54	12.3	4	0.7	1.7	-0.2	0.49	0.39	0.3	1.35	0.58	4.1	1.5	0.51	0.23	3.4	1.2	0.7	0.43	0.13	0.11	0.9	0.67	0.057	0.084	0.32	0	0.18	0.17	0.25	0.16	0.13	0.2	0.41	0.38	0.021	0.023	0.28	0.44	0.48	0.36	240	180	0.93	0.41

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5851

CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5851	Zircon_Sample-085.FIN2	Fe-rich	700000		0.18	0.079	5.7	4.4	90	22	115	3.1	119	22	123.1	7.6	31.3	1.1	1.6	0.3	71	12	13.65	0.94	1.01	0.39	-0.004	0.026	0.001	0.047	0.007	0.014	0.01	0.11	-0.052	0.015	0.012	0.013	-0.31	0.6	-0.012	0.02	-0.062	0	0.0098	0.0029	-0.014	0.047	0.0067	0.0069	0.035	0.046	-0.00146	0.00043	0.026	0.087	175	43	50	450	0.1	0.13
BMB5851	Zircon_Sample-086.FIN2	Fe-rich	700000		0.08	0.1	5.2	3.6	20.4	9.8	48	21	466	54	138	16	65.8	4	1.97	0.55	15.5	8.1	5.8	1.7	0.38	0.13	0.012	0.028	-0.012	0.031	-0.0115	0.0059	-0.001	0.075	0.059	0.063	0.0126	0.0071	0.09	0.45	0.016	0.042	-0.026	0	0.0094	0.0073	-0.022	0.056	0.0024	0.005	0.016	0.03	0.007	0.007	0.02	0.032	25.9	9.6	160	230	0.038	0.049
BMB5851	Zircon_Sample-087.FIN2	Fe-rich	700000		-0.038	0.099	1.3	2.9	92	32	85	18	10.94	0.5	90.4	6.9	30	3.5	0.99	0.32	340	120	32.5	4.6	2.14	0.45	0.007	0.087	0.01	0.039	0.007	0.018	0.02	0.14	0.07	0.13	0.024	0.018	-0.44	0.52	0.034	0.035	0.05	0	0.013	0.01	0.015	0.096	0.0034	0.007	0.106	0.082	0.018	0.017	0.036	0.079	370	100	110	200	0.114	0.09
BMB5851	Zircon_Sample-088.FIN2	Fe-rich	700000		0.125	0.05	16	19	109	73	187	85	790	200	146	41	87	46	0.52	0.18	105	73	18	11	1.05	0.72	0.0076	0.0094	-0.0022	0.0013	-0.0007	0.0054	-0.012	0.038	0.027	0.043	0.0035	0.0038	0.11	0.1	-0.0078	0.0059	0.002	0	0.0019	0.0027	0.013	0.021	-0.0000281	0.0000074	0.01	0.013	-0.00043	0.00011	-0.013	0.013	190	110	60	160	0.16	0.12
BMB5851	Zircon_Sample-089.FIN2	Fe-rich	700000		0.11	0.11	5.7	6.2	59.4	5.7	105.3	9.3	183	14	110.9	8.8	34.7	3.4	1.65	0.53	43.7	3.7	10.2	2.1	0.76	0.15	-0.021	0.046	-0.001	0.026	0.013	0.025	-0.03	0.046	0.015	0.069	0.0091	0.009	-0.41	0.19	0.001	0.038	0.009	0	-0.0003	0.0071	-0.037	0.06	-0.000108	0.000023	0.051	0.054	0.019	0.018	-0.001	0.081	108	33	-30	240	0.28	0.24
BMB5851	Zircon_Sample-090.FIN2	Fe-rich	700000		-0.053	0.052	5.7	4.7	91	3	126.2	7.9	102.1	9.1	116.6	9.4	29.9	2	1.64	0.3	85	13	13.1	2.4	0.87	0.18	-0.01	0.017	-0.017	0.027	0.019	0.0095	0.05	0.12	0.038	0.086	0.029	0.027	0.33	0.32	0.015	0.045	0.068	0	0.019	0.034	-0.01	0.12	-0.000107	0.000017	0.06	0.11	0.0094	0.009	0.09	0.14	192	16	74	40	0.108	0.068
BMB5851	Zircon_Sample-091.FIN2	Fe-rich	700000		0.09	0.11	0.9	2.8	65.1	9.2	95	18	148.6	9.1	101.2	6.2	31.7	3.8	1.48	0.18	117	10	16.5	2.2	0.98	0.28	-0.007	0.012	-0.019	0.031	-0.007	0.015	0.013	0.054	0.13	0.21	0.013	0.012	-0.06	0.51	0.024	0.032	0.071	0	0.009	0.011	0.073	0.084	0.0022	0.0047	0.045	0.047	0.003	0.01	0.06	0.18	240	30	50	120	0.072	0.051
BMB5851	Zircon_Sample-098.FIN2	Fe-rich	700000		0.01	0.11	7.2	2.8	101	11	129	11	56.1	5.7	108	10	27.6	3.9	1.32	0.5	89.9	7.1	13.6	0.67	0.95	0.18	0.014	0.056	0.012	0.027	-0.009	0.01	0.08	0.17	0.02	0.12	0.021	0.019	0.05	0.37	0.003	0.034	0.14	0	0.009	0.016	-0.019	0.062	0.013	0.012	0.11	0.12	0.012	0.02	0.06	0.16	208.8	7.7	180	150	0.036	0.093
BMB5851	Zircon_Sample-099.FIN2	Fe-rich	700000		0.092	0.029	7.2	3.1	17.4	1.2	38.6	3	487	70	142	6.3	64.3	5	1.98	0.6	9.7	1	5.35	0.41	0.319	0.077	-0.007	0.026	0.023	0.027	0.013	0.027	0.05	0.13	-0.019	0.037	0.0035	0.0089	0.19	0.18	0.063	0.059	0.01	0	0.011	0.022	-0.018	0.061	-0.000093	0.000016	0.032	0.055	0.0015	0.0063	0.029	0.08	22.8	2	-10	220	0.038	0.079
BMB5851	Zircon_Sample-100.FIN2	Fe-rich	700000		0.11	0.14	6.8	1.8	90.6	9.3	103	8.6	21.3	5.4	80	8.2	24.2	3.7	0.93	0.35	221	91	24.2	5.3	1.29	0.28	-0.008	0.047	0.036	0.038	-0.0037	0.0086	0.02	0.13	0.03	0.1	0.009	0.013	0.03	0.25	0.039	0.054	0.038	0	0.0105	0.0079	0.065	0.057	0.002	0.0042	0.07	0.14	-0.00159	0.00032	0.07	0.15	320	120	50	190	0.073	0.076
BMB5851	Zircon_Sample-101.FIN2	Fe-rich	700000		0.051	0.067	7.7	3.3	86	26	141	25	510	230	110	45	34	13	1.21	0.38	79	10	16.2	2.6	1.01	0.26	0.0265	0.0096	0.008	0.017	-0.001	0.011	0.01	0.14	0	0.16	0.01	0.013	-0.03	0.3	-0.003	0.012	0.011	0	0.011	0.012	-0.008	0.05	0.0062	0.0073	0.016	0.028	0.0013	0.0056	-0.02	0.049	148	27	20	270	0.104	0.058
BMB5851	Zircon_Sample-102.FIN2	Fe-rich	700000		0.055	0.059	18	33	112	24	143	38	400	120	160	34	39.3	6	1.45	0.64	85	10	14.2	3.1	0.81	0.13	-0.013	0.034	0.005	0.025	0	0.0066	-0.049	0.026	-0.003	0.062	0.0018	0.0051	0.05	0.13	0.01	0.016	0.006	0	0.0039	0.0063	-0.01	0.028	0.0029	0.0037	0.052	0.059	0.0124	0.0098	-0.054	0.014	156	32	80	200	0.12	0.055
BMB5851	Zircon_Sample-103.FIN2	Fe-rich	700000		0.16	0.2	3.4	1.3	70	17	81	9.3	560	76	177	35	49	13	2.03	0.54	39.8	7	7.3	1.5	0.45	0.2	-0.048	0.02	0.031	0.046	-0.003	0.017	-0.012	0.079	0.006	0.075	0.012	0.019	-0.02	0.22	0.024	0.051	-0.01	0	0.008	0.015	0.01	0.12	0.01	0.013	0.017	0.031	0.009	0.013	0.017	0.036	107	20	140	150	0.019	0.045
BMB5851	Zircon_Sample-104.FIN2	Fe-rich	700000		0.001	0.034	5.7	1.4	57.1	5.1	75.5	2.1	507	52	173	16	44.7	6.1	1.9	1	27.1	6	7.87	0.94	0.57	0.23	0.008	0.021	0.001	0.02	-0.0007	0.0053	0.017	0.093	0.04	0.091	0.008	0.017	-0.1	0.25	0.008	0.017	-0.037	0	0.015	0.025	0.087	0.063	-0.000078	0.000011	0.009	0.032	0.0031	0.0088	-0.053	0.04	83	15	190	250	0.21	0.14
BMB5851	Zircon_Sample-111.FIN2	Fe-rich	700000		0.054	0.028	1.1	1.2	5.5	5.9	20	16	410	110	78	31	15	16	5.9	4.5	5.3	5.1	2	2.1	0.1	0.13	0.005	0.021	-0.002	0.0061	-0.0024	0.0049	0.002	0.027	0.006	0.032	-0.000224	0.000058	-0.05	0.11	-0.0004	0.0052	-0.003	0	0.0069	0.0018	0.035	0.07	0.0014	0.0016	0.012	0.029	0.0026	0.004	-0.012	0.028	24	14	60	210	0.02	0.027
BMB5851	Zircon_Sample-112.FIN2	Fe-rich	700000		0.023	0.048	-0.38	0.74	0.67	0.81	3.2	1.6	383	30	69	21	1.5	1.6	2.3	2.3	1.7	1.2	0.24	0.26	0.011	0.024	0.012	0.017	-8.00E-06	1.20E-02	-0.002	0.0073	-0.005	0.03	0.019	0.048	0.0016	0.0037	0.09	0.2	-0.0013	0.0089	0.05	0	0.0051	0.0054	0.002	0.04	0.0008	0.0016	0.013	0.014	0.0011	0.0033	-0.016	0.029	4.8	3.3	140	230	0.009	0.023
BMB5851	Zircon_Sample-113.FIN2	Fe-rich	700000		0.045	0.046	-0.5	0.65	0.074	0.068	0.56	0.48	230	110	31.4	6.6	0.05	0.11	0.98	0.27	0.84	0.82	0.07	0.068	0.0135	0.0085	0	0.011	-0.0022	0.0036	0.001	0.0038	0.028	0.016	-0.0024	0.0096	0.0073	0.0061	0.034	0.034	0.008	0.014	-0.001	0	0.0001	0.0017	0.027	0.031	0.0007	0.0015	0.016	0.026	0.005	0.011	-0.019	0.012	0.9	0.97	330	340	0.0019	0.0054
BMB5851	Zircon_Sample-114.FIN2	Fe-rich	700000		0.088	0.045	0.6	0.34	0.26	0.21	5.9	3.8	370	100	54	5.6	0.25	0.42	1.21	0.38	0.92	0.38	0.1	0.14	0.03	0.035	0.0058	0.0072	-0.004	0.011	0.0032	0.0046	-0.007	0.023	0.011	0.025	0.0055	0.0057	0.02	0.1	0.009	0.018	-0.017	0	0.0029	0.0047	0.041	0.056	0.0006	0.0012	0.009	0.009	0.0024	0.0032	0.012	0.047	9.4	4.6	-90	140	0.012	0.011
BMB5851	Zircon_Sample-115.FIN2	Fe-rich	700000		0.047	0.026	1.1	1.7	0.015	0.014	0	1.4	322	94	53.7	5.2	0.052	0.069	1.7	1.3	0.85	0.54	0.057	0.019	0.016	0.012	-0.013	0.014	0.0059	0.0095	-0.0019	0.005	0.031	0.066	0.002	0.022	0.0071	0.0093	0.048	0.092	-0.0077	0.0094	0.035	0	0.0024	0.004	0.019	0.068	-0.000032	0.000015	-0.0002	0.0073	0.0009	0.0029	0.021	0.062	1.54	0.81	140	160	1.1	2.3
BMB5851	Zircon_Sample-116.FIN2	Fe-rich	700000		0.034	0.043	0.8	2.5	0.28	0.57	1.65	0.17	175.1	8.8	40	13	1.6	3.1	1.09	0.31	1.2	1.7	0.28	0.18	0.058	0.026	-0.003	0.0021	0	0.011	-0.0011	0.008	0.006	0.037	-0.005	0.042	0.0032	0.0066	-0.01	0.14	-0.0005	0.0038	0.018	0	-0.00097	0.00066	0.031	0.068	0.0011	0.0022	0.024	0.012	-0.0005	0.00034	0.003	0.015	1.4	2	-100	100	0.0032	0.0063
BMB5851	Zircon_Sample-117.FIN2	Fe-rich	700000		0.127	0.013	48	26	120	11	163	10	1440	160	279	27	147	30	2.5	2.7	74.9	9.2	16.2	1.2	1.067	0.092	0.003	0.03	0.9	1.7	0.0003	0.0092	0.015	0.019	0.003	0.022	0.0027	0.003	-0.093	0.022	0.0042	0.0059	0.019	0	0.0086	0.0026	0.012	0.029	0.0021	0.0043	0.01	0.026	0.0051	0.0055	0.001	0.022	129	13	-60	220	0.72	0.26
BMB5851	Zircon_Sample-124.FIN2	Fe-rich	700000		0.135	0.095	40	55	72	23	130	29	850	380	152	29	153	18	1.18	0.17	54.4	8.4	15.7	1.9	1.09	0.24	0.0004	0.0028	0.016	0.011	-0.0002	0.0041	0.004	0.035	-0.014	0.014	0.003	0.0063	-0.089	0.084	0.0099	0.0087	0.0038	0	0.0031	0.0041	0.01	0.025	0.0005	0.0011	0.005	0.01	0.0021	0.0052	0.004	0.018	110	14	50	150	0.28	0.17
BMB5851	Zircon_Sample-125.FIN2	Fe-rich	700000		0.063	0.068	3.4	2.7	28	22	55	39	456	61	100	23	47	32	0.98	0.66	22	16	7.6	5.5	0.45	0.38	0.0034	0.0095	0.0017	0.009	0	0.0071	-0.018	0.014	-0.014	0.024	0.0021	0.0028	-0.022	0.066	0.015	0.012	0.014	0	0.0027	0.0043	0.004	0.032	0.0032	0.0033	0.011	0.017	0.0054	0.0067	-0.01	0.018	41	22	100	120	0.07	0.049
BMB5851	Zircon_Sample-126.FIN2	Fe-rich	700000		0.082	0.025	-0.2	0.97	0.27	0.1	5.3	2.1	297	86	51.2	8.1	1	0.26	0.836	0.053	2.1	1.1	0.071	0.095	0.0001	0.0051	0.0032	0.0083	0.0064	0.0076	0.0036	0.0078	-0.006	0.022	-0.01	0.03	0.0062	0.0064	0.016	0.023	0.005	0.0058	-0.016	0	0.007	0.0066	-0.01	0.04	-0.000026	0.00001	0.012	0.019	0.0021	0.0031	-0.033	0.02	18	13	50	220	0.001	0.013
BMB5851	Zircon_Sample-127.FIN2	Fe-rich	700000		0.066	0.053	19	33	19	35	24	44	770	420	109	86	29	54	2.9	1.7	9	16	2.8	5.1	0.18	0.36	0.0037	0.0021	0.0032	0.0067	-0.0014	0.0047	-0.03	0.018	0.002	0.045	0.0043	0.0045	-0.058	0.055	0.013	0.014	0.0078	0	0.0023	0.0041	-0.001	0.033	0.0008	0.0016	0.009	0.015	0.0039	0.0089	-0.008	0.026	27	46	300	310	0.1	0.21
BMB5851	Zircon_Sample-128.FIN2	Fe-rich	700000		0.038	0.07	0.47	0.75	0.089	0.057	1.78	0.42	168	50	46	12	0.01	0.045	0.5	0.17	5.5	1.9	0.17	0.13	0.014	0.017	0.011	0.019	0.003	0.013	-0.0001	0.0049	0.005	0.029	-0.022	0.012	0.0013	0.0018	-0.066	0.056	0.0061	0.0089	0.001	0	0.0008	0.0026	0.002	0.052	0.0005	0.001	0.007	0.011	0.0075	0.0046	0.002	0.016	15.9	9.1	40	310	-0.004	0.011
BMB5851	Zircon_Sample-129.FIN2	Fe-rich	700000		0.049	0.099	1.3	1.1	0.11	0.19	4	2.9	218	91	42	18	0.54	0.37	1.12	0.34	0.37	0.5	0.09	0.18	0.016	0.027	-0.006	0.012	-0.004	0.02	-0.002	0.011	-0.019	0.051	0.07	0.16	0.0066	0.0061	-0.07	0.19	-0.013	0.027	-0.011	0	0.0051	0.0082	-0.02	0.055	-0.000045	0.000024	0.024	0.028	0.0049	0.0046	-0.017	0.035	7.6	6.4	-180	260	-0.01	0.023
BMB5851	Zircon_Sample-130.FIN2	Fe-rich	700000		0.044	0.019	-0.29	0.21	0.056	0.087	0.62	0.85	176	32	51.8	5.7	0.21	0.28	1.7	1.8	0.07	0.21	0.06	0.13	-0.0019	0.0058	0.006	0.012	0.0048	0.0074	-0.0033	0.0011	0.007	0.04	0.003	0.023	0.001	0.0023	0.052	0.071	1.00E-05	9.80E-03	-0.002	0	0.0001	0.0014	-0.0146	0.0027	0.0013	0.0014	0.005	0.013	0.0026	0.0037	-0.001	0.019	0.95	0.78	-20	330	0.0022	0.0076
BMB5851	Zircon_Sample-137.FIN2	Fe-rich	700000		0.12	0.14	1.1	1.1	0.24	0.29	2.8	2.4	276	25	59.7	7.4	0.6	1.2	1.67	0.96	0.12	0.34	0.11	0.14	0.02	0.013	0.032	0.028	0.007	0.014	-0.0023	0.0025	0.016	0.076	-0.017	0.012	0.0012	0.0027	-0.127	0.092	0.0037	0.0079	0.014	0	0.01	0.012	0.049	0.089	0.0033	0.0047	-0.0019	0.0053	0.0015	0.0045	0.002	0.034	4	2.1	130	160	-0.002	0.013
BMB5851	Zircon_Sample-138.FIN2	Fe-rich	700000		0.011	0.052	-0.2	1.4	0.7	1.2	12.3	7	249	93	66	13	2.6	4.5	0.409	0.083	2.7	0.22	0.17	0.33	0.006	0.021	-0.0052	0.0027	0.0106	0.004	0.0021	0.0029	0.009	0.011	0.008	0.022	0.0042	0.0044	0.01	0.19	-0.0011	0.0062	0.02	0	0.0001	0.0015	-0.025	0.032	0.0005	0.0011	0.003	0.012	-0.0004	0.00025	0.002	0.015	9.5	7.4	100	250	0.003	0.015
BMB5851	Zircon_Sample-139.FIN2	Fe-rich	700000		0.042	0.072	10	12	5.7	3.7	10	8.2	498	65	60	11	5	4.5	0.98	0.14	3.6	2.2	0.9	1	0.08	0.044	0.006	0.01	0.0115	0.0076	0.0008	0.0035	0.0047	0.0081	0.022	0.034	0.0016	0.002	-0.14	0.15	0.009	0.016	0.006	0	0.002	0.002	0.005	0.044	0.0006	0.0012	0.0151	0.0059	0.0037	0.0015	0.007	0.029	10.1	8.2	-10	190	0.021	0.046
BMB5851	Zircon_Sample-140.FIN2	Fe-rich	700000		0.095	0.014	10.7	7.9	44.6	3.8	86.1	7.1	970	180	195	10	147	20	2.2	0.36	35	10	17.6	1.1	1.083	0.027	0.0036	0.002	0.0037	0.0046	0.0014	0.0021	-0.016	0.017	0.0211	0.0036	0.0013	0.0027	0.059	0.049	-0.0026	0.0057	0.006	0	0.0002	0.0016	0.001	0.033	0.0015	0.0015	0.009	0.013	0.0042	0.0031	-0.003	0.03	71.2	6	160	100	0.234	0.074
BMB5851	Zircon_Sample-141.FIN2	Fe-rich	700000		0.036	0.028	0.35	0.42	0.072	0.046	1.02	0.9	140	35	29	10	-0.002	0.021	1.4	1.2	1.7	1.4	0.041	0.096	0.011	0.02	0.009	0.025	-0.0028	0.0032	0	0.0019	0.027	0.041	0.007	0.022	0.0008	0.0018	0.04	0.14	-0.0061	0.0033	0.0011	0	0.00157	0.00014	0.006	0.013	-0.0000141	0.0000013	0.0013	0.0066	0.0013	0.0016	-0.004	0.012	8.3	7.9	-10	170	0.0058	0.0038
BMB5851	Zircon_Sample-142.FIN2	Fe-rich	700000		0.082	0.032	0.2	0.91	2.8	4.6	9.7	9.6	400	180	46	19	3.1	5.3	0.94	0.73	1.4	2	0.37	0.62	0.034	0.077	-0.012	0.013	0.0025	0.005	-0.002	0.0044	0.001	0.037	0.012	0.014	0.0036	0.0057	-0.02	0.11	0.0048	0.0055	0.019	0	0.0044	0.0055	0.014	0.035	0.002	0.0017	-0.0004	0.0054	0.0028	0.0025	-0.017	0.016	20.6	5.4	110	200	0.021	0.033
BMB5851	Zircon_Sample-143.FIN2	Fe-rich	700000		0.033	0.013	0.14	0.69	2.6	5.2	7	12	220	100	45	18	9	17	0.73	0.53	2.3	3.4	0.9	1.8	0.06	0.15	-0.0057	0.0027	0.0038	0.0044	0.0022	0.0031	0.003	0.023	-0.0004	0.0056	0.0028	0.0034	-0.06	0.15	0.0032	0.0066	0.012	0	0.0004	0.0013	0.016	0.038	0.0026	0.0031	0.013	0.019	0.0002	0.0012	-0.0059	0.0079	6.9	8.9	180	130	0.01	0.013
BMB5851	Zircon_Sample-150.FIN2	Fe-rich	700000		0.057	0.072	-0.2	1.1	0.098	0.011	1.04	0.14	128	19	34.4	9	0.03	0.11	3.4	2.6	0.31	0.2	0.114	0.032	0.003	0.059	0.0101	0.0065	0.004	0.011	0.0086	0.0055	-0.002	0.04	0.002	0.011	0.0024	0.0028	-0.026	0.061	0.018	0.011	0.019	0	0.0036	0.0014	0.006	0.014	0.0041	0.0033	0.0153	0.0064	-0.0005	0.00021	0.001	0.023	0.49	0.94	-130	200	0.016	0.041
BMB5851	Zircon_Sample-151.FIN2	Fe-rich	700000		0.002	0.057	0.12	0.55	0.088	0.0093	0.5	0.84	122	58	24.3	7.8	0.068	0.031	0.64	0.44	0.357	0.041	0.001	0.07	0.004	0.012	0.002	0.0039	-0.002	0.0057	-0.0016	0.0019	0.002	0.013	0.0058	0.0023	0.0006	0.0014	-0.03	0.24	-0.002	0.01	-0.011	0	0.0021	0.0036	0.007	0.021	0.0005	0.001	0.016	0.024	0.0016	0.0024	0.005	0.021	0.27	0.31	61	75	0.011	0.028
BMB5851	Zircon_Sample-152.FIN2	Fe-rich	700000		0.085	0.053	-0.47	0.45	0.9	0.21	5.6	1	120	18	51.3	6	1.3	1.1	0.64	0.3	1.747	0.09	0.42	0.083	0.018	0.045	0.012	0.02	0.006	0.012	-0.0024	0.002	-0.007	0.04	0.012	0.0041	0.0009	0.0019	-0.02	0.15	-0.007	0.01	-0.008	0	0.0022	0.0052	0.013	0.025	0.0013	0.0026	0.0136	0.0072	0.0049	0.0061	0.019	0.035	1.54	0.25	30	250	0.0023	0.0068
BMB5851	Zircon_Sample-153.FIN2	Fe-rich	700000		0.12	0.022	8.7	1.2	46	24	93	45	730	200	115	27	113	52	0.68	0.13	46	25	15.9	8	1.57	0.82	-0.0011	0.0029	0.0058	0.0069	-0.0002	0.0017	-0.0078	0.0097	-0.0007	0.0097	0.0022	0.0015	-0.014	0.068	-0.0032	0.0068	0.009	0	0.0021	0.0021	-0.001	0.024	0.00084	0.00099	0.008	0.022	0.0002	0.0012	0.006	0.011	122	61	-70	240	0.108	0.048
BMB5851	Zircon_Sample-154.FIN2	Fe-rich	700000		0.0685	0.0094	6.3	4.8	39	15	70	36	1210	290	164	37	87	40	0.47	0.22	30	14	8.9	3.7	0.88	0.5	-0.0042	0.0037	0.0028	0.0053	0.0023	0.0012	-0.006	0.017	0.013	0.035	-0.0000496	0.0000066	0.05	0.14	-0.004	0.008	-0.008	0	0.00393	0.00053	-0.0036	0.008	-0.0000161	0.0000022	0.007	0.02	0.0028	0.0037	0.0098	0.0012	73	35	0	100	0.11	0.0078
BMB5851	Zircon_Sample-155.FIN2	Fe-rich	700000		0.038	0.013	0.39	0.92	1.8	1.7	4.3	3.4	370	160	59	11	4.6	2.7	0.57	0.24	1.8	1.3	0.5	0.35	0.032	0.04	0.0051	0.0081	0.0021	0.0075	0.0016	0.0042	-0.0029	0.0073	-0.0027	0.0059	0.0006	0.0012	-0.005	0.073	0.0027	0.0057	0.0015	0	0.0041	0.0053	0.01	0.014	0.0006	0.0012	0.01	0.01	0.0021	0.0034	0.0008	0.0043	5.8	4.9	-70	110	0.039	0.021
BMB5851	Zircon_Sample-156.FIN2	Fe-rich	700000		0.039	0.031	0	0.74	0.055	0.025	0.37	0.19	360	200	44	18	0.029	0.048	0.79	0.44	0.12	0.35	0.043	0.044	0.007	0.027	-0.0032	0.0057	0.0007	0.0076	0.0043	0.0033	0.007	0.02	-0.0093	0.0018	0.0029	0.0038	-0.04	0.1	0.0032	0.0093	0.001	0	0.0035	0.0025	-0.004	0.011	0.0006	0.0012	0.013	0.013	-0.000378	0.000073	0.0037	0.0087	0.2	0.14	-140	220	0.0108	0.0043

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5852

CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5852	Zircon_Sample-215.FIN2	Fe-rich	700000		0.085	0.041	0.74	0.84	0.018	0.035	0.67	0.83	1380	220	534	65	740	240	6	7.5	0.71	0.37	-0.007	0.069	0.32	0.19	0.0011	0.0066	0.0047	0.0049	0.0021	0.0029	0.021	0.036	0	0.019	0.0003	0.0019	0.032	0.052	0.0033	0.0046	-0.005	0	0.0051	0.0046	0.011	0.026	0.0019	0.0014	-0.0058	0.0077	0.0021	0.0046	0.014	0.034	0.067	0.055	360	330	0.0046	0.0035
BMB5852	Zircon_Sample-216.FIN2	Fe-rich	700000		0.049	0.029	1.2	1.3	0.032	0.019	0.22	0.45	1225	37	622	79	747	86	14	10	0.37	0.14	0.11	0.15	0.15	0.14	0.0075	0.0093	0.0053	0.0063	0.0029	0.0045	0	0.017	-0.008	0.023	0.0006	0.0029	0.07	0.19	-0.0054	0.0065	0.008	0	0.0027	0.0014	0.007	0.036	0.0023	0.0031	-0.0023	0.0077	0.0027	0.0027	-0.0006	0.0089	0.041	0.053	70	210	0.0053	0.0044
BMB5852	Zircon_Sample-217.FIN2	Fe-rich	700000		0.005	0.013	1.38	0.97	4.3	6.7	11	17	1490	210	950	190	3800	2400	6.1	1.6	3.4	3.6	0.54	0.88	9	13	0.007	0.008	0.011	0.0074	-0.0013	0.0034	0.031	0.025	0.027	0.029	0.007	0.012	0.033	0.097	0.006	0.013	0.011	0	0.0032	0.0028	0	0.038	0.0008	0.0018	0.016	0.027	0.0027	0.0033	0.022	0.057	1.2	1.7	160	130	0.009	0.013
BMB5852	Zircon_Sample-218.FIN2	Fe-rich	700000		0.004	0.042	-0.03	0.64	0.31	0.3	1.71	0.94	1090	210	790	110	1790	480	6.8	4.2	1.51	0.45	0.17	0.1	1.5	1.2	-0.003	0.0047	0.0011	0.0084	-0.001	0.0039	0.023	0.03	-0.002	0.03	0.0006	0.002	0.032	0.059	0.0035	0.0041	0.006	0	-0.0001	0.0028	-0.038	0.027	0.003	0.0039	-0.0068	0.005	0.0003	0.0011	-0.001	0.031	0.21	0.2	140	120	0.021	0.023
BMB5852	Zircon_Sample-219.FIN2	Fe-rich	700000		0.024	0.027	0.49	0.72	0.08	0.14	1	0.86	890	170	640	95	950	280	3.5	1	0.7	0.45	0.29	0.57	0.37	0.2	-0.003	0.011	0.0019	0.005	0.0008	0.0052	0.016	0.025	0.0083	0.0068	0.0013	0.0027	0	0.074	-0.0036	0.0059	0.019	0	0.0021	0.0033	0.003	0.026	0.0012	0.0017	0.0025	0.0098	0.0045	0.0032	0.018	0.019	0.059	0.091	180	240	0.007	0.01
BMB5852	Zircon_Sample-220.FIN2	Fe-rich	700000		0.024	0.019	2.5	1.5	0.63	0.29	0.91	0.37	1020	290	436	41	1550	190	14.4	5.1	2.6	1.3	0.089	0.045	1.63	0.85	-0.008	0.013	0.009	0.011	-0.0039	0.002	-0.016	0.049	0.019	0.022	0.0031	0.0042	0.01	0.13	0.005	0.012	0.002	0	0.0023	0.0029	0.017	0.041	0.0025	0.0035	0.005	0.019	0.0019	0.0022	0.015	0.032	0.49	0.24	130	230	0.0084	0.0088
BMB5852	Zircon_Sample-221.FIN2	Fe-rich	700000		0.064	0.061	1	1.1	0.71	0.35	3.3	1.9	1660	270	581	63	2900	1100	24	14	2.3	1	0.095	0.085	3.3	1.8	0.0036	0.0073	0.0063	0.0032	0.0028	0.008	0.05	0.06	-0.011	0.035	0.0026	0.0063	-0.06	0.19	-0.005	0.014	-0.014	0	0.0036	0.0025	0.021	0.041	0.001	0.0015	0.013	0.051	0.0026	0.0055	-0.002	0.022	1.01	0.84	40	180	0.09	0.18
BMB5852	Zircon_Sample-228.FIN2	Fe-rich	700000		0.042	0.038	2.7	2.3	3.2	4.7	8.4	9	1429	82	1210	350	3230	970	8	2.8	4.96	0.95	0.84	0.76	11	14	-0.002	0.023	0.015	0.023	0.0015	0.0042	-0.011	0.031	0.01	0.031	0.0063	0.0051	-0.07	0.18	-0.0038	0.0075	-0.017	0	0.01	0.019	-0.009	0.014	0.0021	0.0028	-0.0036	0.0069	0.0025	0.0042	-0.003	0.021	1.94	0.74	80	150	0.007	0.011
BMB5852	Zircon_Sample-229.FIN2	Fe-rich	700000		0.12	0.11	8.1	8.4	0.47	0.51	1.52	0.81	980	170	567	95	500	150	114	82	0.25	0.32	0.11	0.13	0.113	0.058	0.23	0.18	0.59	0.46	0.053	0.038	0.23	0.1	0.022	0.017	0.016	0.016	0.125	0.026	0.0031	0.0039	0.039	0	0.0099	0.0066	0.012	0.029	0.0036	0.0028	0.014	0.016	0.0032	0.0022	0.033	0.024	0.019	0.023	187	92	0.94	0.51
BMB5852	Zircon_Sample-230.FIN2	Fe-rich	700000		0.17	0.13	17	15	3.9	3	1.59	0.51	828	70	561	45	800	150	590	290	2.3	1.5	0.51	0.36	1.9	1.1	0.55	0.36	1	0.88	0.103	0.08	0.41	0.43	0.1	0.073	0.021	0.024	0.05	0.11	0.013	0.012	0.089	0	0.0214	0.0063	0.038	0.03	0.0098	0.0092	0.012	0.017	0.0069	0.0046	0.012	0.016	0.45	0.25	198	73	3	1.3
BMB5852	Zircon_Sample-231.FIN2	Fe-rich	700000		0.09	0.13	9	12	4.4	3	0.48	0.43	1110	120	700	100	1020	580	560	200	1.84	0.75	0.18	0.11	2.12	0.78	0.26	0.25	0.52	0.61	0.051	0.058	0.26	0.29	0.042	0.066	0.013	0.01	0.11	0.15	0.0062	0.0097	0.033	0	0.0066	0.0082	0.052	0.074	0.0047	0.005	0.035	0.045	0.0025	0.0028	0.0074	0.0082	0.34	0.2	230	340	1.5	1.6
BMB5852	Zircon_Sample-232.FIN2	Fe-rich	700000		0.013	0.045	3.5	2.6	28	15	69	36	960	130	1720	400	9450	460	65	46	22.6	4.9	4.5	2.8	71	28	0.006	0.018	0.0036	0.0093	-0.0029	0.0034	-0.015	0.016	0	0.015	0	0.0016	-0.04	0.11	-0.0058	0.0092	-0.007	0	0.003	0.0022	-0.006	0.011	0.0004	0.001	0.021	0.023	0.001	0.0016	0.003	0.011	4.9	2.7	140	270	0.03	0.02
BMB5852	Zircon_Sample-233.FIN2	Fe-rich	700000		0.067	0.044	-0.1	1.2	1.27	0.36	0.73	0.45	1330	240	530	140	750	300	420	210	1.17	0.39	0.05	0.13	1.25	0.43	0.032	0.033	0.018	0.021	-0.0049	0.0042	0.02	0.029	0.017	0.039	0.0021	0.003	-0.058	0.065	0.006	0.011	0.015	0	0.0053	0.0022	-0.012	0.024	0.0014	0.0022	-0.01	0.017	0.0008	0.0023	0.006	0.029	0.264	0.073	300	270	0.086	0.078
BMB5852	Zircon_Sample-234.FIN2	Fe-rich	700000		0.041	0.019	0.79	0.9	2.1	3.7	5.4	8.9	1480	170	900	330	1360	980	21	18	1.6	1.7	0.37	0.62	6	10	0.0031	0.0059	-0.009	0.012	-0.0025	0.0033	0.013	0.018	0.013	0.052	0.0041	0.0044	0.006	0.021	-0.0047	0.0069	0.005	0	0.001	0.0041	-0.004	0.026	0.0018	0.0037	0.006	0.03	0.0005	0.0016	-0.002	0.013	0.48	0.74	160	92	0.0094	0.0081
BMB5852	Zircon_Sample-241.FIN2	Fe-rich	700000		-0.02	0.18	1.7	2.9	5.8	3.7	-0.1	2	1510	330	790	130	990	560	470	110	6.1	7.8	0.006	0.036	2.3	1.6	0.021	0.02	0.015	0.033	-0.0014	0.0079	0.014	0.061	0.013	0.046	0.0065	0.0077	-0.04	0.14	0	0.013	-0.015	0	0.011	0.01	-0.007	0.014	0.0006	0.0018	0.063	0.096	-0.00046	0.00045	0.013	0.023	0.48	0.43	250	260	0.096	0.043
BMB5852	Zircon_Sample-242.FIN2	Fe-rich	700000		0.079	0.016	2.14	0.97	8.7	2.6	23.9	8.4	940	110	730	67	3550	600	183	27	8.7	3	1.11	0.34	30	11	0.0055	0.0099	0.0003	0.008	0.0016	0.008	0.033	0.039	0.009	0.024	0.0059	0.0036	0.006	0.058	-0.0005	0.0062	0.029	0	0.003	0.0044	-0.006	0.023	0.0013	0.0018	0.023	0.039	0.0032	0.0042	0.009	0.011	2.19	0.66	120	200	0.021	0.023
BMB5852	Zircon_Sample-243.FIN2	Fe-rich	700000		0.124	0.076	7.7	1.5	30.3	3.8	78	13	1370	110	733	60	12300	2300	1000	510	17.7	4.2	4.5	1.1	70	19	-0.006	0.016	0.0005	0.0078	-0.0047	0.0096	0.059	0.078	0.015	0.052	0.011	0.011	-0.07	0.13	-0.006	0.017	0.031	0	0.0048	0.0087	0.001	0.026	0.005	0.004	-0.006	0.024	0.001	0.0029	-0.002	0.02	9.1	2.9	410	160	0.029	0.021
BMB5852	Zircon_Sample-244.FIN2	Fe-rich	700000		0.104	0.021	10.5	3.9	18	13	51	35	700	320	486	29	15900	3900	233	81	12.1	2.2	3.1	2.4	48	24	-0.0113	0.009	0.0044	0.0045	0.0044	0.0074	0.016	0.017	-0.006	0.033	0.0038	0.0039	0.07	0.1	0.0013	0.0084	-0.013	0	0.0024	0.0038	0.005	0.057	0.0052	0.0043	0.008	0.02	0.0033	0.0046	0.015	0.024	5.6	2.9	470	280	0.2	0.17
BMB5852	Zircon_Sample-245.FIN2	Fe-rich	700000		0.059	0.018	6.79	0.76	37	12	91	17	840	140	478	21	12200	1000	175	91	25.2	2.7	4.9	1.7	101.2	8.7	0.006	0.015	-0.0002	0.0024	0.0008	0.0051	0.026	0.026	-0.006	0.016	0.0091	0.0099	0.079	0.059	0.005	0.013	0.011	0	0.0039	0.0044	0.007	0.021	0.0005	0.0013	-0.0023	0.0075	-0.000252	0.000021	0.003	0.019	11.1	2.9	360	260	0.0192	0.0098
BMB5852	Zircon_Sample-246.FIN2	Fe-rich	700000		0.015	0.022	4.42	0.78	17.3	1.1	47.3	5.7	1501	89	988	43	10200	1500	17.9	2.5	33.7	2.9	3.15	0.83	52.4	9.1	-0.001	0.017	-0.0084	0.0064	0.0003	0.0028	0.002	0.016	0.014	0.024	0.0034	0.0055	0.007	0.085	0.0003	0.0067	-0.003	0	0.0054	0.0061	0.035	0.033	0.0005	0.0013	0.003	0.016	0.0023	0.0022	0.015	0.022	4.63	0.56	260	250	0.0283	0.0092
BMB5852	Zircon_Sample-247.FIN2	Fe-rich	700000		0.042	0.028	1.9	2.3	9.7	3.6	14.3	7.5	1020	120	1480	520	6400	2400	240	160	9.1	5.7	0.7	0.35	29	13	0.001	0.018	0.011	0.019	-0.0023	0.0047	0.049	0.014	0.021	0.018	0.0011	0.0034	0.1	0.17	-0.001	0.012	0.014	0	0.0016	0.0023	0.005	0.032	0.0015	0.0022	0.026	0.039	0.001	0.0017	0.018	0.024	1.9	0.59	110	160	0.013	0.01
BMB5852	Zircon_Sample-254.FIN2	Fe-rich	700000		0.06	0.027	1.5	2	0.091	0.082	0.7	1	1840	290	680	110	695	89	13	10	3.324	0.062	0.07	0.13	1.56	0.53	-0.001	0.015	0.037	0.038	0.01	0.013	0.012	0.02	0.021	0.031	0.0038	0.0056	-0.03	0.11	0.001	0.01	0.012	0	0.0039	0.0062	0.032	0.025	0.0057	0.0034	0.01	0.02	0.0005	0.0017	0.032	0.036	0.15	0.13	190	150	0.161	0.085
BMB5852	Zircon_Sample-255.FIN2	Fe-rich	700000		0.21	0.11	10.4	8.5	1.05	0.6	1.67	0.53	3310	420	902	64	1020	440	6.7	1.9	2.37	0.86	0.24	0.15	1.34	0.37	0.39	0.21	0.81	0.46	0.072	0.04	0.33	0.19	0.089	0.05	0.014	0.014	0.05	0.14	0.008	0.017	0.035	0	0.009	0.013	0.029	0.038	0.003	0.0027	0.016	0.034	0.0075	0.0054	0.053	0.039	0.33	0.22	100	170	1.87	0.68
BMB5852	Zircon_Sample-256.FIN2	Fe-rich	700000		0.013	0.07	-0.3	2.4	0.54	0.13	2.12	0.63	3868	56	400	87	1490	190	12.4	4.8	2.2	1.9	0.16	0.15	0.34	0.33	0.011	0.02	0.025	0.025	0.0032	0.0042	0.029	0.024	-0.007	0.038	0.005	0.0063	0.035	0.069	-0.016	0.012	0.027	0	0.02	0.019	-0.01	0.025	0.0005	0.0014	0.007	0.03	0.0029	0.0048	0.046	0.071	0.23	0.12	180	110	0.408	0.077
BMB5852	Zircon_Sample-257.FIN2	Fe-rich	700000		0.026	0.019	1.73	0.82	9.1	3.6	29	14	930	260	1170	270	6780	960	18.8	9.4	7.96	0.86	1.36	0.68	25.1	7.3	0.013	0.02	-0.0095	0.0081	-0.0022	0.0039	0.029	0.027	-0.013	0.014	0.003	0.0042	0.047	0.097	-0.0013	0.0029	0.021	0	0.0019	0.0019	0.002	0.021	0.0041	0.0038	0.006	0.021	0.002	0.0028	0.005	0.013	3.1	1.6	30	210	0.0185	0.0052
BMB5852	Zircon_Sample-258.FIN2	Fe-rich	700000		-0.002	0.072	1.5	1.1	0.104	0.059	1.04	0.92	4070	290	964	47	397	15	12.8	7.2	6.55	0.89	-0.04	0.16	1.08	0.52	0.012	0.014	0.0116	0.0043	-0.0044	0.0046	0.031	0.035	0.008	0.026	0.0066	0.0094	0.04	0.13	0.008	0.013	0.017	0	0.0024	0.006	0.001	0.053	0.0003	0.0011	-0.003	0.026	0.0029	0.0031	0.003	0.032	0.27	0.17	150	230	0.044	0.035
BMB5852	Zircon_Sample-259.FIN2	Fe-rich	700000		0.056	0.024	2.9	1.6	17.5	2.6	53.3	7.7	597	53	2000	310	10700	1900	78	51	13.4	2.1	3.36	0.73	55	10	0	0.017	0.0002	0.0048	0.0026	0.0067	0.049	0.055	-0.008	0.031	0.0059	0.0056	0.12	0.11	-0.0034	0.0066	-0.0146	0	0.0034	0.004	0.016	0.06	0.0009	0.0013	0	0.023	0.0066	0.0076	-0.015	0.024	4.9	1.3	310	200	0.044	0.013
BMB5852	Zircon_Sample-260.FIN2	Fe-rich	700000		0.011	0.016	-0.18	0.76	0.027	0.022	1.03	0.79	2070	320	1204	42	1100	220	11	5.8	4.6	2.7	-0.004	0.054	0.084	0.046	0.005	0.018	0.0057	0.0098	0.0015	0.0044	0.036	0.039	0	0.012	0.0004	0.002	0.111	0.097	0.0063	0.0086	-0.002	0	0.006	0.011	-0.002	0.03	0.0013	0.002	0.007	0.03	0.0009	0.0016	-0.002	0.03	0.019	0.032	140	120	0.161	0.046
BMB5852	Zircon_Sample-267.FIN2	Fe-rich	700000		0.039	0.023	172	87	108	75	85	54	5300	2000	1260	270	3110	720	26.8	9.9	3.21	0.98	1.8	1.9	21	13	-0.01	0.018	0	0.015	0.001	0.0033	0.018	0.045	0.001	0.033	0.0006	0.0032	0.018	0.097	0.007	0.019	-0.006	0	0.0048	0.0068	-0.003	0.064	0.005	0.0025	-0.008	0.024	0.0015	0.0037	-0.006	0.022	1.94	0.95	80	120	0.12	0.088
BMB5852	Zircon_Sample-268.FIN2	Fe-rich	700000		0.04	0.026	0.8	1	0.65	0.78	2.8	2.1	1350	160	1010	130	2060	340	8.1	2.2	2.7	1.1	0.11	0.11	2.8	1.8	-0.0017	0.0079	0.0061	0.0076	0.0029	0.0051	0.025	0.012	-0.001	0.03	0.0014	0.0028	0.169	0.048	0.008	0.015	0.007	0	0.0048	0.0014	0.015	0.046	0.0016	0.0021	-0.0017	0.0053	0.004	0.004	-0.004	0.014	0.44	0.34	126	95	0.015	0.013
BMB5852	Zircon_Sample-269.FIN2	Fe-rich	700000		0.036	0.041	0.6	1.4	0.3	0.28	1.3	1	4600	1000	850	170	1010	370	5.8	2.6	1.69	0.67	0.07	0.12	0.43	0.12	0.002	0.023	0.0164	0.0051	-0.0011	0.0047	0.019	0.06	0.04	0.11	0.0007	0.0032	-0.09	0.16	-0.0038	0.0068	-0.004	0	0.01	0.014	0.01	0.039	0.002	0.0044	-0.012	0.013	0.0021	0.0049	0.023	0.044	0.63	0.21	228	93	0.26	0.16
BMB5852	Zircon_Sample-270.FIN2	Fe-rich	700000		0.067	0.037	1.2	1	0.35	0.038	1.3	1.1	3900	1400	960	200	1320	290	130	110	2.61	0.35	0.064	0.022	1.21	0.27	0.0216	0.0087	0.048	0.026	0.0079	0.0065	0.01	0.026	0.041	0.043	0.0024	0.004	-0.061	0.042	-0.0024	0.0052	0.003	0	0.0062	0.0065	-0.001	0.014	0.0049	0.0047	0.002	0.021	0.0005	0.0016	0.014	0.023	0.168	0.061	51	91	0.046	0.012
BMB5852	Zircon_Sample-271.FIN2	Fe-rich	700000		0.024	0.044	4.2	1.5	15.8	4.6	56	20	1118	70	1140	180	6550	780	115	57	8.2	1.9	2.87	0.95	42.3	9.8	0.004	0.013	0.0056	0.0065	-0.0002	0.0059	0.015	0.027	0.039	0.048	0.0024	0.003	0.073	0.059	-0.0035	0.0044	0.0107	0	0.0028	0.0025	-0.011	0.029	-0.000153	0.000063	0.008	0.024	0.0022	0.0023	-0.003	0.016	4.4	2.1	240	160	0.033	0.02
BMB5852	Zircon_Sample-272.FIN2	Fe-rich	700000		0.042	0.023	0.89	0.62	0.51	0.1	3.8	1.4	1773	79	2110	170	2240	440	12.6	3.1	1.8	1.2	0.13	0.12	2.53	0.4	0.0099	0.0043	0.0002	0.0071	0.0002	0.0036	0.024	0.016	0.005	0.025	0.0022	0.0036	0.026	0.027	0.0003	0.0042	0.018	0	0.002	0.0034	-0.012	0.018	0.0005	0.0012	0.01	0.012	0.0019	0.0014	0.0009	0.0086	0.45	0.31	80	120	0.01	0.013
BMB5852	Zircon_Sample-273.FIN2	Fe-rich	700000		0.065	0.025	3.1	2	4.6	4.7	16	15	1300	140	864	94	3550	760	11.71	0.91	2.8	2	0.94	0.93	13	12	0.009	0.012	0.028	0.031	0.004	0.0052	0.024	0.021	0.018	0.013	0.0062	0.006	-0.052	0.051	-0.0042	0.0057	0.026	0	0.0059	0.0042	0.001	0.035	0.00031	0.00093	0.004	0.015	0.0047	0.0035	0.015	0.015	0.97	0.73	155	94	0.08	0.082
BMB5852	Zircon_Sample-280.FIN2	Fe-rich	700000		0.05	0.035	1.6	2.6	11	12	30	38	2440	530	760	220	5300	6100	37	43	4.5	5.3	1.8	2.3	33	42	0.007	0.018	-0.01	0.019	-0.0041	0.009	0.08	0.13	-0.018	0.044	0.0027	0.009	-0.06	0.16	-0.0065	0.004	0.025	0	0.022	0.036	0.052	0.029	-0.0003	0.00021	0.00138	0.00097	-0.00057	0.0004	0.071	0.067	2.2	2.6	11	56	0.049	0.036
BMB5852	Zircon_Sample-281.FIN2	Fe-rich	700000		0.059	0.055	6.2	2.9	1.16	0.52	2.98	0.7	3630	380	760	300	1550	470	9.5	3.5	3.3	1.1	0.3	0.21	5.2	1.2	0.029	0.024	0.036	0.05	-0.0029	0.0028	0.005	0.021	0.05	0.026	0.0071	0.0064	0.07	0.24	0	0.025	0.04	0	0.0138	0.0074	0.053	0.039	0.0087	0.0099	0.08	0.13	0.0049	0.0049	0.087	0.048	1.38	0.26	110	140	1.7	1.1
BMB5852	Zircon_Sample-282.FIN2	Fe-rich	700000		0.14	0.11	6.1	1.2	14.17	0.49	25.3	1.4	4160	730	690	200	3250	340	11.8	4.8	6.4	3.1	1.64	0.63	24	2.1	0.029	0.039	0.22	0.27	0.002	0.012	0.062	0.067	-0.022	0.015	0.02	0.033	0.05	0.16	-0.01	0.012	0.02	0	0.0129	0.0086	-0.008	0.085	0.0028	0.0062	0.052	0.084	0.007	0.013	0.078	0.019	2.6	1.1	175	78	0.45	0.49
BMB5852	Zircon_Sample-283.FIN2	Fe-rich	700000		0.045	0.015	7.1	5.3	0.69	0.25	3.3	2.6	2140	140	1022	68	2390	630	6.3	1.9	1.91	0.58	0.165	0.069	1.41	0.45	0.043	0.021	0.139	0.093	0.0173	0.0089	0.051	0.04	0.012	0.02	0.0033	0.008	0.042	0.052	0.013	0.019	0.015	0	0.0076	0.0036	-0.014	0.019	0.002	0.0015	0.017	0.016	0.0004	0.0014	0.038	0.027	0.33	0.18	118.03	0.17	0.081	0.059
BMB5852	Zircon_Sample-284.FIN2	Fe-rich	700000		0.047	0.033	2.8	1.4	0.99	0.36	2.4	1.2	2110	330	762	70	1280	290	15.4	7.3	2.19	0.49	0.078	0.093	2.51	0.84	0.036	0.024	0.133	0.08	0.013	0.011	0.11	0.039	0.038	0.015	0.0028	0.0034	0.07	0.28	0.0001	0.008	0.029	0	0.0027	0.0021	0	0.03	0.004	0.005	-0.002	0.015	0.0018	0.0028	0.013	0.014	0.401	0.048	150	170	0.28	0.16
BMB5852	Zircon_Sample-285.FIN2	Fe-rich	700000		0.049	0.097	3.3	1.9	1.1	0.93	6.3	2.1	2160	300	830	150	1720	320	7.22	0.3	2.48	0.29	0.11	0.12	1.83	0.87	0.007	0.012	0.0148	0.0081	0.0053	0.0061	0.024	0.029	0	0.017	0.0016	0.0028	-0.06	0.11	0.001	0.011	0.003	0	0.002	0.0031	-0.022	0.018	0.0017	0.0021	0.005	0.015	0.0006	0.0018	0.045	0.015	0.89	0.14	70	43	0.4	0.15
BMB5852	Zircon_Sample-286.FIN2	Fe-rich	700000		0.083	0.031	5.1	1.2	17	2.6	39	12	1050	380	1670	270	9400	1900	8.71	0.82	11.2	1	2.5	1.1	48	16	-0.0068	0.0065	0.0017	0.0052	0.0036	0.0049	0.037	0.019	-0.002	0.02	0.0012	0.0039	0.087	0.092	0.005	0.016	0.003	0	0.0025	0.0035	-0.015	0.03	0.0062	0.0073	0.007	0.021	0.0031	0.004	0.0254	0.0052	4	1.9	153	45	0.14	0.16

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5855

CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5855	Zircon_Sample-059.FIN2	Fe-rich	700000		0.04	0.1	14	5.4	720	130	119.7	4.1	680	210	31	3.1	77	17	1.06	0.33	134	18	1.28	0.58	4.9	1.1	-0.029	0.049	-0.026	0.03	-0.006	0.012	-0.023	0.03	-0.008	0.095	0.0023	0.0065	0.058	0.076	-0.006	0.027	0.006	0	0.002	0.011	-0.07	0.12	-0.000133	0.000043	0.007	0.028	0.0046	0.0099	-0.05	0.05	5.31	0.79	190	140	0.048	0.042
BMB5855	Zircon_Sample-060.FIN2	Fe-rich	700000		0.042	0.078	13	10	600	120	77.4	8.6	320	190	17.5	1.9	50	19	10	16	320	88	1.71	0.58	6.7	2.5	-0.019	0.027	0.022	0.048	0.021	0.039	-0.01	0.15	0.01	0.11	0.014	0.013	-0.22	0.49	-0.003	0.037	0.03	0	0.026	0.019	-0.05	0.12	0.011	0.023	0.03	0.059	0.017	0.02	-0.02	0.13	7	1.8	220	130	0.104	0.063
BMB5855	Zircon_Sample-061.FIN2	Fe-rich	700000		0.016	0.076	18.8	9.2	62	15	27	5.5	487	54	18	3.3	69	10	1.18	0.93	17.4	1.9	0.89	0.45	2.83	0.45	-0.047	0.059	-0.029	0.018	-0.011	0.02	0.021	0.098	0.011	0.09	0.045	0.045	0.07	0.091	-0.025	0.015	0.06	0	0.0077	0.0085	0.014	0.026	0.0021	0.0045	0.042	0.094	0.0017	0.0046	-0.064	0.083	0.87	0.31	140	130	0.075	0.099
BMB5855	Zircon_Sample-062.FIN2	Fe-rich	700000		0.016	0.053	13.3	2	182	59	72	33	510	260	20.1	7.4	64	33	0.62	0.23	64	26	1.31	0.35	4.6	1.5	-0.003	0.046	-0.025	0.034	0.003	0.022	-0.043	0.048	-0.01	0.12	0.0081	0.0091	0.08	0.46	-0.007	0.019	0.024	0	0.011	0.017	0.004	0.069	-0.000092	0.000022	0.011	0.023	0.0028	0.0063	0.063	0.09	2.78	0.95	250	280	0.069	0.036
BMB5855	Zircon_Sample-063.FIN2	Fe-rich	700000		0.063	0.05	47	46	165	30	68	11	466	29	20.6	2.4	68	12	0.95	0.48	57.4	8.1	1.58	0.68	4.68	0.62	0.027	0.084	0.008	0.029	0.005	0.022	-0.041	0.099	0.05	0.13	0.021	0.026	0.16	0.3	-0.013	0.014	0.01	0	0.011	0.033	-0.006	0.093	0.01	0.021	0.112	0.024	0.008	0.011	0.05	0.15	2.26	0.79	50	110	0.076	0.021
BMB5855	Zircon_Sample-064.FIN2	Fe-rich	700000		-0.05	0.12	19	13	360	150	82	20	260	100	22	6.4	62	23	2.8	3.3	194	54	2.2	1.1	6.8	2.4	-0.018	0.03	-0.006	0.037	0.007	0.028	0.04	0.1	0.17	0.44	0.029	0.038	-0.12	0.2	-0.01	0.035	0.09	0	0.018	0.025	0.035	0.088	0.011	0.015	0.039	0.038	0.0028	0.0068	0.09	0.18	6.5	1.4	89	84	0.137	0.083
BMB5855	Zircon_Sample-065.FIN2	Fe-rich	700000		0.14	0.17	13.5	7.5	90.6	7.3	44.1	4.3	528	30	18	4.8	64	17	1.4	1.8	33	12	1.11	0.37	4.2	1.2	-0.026	0.035	-0.058	0.044	0.001	0.023	-0.063	0.03	-0.14	0.11	0.01	0.014	-0.25	0.36	-0.0147	0.0098	-0.087	0	-0.003	0.014	0.14	0.36	0.0051	0.0071	0.049	0.037	0.0014	0.0042	-0.004	0.075	1.66	0.7	100	200	0.131	0.06
BMB5855	Zircon_Sample-072.FIN2	Fe-rich	700000		0.095	0.036	23.6	9.8	129	32	62	20	336	47	18.5	4.4	127	33	0.61	0.41	53.8	3.6	1.37	0.85	5.8	1.9	-0.038	0.01	-0.012	0.02	-0.011	0.019	-0.02	0.046	0.002	0.089	-0.000828	0.000058	0.13	0.21	0.015	0.036	0.08	0	0.016	0.023	0.08	0.13	-0.0000921	0.0000065	0.045	0.024	-0.000298	0.000021	0.004	0.033	1.84	0.39	590	730	0.094	0.014
BMB5855	Zircon_Sample-073.FIN2	Fe-rich	700000		0.059	0.07	9.6	8.9	49.5	5.2	27.1	5.9	583	54	19.1	3.6	77.7	8.3	4.7	6	17.2	5.9	0.45	0.23	2.58	0.22	0.028	0.057	-0.021	0.032	0.007	0.015	0.17	0.33	0.07	0.16	0.025	0.034	-0.06	0.27	0.008	0.062	-0.017	0	0.019	0.016	0	0.16	0.012	0.01	0.05	0.064	0.0035	0.0079	-0.029	0.091	0.8	0.19	180	130	0.075	0.097
BMB5855	Zircon_Sample-074.FIN2	Fe-rich	700000		0.028	0.027	1.04E+04	3.20E+03	1320	550	96	49	1210	220	26	8.8	92	49	5.2	8.1	162	77	0.82	0.24	5.2	3.2	-0.01	0.03	-0.01	0.011	0.008	0.021	0.06	0.17	0.072	0.053	-0.00074	0.00027	0.03	0.6	-0.0017	0.009	0.031	0	0.004	0.013	-0.04	0.12	0.009	0.013	0.003	0.036	0.0053	0.0057	-0.006	0.052	5.6	3.3	450	270	0.115	0.04
BMB5855	Zircon_Sample-075.FIN2	Fe-rich	700000		0	0.11	12.5	9.4	60.6	8.6	34.6	8.3	490	43	17.8	5.6	67	21	2.7	1.8	22.2	6.6	1.06	0.42	3.3	0.68	-0.039	0.086	-0.026	0.043	-0.008	0.027	0.11	0.33	0.04	0.14	0.02	0.028	-0.06	0.2	0.004	0.066	0.22	0	-0.007	0.01	0.01	0.18	0.0037	0.0077	0.074	0.097	0.022	0.028	0	0.14	1.1	0.18	160	120	0.002	0.031
BMB5855	Zircon_Sample-076.FIN2	Fe-rich	700000		0.11	0.12	10	5.4	128	18	58.2	9.2	311	17	18.6	1.3	56.9	9.5	1.3	1	49.6	7.4	1.46	0.47	5.25	0.47	0.006	0.032	-0.014	0.042	0.005	0.025	-0.001	0.037	-0.097	0.067	0.005	0.012	0.23	0.72	0.025	0.035	0.08	0	0.018	0.014	0.1	0.17	0.0047	0.0097	0.09	0.16	-0.00046	0.00013	0.03	0.13	2.08	0.21	32	93	0.072	0.065
BMB5855	Zircon_Sample-077.FIN2	Fe-rich	700000		0.037	0.03	1.40E+03	2.40E+03	320	260	96	12	810	83	28.8	6.3	123.3	9.4	1	0.4	74.1	8.2	1.63	0.21	7.16	0.8	0	0.027	0.015	0.019	0.01	0.01	-0.005	0.069	-0.009	0.051	0.008	0.012	0.08	0.13	0.013	0.016	-0.002	0	0.014	0.014	0.072	0.099	0.0058	0.0072	0	0.016	-0.000221	0.000058	0.04	0.15	3.2	1	540	100	0.121	0.06
BMB5855	Zircon_Sample-078.FIN2	Fe-rich	700000		0.094	0.072	720	790	1.20E+03	1.10E+03	320	250	1470	270	61.8	7.9	142	22	1.68	0.68	119	14	2.12	0.7	9.05	0.46	0.018	0.057	-0.02	0.02	-0.005	0.01	0.059	0.088	-0.046	0.081	-0.00077	0.00019	-0.11	0.19	-0.014	0.012	0.121	0	0.007	0.025	-0.052	0.077	0.0033	0.0068	0.018	0.042	0.0078	0.008	-0.047	0.039	4.3	1.1	220	180	0.12	0.061
BMB5855	Zircon_Sample-085.FIN2	Fe-rich	700000		0.071	0.05	23	2.8	170	32	93	14	1620	110	57.5	3.8	243	17	4.2	3.6	76	11	1.81	0.14	8.88	0.87	0.018	0.031	0.0044	0.0086	-0.0025	0.0064	-0.012	0.06	-0.026	0.051	0.015	0.015	0.08	0.11	0.0033	0.0046	0.006	0	0.0044	0.0049	-0.042	0.05	0.0035	0.0055	0.035	0.047	0.0032	0.0041	0.014	0.028	3.7	0.4	840	220	0.133	0.084
BMB5855	Zircon_Sample-086.FIN2	Fe-rich	700000		0.086	0.054	170	160	381	60	158	21	1800	140	65.1	1.6	219	36	3.2	3.3	144	20	2.71	0.15	12.5	2.3	-0.028	0.044	0.003	0.022	-0.0037	0.0098	0.018	0.062	0.07	0.12	0.0055	0.0078	-0.06	0.1	0.005	0.013	-0.004	0	0.0035	0.0097	-0.026	0.072	0.0043	0.0069	0.007	0.014	0.003	0.0045	0.002	0.055	5.9	1.9	590	390	0.12	0.14
BMB5855	Zircon_Sample-087.FIN2	Fe-rich	700000		0.037	0.033	0.5	3.4	0.6	1.1	1.4	1.1	362	39	6.5	1.5	3	4.1	0.28	0.17	2.1	1.1	0.07	0.1	0.051	0.082	-0.018	0.026	-0.0014	0.0063	0.0006	0.0019	-0.014	0.052	0.006	0.049	0.0072	0.0092	0.18	0.27	0.012	0.015	-0.036	0	0.0037	0.0043	-0.05	0.096	-0.000071	0.000049	0.01	0.022	0.003	0.0062	-0.025	0.028	0.07	0.11	190	130	0.012	0.018
BMB5855	Zircon_Sample-088.FIN2	Fe-rich	700000		0.084	0.075	1.5	2.8	3.9	7.5	4.1	5.4	345	69	2.8	3.6	5.8	9.5	0.59	0.31	3.5	3.8	0.17	0.2	0.52	0.69	-0.015	0.03	0.0144	0.0097	0.004	0.017	0.02	0.11	0.011	0.063	-0.00046	0.00034	-0.02	0.16	-0.0038	0.0094	-0.004	0	0.003	0.0054	-0.046	0.094	-0.000073	0.000054	0.012	0.044	0.0037	0.0076	0.043	0.043	0.3	0.14	370	450	0.016	0.011
BMB5855	Zircon_Sample-089.FIN2	Fe-rich	700000		0.022	0.025	38.8	4.9	275	47	98.2	3.8	790	150	73	11	194	31	2.23	0.47	78.4	5.7	1.722	0.054	9.92	0.61	0.22	0.15	0.22	0.1	0.016	0.022	0.117	0.095	-0.011	0.036	0.0032	0.0035	-0.04	0.21	0.002	0.0067	0.006	0	0.0011	0.0034	-0.027	0.0015	0.0013	0.0026	0.006	0.013	0.005	0.0067	0.03	0.047	3.6	0.21	650	220	0.043	0.031
BMB5855	Zircon_Sample-090.FIN2	Fe-rich	700000		0.061	0.03	24.1	3.9	154	21	73.3	9.2	636	18	49.1	6.4	230	29	2.3	1.3	56.7	9.1	1.37	0.33	6.5	1	0.03	0.02	0.028	0.025	0.01	0.018	0.008	0.057	0.028	0.092	0.0014	0.0039	-0.07	0.31	0.0015	0.0061	-0.027	0	-0.0025	0.0035	-0.04	0.15	0.0016	0.0021	0.017	0.016	0.0046	0.0066	0.031	0.034	3.1	1.3	710	270	0.28	0.4
BMB5855	Zircon_Sample-091.FIN2	Fe-rich	700000		0.01	0.037	14.6	4.8	90	44	49	19	990	180	41	12	161	45	1.6	1.3	44	21	1.16	0.44	5.5	3.1	0.02	0.019	0.0032	0.009	0.008	0.01	0.056	0.047	-0.023	0.048	0.0087	0.0084	-0.1	0.28	0	0.022	0.028	0	0.0103	0.005	-0.003	0.04	0.0023	0.0047	0.012	0.019	0.0066	0.006	0.025	0.037	1.99	0.96	1.60E+03	####	0.16	0.064
BMB5855	Zircon_Sample-098.FIN2	Fe-rich	700000		0	0.11	8.8	8.4	97	38	34	11	1360	390	35.1	2.3	77	24	1.6	2	70	14	1.08	0.15	4.9	1.1	0.006	0.022	0.01	0.01	0	0.0058	0.013	0.034	0.016	0.046	0.0043	0.0064	-0.013	0.067	-0.003	0.012	0.003	0	0.0046	0.0083	0.007	0.052	0.0017	0.0021	0.023	0.031	-0.000088	0.00006	0.09	0.059	2.55	0.58	260	170	0.092	0.075
BMB5855	Zircon_Sample-099.FIN2	Fe-rich	700000		0.03	0.029	100	110	300	49	81	11	1030	130	61.1	4.7	207	12	3.3	2.3	122	26	1.94	0.39	9.6	1.8	0.22	0.15	0.28	0.32	0.028	0.024	0.11	0.13	0.021	0.067	-0.00052	0.00041	-0.02	0.27	0.007	0.0051	0.033	0	0.0034	0.0041	-0.029	0.06	0.0023	0.0048	0.054	0.08	0.0008	0.0018	0.031	0.046	5.1	1.7	1020	100	0.183	0.05
BMB5855	Zircon_Sample-100.FIN2	Fe-rich	700000		0.033	0.032	17	14	510	120	123	14	1840	330	85.6	3.8	186	15	1.61	0.57	204	44	3.36	0.83	15.9	3.6	0.062	0.077	0.025	0.028	-0.0018	0.0019	0.041	0.062	-0.042	0.014	0.003	0.0067	0.1	0.16	-0.0016	0.0061	0.002	0	0.0019	0.0043	0.02	0.11	0.0031	0.0033	0.039	0.02	0.015	0.027	0.052	0.039	5.8	1.4	1080	570	0.135	0.052
BMB5855	Zircon_Sample-101.FIN2	Fe-rich	700000		0.1	0.11	29	11	173	71	57	28	690	130	58.9	3.5	278	88	1.5	1.4	80.4	7.3	1.52	0.48	8.9	0.83	-0.016	0.037	0.0034	0.0089	0.0047	0.0075	-0.007	0.015	0.021	0.051	0.0024	0.006	-0.083	0.068	-0.011	0.02	-0.0136	0	0.007	0.012	0.03	0.13	0.0047	0.0042	0.024	0.022	0.0016	0.002	0.084	0.049	3.05	0.4	210	160	0.095	0.061
BMB5855	Zircon_Sample-102.FIN2	Fe-rich	700000		0.04	0.029	6.5	7.5	12.3	4.6	5.1	0.66	490	36	3.15	0.84	16.2	4.7	11	22	5.3	2.5	0.061	0.017	0.578	0.092	-0.003	0.015	0.0042	0.0064	0.0011	0.0039	0	0.029	0.025	0.04	0.0048	0.0037	-0.017	0.062	0.0022	0.0071	0.016	0	0.0074	0.0082	0.001	0.07	-0.000036	0.00001	0.022	0.029	0.0006	0.0014	0.012	0.023	0.242	0.02	372	46	0.15	0.25
BMB5855	Zircon_Sample-103.FIN2	Fe-rich	700000		0.048	0.033	15.7	1.4	1350	220	160	14	770	180	77.9	9	194	9.2	2.14	0.22	417	41	3.67	0.27	26	5	0.093	0.045	0.0151	0.0095	0.0063	0.0024	0.024	0.018	0.006	0.014	0.0019	0.0044	-0.02	0.17	0.007	0.0062	-0.007	0	0.0013	0.0043	-0.001	0.028	0.0022	0.0044	0.018	0.021	-0.000044	0.0000061	0.022	0.019	13	2	1170	160	0.087	0.051
BMB5855	Zircon_Sample-104.FIN2	Fe-rich	700000		-0.002	0.032	3.5	2	4.4	2.6	2.29	0.61	372	52	3.1	1.5	6.1	4.8	1.2	0.48	2.65	0.95	0.069	0.031	0.35	0.21	0.005	0.016	0.005	0.011	0.0059	0.0013	0.015	0.022	0.006	0.035	0.0026	0.0059	0	0.17	-0.004	0.011	0	0	0.0031	0.0022	-0.024	0.02	0.0008	0.0017	0.012	0.014	0.0007	0.0014	0.022	0.017	0.18	0.11	340	300	0.022	0.028
BMB5855	Zircon_Sample-111.FIN2	Fe-rich	700000		-0.008	0.091	41.9	3.8	336	62	89	10	1750	260	64.5	8.5	174	4.1	1.16	0.53	88	22	2.19	0.46	9.47	0.98	0.001	0.011	0.016	0.016	-0.006	0.016	-0.013	0.036	0.06	0.17	0.0039	0.0057	0.028	0.061	-0.0046	0.0075	0	0	0.0014	0.007	-0.002	0.033	0.007	0.013	0.035	0.016	0.0065	0.0075	0.027	0.035	5.5	1	357	96	0.091	0.039
BMB5855	Zircon_Sample-112.FIN2	Fe-rich	700000		0.013	0.024	70	110	130	100	25	14	1340	190	12.2	6.2	27	14	0.306	0.034	28.1	7.7	0.31	0.18	2.1	1.1	0.0007	0.0056	0.0027	0.0037	0.0056	0.0069	-0.001	0.025	-0.003	0.024	0.0017	0.0041	-0.03	0.15	-0.013	0.012	0.014	0	0.0015	0.0042	-0.005	0.03	-0.0000286	0.0000037	0.008	0.019	0.0016	0.0016	-0.007	0.012	1.67	0.65	200	160	0.016	0.024
BMB5855	Zircon_Sample-113.FIN2	Fe-rich	700000		0.042	0.071	-0.3	1.1	2.4	4.5	2.7	2.3	508	91	6.2	2.9	6.1	5.9	0.28	0.27	6.6	6.7	-0.033	0.065	0.22	0.22	0.04	0.072	0.0001	0.0075	0.005	0.015	-0.001	0.016	-0.006	0.045	0.0097	0.009	-0.01	0.11	-0.015	0.029	-0.01	0	0.004	0.0038	0.002	0.036	0.0013	0.0018	0.02	0.034	0.0041	0.0082	-0.003	0.041	0.25	0.29	220	210	0.016	0.016
BMB5855	Zircon_Sample-114.FIN2	Fe-rich	700000		0.045	0.031	13	13	170	120	37	21	1000	180	35	13	89	47	0.55	0.43	82	51	1.02	0.44	5.8	2.9	0.02	0.024	0.01	0.026	0.0036	0.0029	0.013	0.031	-0.0134	0.0083	0.028	0.051	-0.05	0.19	-0.001	0.0039	0.004	0	0.0068	0.0086	0.052	0.094	0.0014	0.0028	0.053	0.068	0.0006	0.0013	0.035	0.066	2.9	1.3	300	160	0.036	0.041
BMB5855	Zircon_Sample-115.FIN2	Fe-rich	700000		0.041	0.03	20.9	4.3	151	21	53.6	4.9	1042	54	57.6	3.2	240	13	2.3	2	77	13	1.66	0.16	10.4	1	0.01	0.015	-0.0017	0.0099	0.0038	0.0063	-0.006	0.013	-0.011	0.024	-0.00041	0.00019	-0.091	0.039	-0.006	0.011	-0.002	0	0.0019	0.0048	-0.011	0.025	0.0012	0.0024	0.008	0.031	0.0035	0.0024	0	0.052	3.63	0.43	1150	350	0.0546	0.0078
BMB5855	Zircon_Sample-116.FIN2	Fe-rich	700000		0.05	0.031	80	120	370	200	67	20	2160	290	81.2	4.5	216	55	1.03	0.67	126	16	1.7	0.34	12.8	3.9	0	0.016	-0.012	0.016	-0.0038	0.0067	0	0.036	0.021	0.035	0.009	0.01	-0.13	0.3	0	0.025	0.022	0	0.0044	0.0098	-0.039	0.089	0.0019	0.0024	0.016	0.021	0.0036	0.0044	0.032	0.078	4.3	1.3	240	210	0.094	0.029
BMB5855	Zircon_Sample-117.FIN2	Fe-rich	700000		0.028	0.03	42	43	830	420	147	79	2570	200	72.6	7	206.3	3.6	3.6	1.5	240	83	2.9	1.1	25	11	0.85	0.76	0.54	0.56	0.019	0.019	0.04	0.071	0.015	0.019	0.0035	0.0077	0.03	0.16	-0.0028	0.0035	0.019	0	0.0101	0.0071	0.028	0.06	-0.0000273	0.0000027	0.01	0.02	0.00219	0.00022	-0.017	0.022	7.4	1.2	1730	230	0.26	0.14

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe_2O_3 x 0.89981.

BMB 5857

CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5857	Zircon_sample-007.FIN2	Fe-rich	700000		-0.1	0.11	63	42	46	23	8.1	2.9	2100	2300	9.99	0.47	20.5	4.7	1.7	1.3	3.3	1.3	13.2	2	32.3	3	-0.017	0.09	-0.003	0.044	0.006	0.014	0	0.12	-0.02	0.13	0.013	0.02	-0.09	0.57	0.004	0.026	-0.05	0	-0.011	0.017	0.008	0.085	0.013	0.018	0.001	0.057	0.0035	0.0067	0.128	0.064	72	16	220	150	0.14	0.06
BMB5857	Zircon_sample-008.FIN2	Fe-rich	700000		-6	15	800	1200	23	19	2400	1900	650	170	-60	110	1160	770	480	430	38	60	-33	56	88	46	1	10	-1	12	7.1	7.4	22	13	-7	27	7	15	-80	200	-0.7	5	3.7	8	3.1	5.2	-6	20	3.2	6.4	-3.2	7.1	1.8	2.2	8	11	27.4	5.6	170	150	27	20
BMB5857	Zircon_sample-009.FIN2	Fe-rich	700000		-0.013	0.04	10.6	1.1	26	2.8	8.1	4.2	507	62	12.02	0.6	16.5	1.1	3.1	1.2	2.76	0.55	9.2	1.2	27.8	2.2	0.038	0.064	0.012	0.02	-0.003	0.013	0.06	0.11	-0.02	0.1	0.0041	0.0074	0.15	0.16	0.006	0.024	-0.063	0	-0.004	0.017	0.08	0.15	0.004	0.012	0	0.047	0.0016	0.0051	0.11	0.065	58.5	8.3	90	110	0.063	0.079
BMB5857	Zircon_sample-010.FIN2	Fe-rich	700000		-0.028	0.027	3.9	1.5	7.5	1.4	10.9	4.9	387	18	14.5	1.4	30.5	4.2	1100	1200	1.06	0.57	5.7	1	19.8	2.5	-0.002	0.075	0.034	0.066	0.019	0.038	0.05	0.11	-0.02	0.2	0.007	0.018	0.08	0.49	-0.011	0.043	0.04	0	-0.0136	0.0096	0.03	0.19	0.0052	0.009	0.018	0.083	0.014	0.021	0.11	0.13	21.4	3	210	100	0.56	0.49
BMB5857	Zircon_sample-011.FIN2	Fe-rich	700000		-0.09	0.15	14.5	8.9	46.7	9.6	4.7	1.2	510	54	10.1	1.4	13.8	2.7	5.1	2	5	0.57	11.8	1.5	37.9	4.3	0.08	0.11	-0.033	0.029	-0.007	0.021	0.04	0.14	-0.02	0.11	0.007	0.014	-0.21	0.44	-0.002	0.013	-0.008	0	0.0115	0.0098	0.006	0.087	0.008	0.013	0.019	0.077	0.018	0.015	0.007	0.034	83.7	9.3	110	130	0.052	0.059
BMB5857	Zircon_sample-012.FIN2	Fe-rich	700000		-0.019	0.086	9.6	3.6	11.6	1.2	3.2	2.3	429	49	14.3	1.7	24.1	5.2	4	1.4	1.11	0.71	5.97	0.63	21.2	2.9	0.019	0.053	0.037	0.081	0.007	0.021	0.011	0.044	-0.041	0.083	0.0057	0.0091	-0.01	0.34	0.007	0.027	0.041	0	-0.006	0.014	0.03	0.11	0.009	0.011	0.07	0.1	0.0022	0.0089	0.074	0.056	22.9	3.8	120	170	0.094	0.021
BMB5857	Zircon_sample-013.FIN2	Fe-rich	700000		-0.148	0.088	12.5	4.3	15.06	0.94	7.7	1.9	440	34	10.38	0.8	28.3	5.3	1.59	0.59	1.66	0.81	7.11	0.46	26.2	4.6	0.033	0.091	-0.022	0.045	0.0247	0.0082	0.04	0.14	0.09	0.27	0.0101	0.0097	-0.36	0.41	-0.004	0.026	0.05	0	0.005	0.021	0.025	0.053	0.007	0.013	0.031	0.099	0.0041	0.0092	0.15	0.15	28	1.3	200	140	0.086	0.057
BMB5857	Zircon_sample-020.FIN2	Fe-rich	700000		0.246	0.038	9.4	2.4	27.8	6.5	6.4	2.2	476	20	11.4	1.5	21.9	3.5	94	43	3.4	1.2	6.01	0.74	28.1	3.2	0.013	0.095	-0.023	0.021	0.02	0.028	0.095	0.017	0.1	0.16	0.014	0.02	-0.1	0.13	0.032	0.029	0.021	0	-0.015	0.011	-0.008	0.079	0.001	0.0067	-0.033	0.059	0.007	0.018	0.018	0.032	48	12	-150	180	0.25	0.12
BMB5857	Zircon_sample-021.FIN2	Fe-rich	700000		0.1	0.092	10	17	11.8	1.6	4.9	2.1	490	83	12.45	0.95	19.4	0.36	2.94	0.93	1.12	0.6	5.14	0.98	25.7	4.2	0.003	0.065	-0.017	0.054	-0.008	0.018	-0.004	0.076	-0.088	0.082	0.031	0.022	-0.25	0.57	0.025	0.064	0	0	-0.005	0.022	0.05	0.11	0.016	0.013	-0.01	0.1	0.008	0.014	0.042	0.057	20.4	2	48	72	0.115	0.054
BMB5857	Zircon_sample-022.FIN2	Fe-rich	700000		0.087	0.094	6.9	5.8	21.11	0.78	4.1	2.5	424	20	10.7	1.1	14.9	1.1	3.78	0.65	2.29	0.21	5.73	0.8	30	1.9	-0.006	0.084	-0.024	0.068	-0.006	0.03	-0.09	0.1	-0.04	0.16	0.011	0.017	0.01	0.68	-0.029	0.053	0.1	0	-0.006	0.022	0.002	0.044	-0.0008	0.0057	0.05	0.13	0.009	0.012	0.047	0.082	35.6	4	110	120	0.008	0.023
BMB5857	Zircon_sample-023.FIN2	Fe-rich	700000		0.13	0.18	4.9	8.9	10.3	1.5	3.8	2.6	404	12	13.95	0.55	22.9	1.1	2.42	0.55	0.91	0.34	3.73	0.51	21.4	2	-0.013	0.069	-0.05	0.04	0.016	0.028	0.07	0.11	-0.064	0.085	0.018	0.023	0.05	0.24	-0.002	0.061	-0.07	0	-0.001	0.024	0.04	0.11	0.014	0.014	-0.028	0.072	0.0075	0.0086	0.053	0.053	20.5	2.4	60	140	0.043	0.056
BMB5857	Zircon_sample-024.FIN2	Fe-rich	700000		0.048	0.094	15	5.4	58	16	6.8	2.8	514	52	9.5	1	11.14	0.55	2.61	0.74	6	1.6	9.5	1.1	52.4	8.2	-0.003	0.014	0.001	0.027	-0.008	0.017	-0.024	0.098	0.05	0.17	0.01	0.025	-0.39	0.36	0.028	0.04	-0.01	0	0.016	0.016	0.02	0.17	0.005	0.015	-0.05	0.042	0.019	0.024	0.04	0.16	92	18	30	110	0.063	0.048
BMB5857	Zircon_sample-025.FIN2	Fe-rich	700000		-0.012	0.08	25	28	11.1	1.4	5.6	1.5	427	33	13.4	1.9	21.1	2.4	2.9	1.1	0.9	0.59	4.56	0.77	23.8	3.1	-0.003	0.04	0.001	0.023	0.028	0.022	0.055	0.078	0.08	0.12	0.017	0.02	0.2	0.39	-0.004	0.043	-0.098	0	-0.0034	0.0082	-0.02	0.13	0.009	0.015	-0.042	0.022	0.002	0.0055	0.028	0.052	20.5	2.9	90	160	0.081	0.077
BMB5857	Zircon_sample-026.FIN2	Fe-rich	700000		-0.01	0.13	12.4	7.7	10.4	1.6	2	2.6	386	18	14	2	21.51	0.91	2.89	0.52	1.17	0.61	3.57	0.64	21.8	1.5	0.09	0.13	0.042	0.075	0	0.031	0.13	0.15	-0.009	0.095	0.019	0.019	-0.13	0.97	0	0.054	0.006	0	0.003	0.035	-0.09	0.16	0.018	0.034	-0.021	0.065	0.014	0.034	0.01	0.1	18.7	2.4	20	110	0.024	0.028
BMB5857	Zircon_sample-033.FIN2	Fe-rich	700000		0.343	0.063	15.7	3.9	16.61	0.98	3.1	2.6	458	18	13.8	1.1	18.31	0.85	3.77	0.96	1.4	0.77	5.59	0.66	35.1	4.6	0	0.11	0.017	0.087	0.015	0.021	-0.15	0.19	0.04	0.19	0.027	0.045	-0.1	0.51	-0.016	0.077	-0.03	0	-0.027	0.014	0.21	0.36	0.021	0.022	0.08	0.12	0.005	0.012	0	0.11	25.6	3.4	150	200	0.098	0.072
BMB5857	Zircon_sample-034.FIN2	Fe-rich	700000		0.28	0.16	22	14	47.9	3.3	6.4	2.5	1340	830	9.67	0.97	12.2	2.3	7.1	2	4.7	1.6	8.9	1.4	46.5	4	-0.09	0.1	-0.04	0.1	0	0.043	0	0.22	0.07	0.15	0.019	0.025	0.46	0.9	0.08	0.1	-0.02	0	-0.0194	0.0075	-0.14	0.27	0.012	0.012	0.061	0.076	0.048	0.035	0.045	0.071	73.3	6.8	130	110	0.1	0.11
BMB5857	Zircon_sample-035.FIN2	Fe-rich	700000		0.14	0.14	44	73	14.4	1.3	4.1	2.3	419	21	19.6	2.3	30.4	3.6	6.6	7.2	1.18	0.49	6.8	1.1	36.3	3.7	0.006	0.018	-0.03	0.052	-0.012	0.015	0.03	0.18	-0.032	0.062	0.025	0.025	-0.34	0.12	-0.003	0.037	0.004	0	0.003	0.01	-0.03	0.12	0.0022	0.0054	0.056	0.075	0.008	0.02	0.006	0.054	29.3	5.3	130	150	0.09	0.099
BMB5857	Zircon_sample-036.FIN2	Fe-rich	700000		0.08	0.13	12.1	4.1	26.9	3.8	5	2.6	630	210	10.6	1.7	15.9	3.8	2.78	0.56	2.87	0.78	8.3	1.1	42.5	9.4	0.043	0.05	0.019	0.037	0.007	0.019	0.05	0.13	-0.027	0.075	0.02	0.021	0.11	0.71	0.003	0.019	0.049	0	-0.006	0.021	0	0.17	0.004	0.01	0.013	0.044	0.0017	0.0067	0.008	0.068	37.9	5.1	140	120	0.09	0.13
BMB5857	Zircon_sample-037.FIN2	Fe-rich	700000		0.103	0.083	10.6	3.4	43.5	7.1	9.6	4.1	538	49	9.5	1.7	12.8	1.2	1.59	0.96	4.43	0.98	8.39	0.88	38.7	3.2	0.031	0.09	-0.022	0.054	-0.019	0.019	0.02	0.1	-0.018	0.09	0.013	0.023	0.27	0.65	-0.012	0.028	-0.007	0	0.003	0.018	-0.031	0.078	0.012	0.01	0.011	0.028	0.006	0.0088	0.05	0.057	61	10	172	97	0.052	0.065
BMB5857	Zircon_sample-038.FIN2	Fe-rich	700000		0.042	0.099	11.2	6.8	10.7	1.2	3.8	4.8	362	23	12.84	0.91	20.9	1.2	2.93	0.85	0.88	0.35	5.79	0.74	27.5	6.3	-0.046	0.042	0.031	0.094	0.003	0.036	-0.005	0.048	-0.01	0.2	0.083	0.099	-0.22	0.5	0.043	0.036	-0.05	0	-0.005	0.027	-0.07	0.19	0.008	0.013	0.044	0.084	0.008	0.012	-0.053	0.03	21.2	3.4	60	160	0.091	0.043
BMB5857	Zircon_sample-039.FIN2	Fe-rich	700000		-0.05	0.18	8.6	4.1	8.04	0.7	0.3	1.3	358	36	13.66	0.74	24.3	2.3	4.2	1.1	0.5	0.46	5	1.1	28.2	2.6	0.15	0.17	-0.026	0.037	0.006	0.039	0.05	0.16	-0.09	0.14	0.021	0.028	0.26	0.37	0.016	0.059	0.1	0	-0.019	0.035	-0.031	0.08	0.013	0.02	-0.03	0.11	0.022	0.022	0.024	0.051	13.5	0.73	100	130	0.07	0.091
BMB5857	Zircon_Sample-046.FIN2	Fe-rich	700000		0.138	0.065	10.2	4.4	58.6	6.2	3.3	2.8	331	30	10.7	1.3	12	1.3	3	1.4	7.7	2.6	11.3	1.7	72	12	0.022	0.059	-0.027	0.087	0.004	0.03	0.06	0.11	-0.05	0.14	0.025	0.029	-0.09	0.48	0.009	0.052	0	0	0.034	0.031	0.14	0.24	0.0038	0.0087	0.013	0.051	0.011	0.023	0.014	0.046	87	22	40	140	0.036	0.031
BMB5857	Zircon_Sample-047.FIN2	Fe-rich	700000		0.185	0.099	28	23	39.2	8.3	5.4	0.7	584	27	13.3	2.2	11.98	0.86	2.96	0.9	3.9	1.6	10	1.8	67.2	8.3	0.015	0.055	-0.014	0.065	0.001	0.016	-0.019	0.078	0.02	0.31	0.033	0.012	-0.26	0.49	-0.034	0.026	0	0	-0.017	0.018	0.04	0.13	-0.0007	0.0051	0.05	0.11	0.013	0.013	-0.002	0.063	56	12	161	62	0.038	0.076
BMB5857	Zircon_Sample-048.FIN2	Fe-rich	700000		0.144	0.071	5.6	6.3	45.1	8.5	29	15	628	34	12.4	3.6	35	27	380	530	6.2	2.1	8.8	1.2	60.7	9.3	-0.007	0.085	0.06	0.13	0.014	0.035	0.1	0.11	0.08	0.16	0.042	0.014	-0.04	0.33	0.016	0.0094	0.12	0	0.013	0.038	-0.04	0.15	0.024	0.035	0.056	0.074	0.017	0.016	-0.032	0.039	50.8	6.5	120	150	1.5	1.5
BMB5857	Zircon_Sample-049.FIN2	Fe-rich	700000		0.08	0.13	100	130	20.2	4.6	3.2	1.1	518	76	14.1	1.2	20.2	3.2	3.4	2.1	1.6	1.1	5.1	1	55	12	0.04	0.13	0.01	0.074	0.01	0.016	0.01	0.21	-0.04	0.1	0.029	0.039	-0.19	0.44	-0.011	0.044	0.22	0	-0.007	0.016	0.02	0.12	-0.0036	0.0011	0.07	0.13	0.0027	0.0092	-0.002	0.026	31.4	6.4	-2	53	0.1	0.12
BMB5857	Zircon_Sample-050.FIN2	Fe-rich	700000		0.07	0.12	-0.4	3.4	6.46	0.34	3.3	1	302	33	14.8	1.8	27.3	3.1	6.3	4.8	1.28	0.92	4.22	0.54	36.3	6.6	0.041	0.063	0.05	0.15	0.002	0.018	0	0.14	0.07	0.25	0.022	0.03	-0.21	0.44	-0.027	0.043	-0.03	0	-0.008	0.016	0.04	0.13	0.0145	0.0094	0.05	0.12	0.015	0.014	0.058	0.088	11.5	3.7	70	62	0.064	0.093
BMB5857	Zircon_Sample-051.FIN2	Fe-rich	700000		-0.018	0.085	12.3	5.2	20.5	2.8	4.1	2	488	36	13.2	1.7	15.4	1.1	4.36	0.44	2.32	0.68	4.72	0.24	57.4	6.8	0.028	0.046	-0.053	0.071	-0.016	0.035	-0.11	0.18	-0.05	0.2	0.034	0.048	-0.1	0.98	-0.03	0.048	-0.06	0	0.0152	0.0066	0.02	0.13	0.015	0.021	-0.02	0.11	0.0034	0.0097	0.09	0.064	31.4	6.1	100	180	0.072	0.048
BMB5857	Zircon_Sample-052.FIN2	Fe-rich	700000		-0.014	0.084	7.9	2.1	10.5	1.9	2.6	2	388	60	12.2	1.2	20.7	0.36	1.99	0.38	1.62	0.52	4.91	0.53	53	8.3	0.066	0.063	0.002	0.057	-0.005	0.028	0.15	0.14	-0.018	0.041	0.022	0.027	-0.1	0.37	-0.024	0.034	-0.001	0	-0.0044	0.0092	0.06	0.11	0.0046	0.0068	0.15	0.11	-0.00321	0.00072	-0.018	0.061	15.2	2	50	140	0.112	0.071
BMB5857	Zircon_Sample-059.FIN2	Fe-rich	700000		0.23	0.13	11	11	10.1	1.4	1.7	2.7	382	53	12.7	1.2	21.2	1.7	310	270	0.86	0.71	3.05	0.56	81.3	7.3	-0.004	0.049	0.012	0.055	-0.009	0.031	-0.078	0.078	0.112	0.056	0.023	0.04	-0.04	0.31	-0.041	0.034	-0.01	0	-0.014	0.018	-0.111	0.089	0.0059	0.0073	0.008	0.061	0.024	0.021	-0.01	0.045	12.2	1.2	140	63	0.09	0.074
BMB5857	Zircon_Sample-060.FIN2	Fe-rich	700000		0.19	0.15	17	14	25.8	1.1	6.4	1.5	526	31	12	1.7	14.5	1.6	4.8	1.5	2.52	0.86	4.87	0.57	104	18	0.033	0.057	0.07	0.15	-0.006	0.031	0.04	0.13	0.02	0.1	0.034	0.014	-0.19	0.43	0.02	0.03	0.02	0	-0.013	0.022	0.03	0.12	0.0081	0.0096	0.033	0.044	0.012	0.014	0.06	0.16	24.8	2.4	120	210	0.133	0.072
BMB5857	Zircon_Sample-061.FIN2	Fe-rich	700000		0.136	0.088	5.5	4	8.12	0.69	1.8	2.2	329	41	12.5	1.3	22.6	2.4	5.5	2.3	0.4	0.52	3.25	0.55	84	17	0.001	0.076	-0.006	0.034	0.016	0.045	0.02	0.17	0.14	0.23	0.022	0.014	0.03	0.23	0.005	0.021	-0.05	0	-0.002	0.036	-0.03	0.17	0.029	0.037	0.034	0.051	0.005	0.012	0.038	0.069	9.38	0.56	54	91	0.134	0.067
BMB5857	Zircon_Sample-062.FIN2	Fe-rich	700000		0.186	0.085	12.8	3.2	27.3	4.8	2.1	3.3	553	31	14.4	2.4	16.4	3	380	390	2.9	1.5	4.55	0.6	135	32	-0.023	0.062	0.031	0.056	0.002	0.028	0.01	0.17	-0.085	0.091	-0.00241	0.00056	0.28	0.3	0.002	0.047	0.06	0	-0.003	0.028	-0.14	0.23	0.0029	0.0074	-0.036	0.083	0.004	0.01	0.012	0.063	24	2.8	140	140	0.18	0.19
BMB5857	Zircon_Sample-063.FIN2	Fe-rich	700000		0.028	0.061	10.5	3.3	40.9	5.3	11.5	4.5	497	33	12.78	0.95	25	11	8900	7000	7.6	3.2	5.1	2.7	139	77	-0.009	0.04	0.055	0.073	0.023	0.035	0.17	0.19	0.02	0.11	0.017	0.017	-0.13	0.34	0.035	0.069	0.05	0	0.027	0.053	0.038	0.052	0.0044	0.0084	0.047	0.077	0.0056	0.0066	0.01	0.017	39.3	9.8	100	260	2.9	3.8
BMB5857	Zircon_Sample-064.FIN2	Fe-rich	700000		0.03	0.19	8.9	6.5	10.3	1.2	3.3	2.2	570	190	15.2	1.2	22.6	3.6	84	85	1.2	1	4.09	0.52	144	19	-0.011	0.043	0.03	0.11	0.009	0.031	0.03	0.14	-0.06	0.12	0.023	0.031	-0.03	0.41	-0.02	0.02	0.09	0	0.007	0.034	-0.14	0.14	0.023	0.019	0.011	0.047	0.017	0.025	0.022	0.085	15.2	2.2	6	72	0.018	0.026
BMB5857	Zircon_Sample-065.FIN2	Fe-rich	700000		-0.03	0.16	6	3.4	14.2	2.8	1.1	2.2	366	41	14.2	3.3	22.2	3.5	3.74	0.97	1.9	1	3.63	0.93	102	22	0.08	0.16	0.063	0.046	0.054	0.014	0.08	0.14	0.03	0.22	-0.00251	0.0005	-0.26	0.22	-0.016	0.038	0.01	0	0.009	0.022	-0.096	0.089	0.012	0.018	0.05	0.12	0.011	0.021	0.024	0.074	13.2	1.5	200	290	0.049	0.047
BMB5857	Zircon_Sample-072.FIN2	Fe-rich	700000		0.227	0.053	8.4	4.3	12	3.6	11.6	2.9	426	38	13.9	1.3	23.4	2.2	2.3	2	1.45	0.33	3.92	0.94	169	26	-0.054	0.04	-0.021	0.044	0.047	0.032	0.06	0.24	-0.12	0.15	0.012	0.028	-0.37	0.5	0.023	0.063	0.09	0	-0.011	0.01	-0.008	0.081	0.021	0.03	-0.027	0.098	-0.0022	0.0057	0.038	0.096	12.4	2.1	210	120	0.44	0.23
BMB5857	Zircon_Sample-073.FIN2	Fe-rich	700000		0.68	0.49	10.7	5	23.6	4.4	22	27	456	58	12	2.1	30.4	9.2	21	20	3.5	1.2	5.94	0.73	200	15	-0.13	0.15	-0.048	0.039	-0.012	0.063	0.33	0.32	0.019	0.049	0.028	0.026	0.4	1.3	0.036	0.077	0.16	0	-0.012	0.018	0.02	0.42	0.018	0.023	-0.017	0.091	0.068	0.075	0.05	0.19	27.4	4.4	140	190	0.59	0.42
BMB5857	Zircon_Sample-074.FIN2	Fe-rich	700000		0.15	0.12	3	5.2	12.5	7.4	6.8	3.7	411	35	12.5	1.8	27	15	5	6.3	1.5	1.7	5.1	3.8	150	110	-0.0094	0.0086	-0.047	0.032	0.013	0.024	0.12	0.2	0.03	0.1	0.011	0.022	1	1.4	-0.03	0.043	0.08	0	-0.003	0.012	0.06	0.1	0.001	0.016	0.036	0.079	0.015	0.019	0.022	0.04	23	21	170	250	0.036	0.063
BMB5857	Zircon_Sample-075.FIN2	Fe-rich	700000		1.1	2.1	-12	44	5.5	3.3	80	120	342	68	15.8	8.8	30	28	30	52	-4	11	2.4	2.5	78	93	-0.5	1.2	-0.19	0.49	0.18	0.33	1.1	2.2	-0.45	0.77	0.33	0.65	-1.4	2.5	-0.4	0.75	0.36	1	-0.016	0.013	-0.25	0.37	0.25	0.51	-0.18	0.34	-0.023	0.045	0.05	0.14	10.4	6.2	90	180	1.2	2
BMB5857	Zircon_Sample-076.FIN2	Fe-rich	700000		14	18	150	260	15.7	9.1	330	400	460	88	-23	40	670	960	3400	3300	58	72	18	36	62	85	1.4	7.5	-0.5	5.7	3.1	6.3	11	19	-9	16	0.8	1.8	-8	11	0.1	2.2	6.6	8	0.7	0.86	2.2	2.5	-0.15	0.29	-0.6	3.6	3.3	5	-0.4	2	20	11	140	190	5400	6300
BMB5857	Zircon_Sample-077.FIN2	Fe-rich	700000		0.26	0.1	80	140	16.2	3.8	10.6	4.4	396	14	12.2	2.2	24.5	2.6	44	53	1.8	1.5	7	0.9	157.6	9.1	0.043	0.076	0.045	0.075	0.011	0.024	0.09	0.13	0	0.24	0.016	0.026	0.19	0.58	-0.069	0.065	-0.013	0	0.019	0.039	-0.05	0.15	0.022	0.02	-0.05	0.11	0.021	0.026	0.05	0.13	22.4	4	170	180	0.56	0.61
BMB5857	Zircon_Sample-078.FIN2	Fe-rich	700000		0.05	0.18	7.1	3.8	17.3	3.7	9.9	5.4	493	76	12	1.4	36	11	16	16	1.59	0.78	6.5	1.5	150	42	0.073	0.075	0.004	0.069	-0.008	0.023	0.19	0.26	0.08	0.15	0.012	0.013	0.09	0.15	0.03	0.063	0.08	0	-0.0005	0.0075	-0.04	0.1	0.012	0.023	0	0.17	0.005	0.015	0.017	0.067	13	3.4	120	130	0.74	0.87

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe_2O_3 x 0.89981.

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CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5867	Zircon_Sample-085.FIN2	Fe-rich	700000		0.085	0.051	8.9	2.8	52	24	92	43	1410	110	10900	1000	3310	690	21	12	45	11	20.6	4.3	133	27	0.33	0.23	0.81	0.49	0.072	0.052	0.31	0.19	0.055	0.084	0.018	0.011	0.1	0.14	0.025	0.013	0.15	0	0.032	0.022	0.088	0.054	0.0187	0.0075	0.07	0.012	0.0178	0.0098	-0.008	0.027	2.16	0.54	990	480	0.94	0.42
BMB5867	Zircon_Sample-086.FIN2	Fe-rich	700000		0.029	0.015	3.22	0.74	22.8	3.9	47.8	8.4	1890	130	2160	240	3450	560	9.3	5.3	29.9	6.8	20.1	5.3	110	21	0.049	0.077	0.017	0.016	-0.001	0.0035	-0.009	0.019	-0.036	0.028	0.0051	0.0034	0.06	0.12	-0.004	0.01	0.005	0	0.0023	0.0018	-0.007	0.024	0.0049	0.0029	0.004	0.02	0.0051	0.0045	-0.014	0.024	3.59	0.84	1830	430	0.24	0.13
BMB5867	Zircon_Sample-087.FIN2	Fe-rich	700000		0.039	0.019	5.9	2.6	34.9	7.2	56	10	904	55	1397	56	1620	290	6.57	0.98	40.3	1.2	21	2	87.3	4.1	0.039	0.024	0.031	0.022	-0.002	0.011	0.039	0.024	0.007	0.017	0.0008	0.0016	0	0.19	-0.007	0.012	0.028	0	0.0101	0.0099	0.004	0.019	0.0021	0.002	0.023	0.017	0.0037	0.0045	-0.005	0.017	3.49	0.37	2900	1200	0.119	0.046
BMB5867	Zircon_Sample-088.FIN2	Fe-rich	700000		0.044	0.036	8.1	2.8	34.2	6.7	47	24	1670	210	2250	230	3110	670	41	36	1.8	1.3	28.8	8.1	76	32	0.42	0.35	0.92	0.64	0.051	0.043	0.19	0.2	0.07	0.085	0.0085	0.0056	0.01	0.11	0.014	0.012	0.064	0	0.025	0.018	0.11	0.14	0.029	0.025	0.048	0.011	0.021	0.013	0.001	0.014	2.8	0.57	3600	1600	5.4	4.5
BMB5867	Zircon_Sample-089.FIN2	Fe-rich	700000		0.024	0.038	8.1	2.3	46	15	90	16	1800	400	3920	240	3300	280	15.5	8.4	39.4	7.7	46	13	82	10	0.14	0.16	0.22	0.22	0.004	0.023	0.032	0.03	-0.013	0.068	0.007	0.013	0.12	0.24	-0.012	0.025	0.023	0	0.0048	0.0076	-0.039	0.088	0.0025	0.0034	0.01	0.023	0.0013	0.0052	0.021	0.045	4.5	1.7	680	350	0.89	0.29
BMB5867	Zircon_Sample-090.FIN2	Fe-rich	700000		0.034	0.02	13.7	3	26.5	5.3	56	12	20800	1500	1550	61	4720	420	5.5	1.2	14.9	2.6	51	13	64	11	0.016	0.041	-0.007	0.045	-0.003	0.018	-0.03	0.048	0.033	0.047	0.0012	0.0038	0.11	0.24	0.015	0.022	-0.044	0	-0.005	0.0037	-0.029	0.066	0.0015	0.0046	0.033	0.018	0.0007	0.0035	0.005	0.04	1.58	0.3	250	180	0.33	0.35
BMB5867	Zircon_Sample-091.FIN2	Fe-rich	700000		-0.012	0.051	4.1	1.4	19.2	1.4	42.6	6.4	5980	590	1620	130	3870	290	6.2	5.4	7.2	1.9	59	12	55.9	7.7	-0.001	0.024	0.006	0.032	0.0035	0.0051	0.017	0.038	0.028	0.043	0.0003	0.0013	0.02	0.11	0.005	0.012	0.04	0	0.005	0.008	-0.042	0.033	0.0038	0.0037	-0.001	0.017	0.0002	0.0022	0.007	0.018	1.1	0.44	-10	260	0.031	0.051
BMB5867	Zircon_Sample-098.FIN2	Fe-rich	700000		4.6	6.1	-50	230	38.4	4.9	280	220	8020	430	1670	250	8200	4100	56	55	16	15	23	43	70	12	-0.09	0.82	0.46	0.88	-0.3	0.44	-0.1	3.8	-0.5	1.4	0.008	0.043	2	3.9	0	1.4	-0.1	1	0.12	0.16	-1.6	1.8	0.05	0.13	-0.29	0.44	0.03	0.15	-0.8	3	4.9	3.3	130	150	10	12
BMB5867	Zircon_Sample-099.FIN2	Fe-rich	700000		0.025	0.025	4	1	21.3	3.4	58.4	5.7	5270	640	12000	1800	3980	480	25	27	5.8	1.6	16.4	1.4	35.4	2.9	0.65	0.26	2.15	0.51	0.204	0.04	0.86	0.24	0.237	0.085	0.033	0.032	0.33	0.11	0.054	0.013	0.42	0	0.104	0.03	0.43	0.14	0.064	0.02	0.24	0.065	0.058	0.032	0.043	0.049	2.14	0.75	350	210	0.25	0.11
BMB5867	Zircon_Sample-100.FIN2	Fe-rich	700000		0.31	0.21	48	26	64	18	166	48	12570	460	1735	47	6700	1100	13.7	3.5	24.2	6.5	27.2	5.6	72	14	-0.007	0.037	0.085	0.087	0.019	0.014	0	0.11	-0.028	0.074	0.0005	0.0057	-0.03	0.65	-0.015	0.037	-0.08	0	0.013	0.021	-0.05	0.12	0.008	0.012	0.15	0.19	0.012	0.018	0.019	0.088	7.8	3.3	130	130	1.33	0.53
BMB5867	Zircon_Sample-101.FIN2	Fe-rich	700000		0.078	0.084	11.4	3.6	49	14	186	63	5700	1400	2700	520	8000	2200	3190	970	31	27	21	11	74	36	-0.033	0.062	0	0.054	0.0028	0.009	0.06	0.11	0.05	0.089	0.0009	0.0037	-0.03	0.19	0.016	0.027	-0.02	0	0.0001	0.0095	0.012	0.022	0.004	0.01	0.02	0.12	0.011	0.013	-0.002	0.035	5.7	3	220	160	0.68	0.28
BMB5867	Zircon_Sample-102.FIN2	Fe-rich	700000		0.21	0.27	8.7	6.4	17	4.9	63	27	3500	320	672	76	3570	760	200	280	13.1	3.7	8.43	0.82	27.2	4.8	-0.01	0.021	-0.006	0.059	-0.002	0.014	0.39	0.63	-0.18	0.38	0.044	0.081	0.31	0.25	-0.11	0.16	-0.05	0	0.026	0.059	-0.2	0.39	0.038	0.07	0.016	0.036	0.01	0.028	0.1	0.18	3.1	1.3	200	130	0.7	1
BMB5867	Zircon_Sample-103.FIN2	Fe-rich	700000		-0.034	0.016	2.5	1	18.2	1.6	37.2	3.3	1740	150	891	64	2600	330	2.92	0.65	8.9	2.6	7.7	1.3	35.9	3.8	-0.011	0.012	-0.014	0.018	-0.0035	0.0036	0.039	0.057	0.007	0.049	0.0028	0.0039	0.07	0.21	0.004	0.011	0.011	0	-0.0115	0.0077	0.043	0.028	0.0067	0.0082	-0.037	0.04	0.0063	0.0027	0.036	0.057	1.25	0.53	327	56	0.079	0.093
BMB5867	Zircon_Sample-104.FIN2	Fe-rich	700000		0.007	0.016	6.3	1.4	47.4	8	94	13	2710	260	1880	170	4350	450	13.1	6.8	32.4	8.8	14.4	2	61.1	9	-0.003	0.021	-0.005	0.011	-0.0016	0.0038	0.002	0.046	0.029	0.033	0.0018	0.0023	0.01	0.14	0.002	0.0056	-0.002	0	-0.002	0.0052	-0.004	0.049	0.0021	0.0022	-0.022	0.022	0.0007	0.0027	0.017	0.014	3.6	1	530	130	0.39	0.13
BMB5867	Zircon_Sample-111.FIN2	Fe-rich	700000		0.27	0.36	10	2.6	46	14	133	47	4290	220	1940	290	4840	830	140	130	33.6	7.8	5.6	1.6	47	11	0.015	0.017	0.03	0.037	0.0067	0.0082	0.02	0.1	-0.011	0.048	0.008	0.012	-0.04	0.17	0.0018	0.0082	0.018	0	-0.002	0.011	0.07	0.14	0.0015	0.0033	-0.059	0.088	0.0091	0.0092	-0.018	0.06	7	2.1	201	98	1.7	2.4
BMB5867	Zircon_Sample-112.FIN2	Fe-rich	700000		1	1.1	42	36	51	21	220	160	10300	1200	1710	110	6250	800	320	440	10	11	4	3.8	50	28	0.27	0.77	-0.15	0.74	0.05	0.11	1.9	3.7	-0.15	0.62	0.09	0.2	-4.2	8	0.5	0.69	0.25	1	0.039	0.051	-1.3	2.1	-0.019	0.027	-0.46	0.6	0.03	0.13	0.41	0.58	5.3	1.7	209	68	4.8	7.7
BMB5867	Zircon_Sample-113.FIN2	Fe-rich	700000		0.049	0.053	12.4	5.7	44	12	96	31	5260	670	1690	160	5250	710	200	290	16.4	9	4.4	1	47.3	7.7	0.012	0.026	-0.004	0.031	0.0027	0.0073	0.007	0.022	-0.009	0.031	0.0005	0.002	0.07	0.11	-0.013	0.016	0.013	0	0.0053	0.0053	0.025	0.021	0.0008	0.002	0.009	0.047	0.001	0.0029	0.004	0.027	6.7	1.1	160	140	0.19	0.15
BMB5867	Zircon_Sample-114.FIN2	Fe-rich	700000		0.029	0.039	17.1	3.8	27	10	47	9.8	2030	200	970	160	4200	1900	9.7	2.7	6.2	1.1	3.1	1.5	27	10	0.05	0.049	0.52	0.24	0.0133	0.0025	0.066	0.092	-0.025	0.017	-0.000435	0.000064	-0.112	0.047	0.0059	0.0056	0.021	0	0.006	0.007	0.001	0.053	0.0003	0.002	0.029	0.047	0.0106	0.0059	0.02	0.03	3.69	0.66	-49	76	0.16	0.13
BMB5867	Zircon_Sample-115.FIN2	Fe-rich	700000		0.055	0.073	13.8	6.6	47	17	102	33	3780	680	1760	450	3760	930	11.3	6.6	26	8.5	4.47	0.34	40.5	4.4	-0.01	0.034	0	0.014	0.013	0.026	-0.035	0.075	-0.023	0.045	0.0031	0.008	-0.05	0.19	0.028	0.027	-0.01	0	0.002	0.021	-0.016	0.075	0.0101	0.0074	0.005	0.031	0.008	0.013	0.02	0.037	3.77	0.67	154	75	0.52	0.54
BMB5867	Zircon_Sample-116.FIN2	Fe-rich	700000		0.023	0.016	6.53	0.92	17.4	4.2	46	12	4470	370	1090	120	3710	890	13.8	2.2	12.8	2	2.24	0.43	25.4	3.4	0.01	0.019	-0.0038	0.0095	0.0031	0.0069	-0.001	0.035	-0.01	0.025	0.0015	0.0018	0.098	0.094	0.003	0.01	0.005	0	-0.0017	0.0053	-0.006	0.034	0.0013	0.0023	0.003	0.028	0.0015	0.0018	-0.007	0.013	4.3	0.46	180	110	0.044	0.017
BMB5867	Zircon_Sample-117.FIN2	Fe-rich	700000		-0.01	0.024	9.5	3.4	24.5	3	55.1	7.9	1057	79	1117	89	3730	470	7.47	0.7	22.9	3.1	3.21	0.69	36.8	8.8	0.057	0.093	0.05	0.11	0.003	0.013	0.036	0.03	0.018	0.037	0.0079	0.0063	0.21	0.33	0.0022	0.0068	0.01	0	-0.0019	0.0036	-0.002	0.036	0.0019	0.003	0.003	0.015	0.0014	0.0033	0.007	0.018	3.6	1.1	2900	1100	0.106	0.019
BMB5867	Zircon_Sample-124.FIN2	Fe-rich	700000		-0.134	0.077	6.4	3.7	7	1.2	16.2	2.7	800	110	521.5	8.1	865	52	7.8	1.3	2.71	0.4	0.81	0.28	11	2.2	-0.057	0.057	0.003	0.048	-0.004	0.02	0.09	0.12	0.1	0.22	0.035	0.047	0.31	0.73	-0.03	0.043	0.05	0	-0.026	0.02	0.11	0.17	0.009	0.016	0.031	0.041	0.0049	0.0095	0.072	0.087	0.63	0.15	-23	51	0.066	0.053
BMB5867	Zircon_Sample-125.FIN2	Fe-rich	700000		0.01	0.058	5.7	7.9	6.44	0.41	19.4	5.6	1230	410	495	12	950	120	5.6	1.4	2.94	0.83	0.85	0.33	11.2	3.5	0.05	0.073	-0.009	0.052	0.009	0.034	0.11	0.13	0.06	0.14	-0.00183	0.00045	0.13	0.49	-0.022	0.036	0.02	0	-0.021	0.012	0.14	0.16	0.01	0.016	-0.025	0.085	0.016	0.026	0.006	0.035	0.42	0.14	100	270	0.031	0.022
BMB5867	Zircon_Sample-126.FIN2	Fe-rich	700000		-0.08	0.11	5.5	2.2	5.52	0.35	16	2.6	767	40	455	20	990	140	5.6	2	3.9	1.2	0.8	0.2	9.1	1.6	0.03	0.13	-0.003	0.069	0.016	0.034	-0.06	0.14	0.06	0.11	0.02	0.018	0.08	0.75	-0.031	0.056	0.09	0	0.001	0.022	0.11	0.29	0.007	0.014	-0.064	0.056	0.014	0.024	0.048	0.096	0.43	0.24	-110	74	0.062	0.068
BMB5867	Zircon_Sample-127.FIN2	Fe-rich	700000		-0.18	0.12	9.4	4.2	6.46	0.59	15.4	2.6	873	40	494	16	862	17	6.25	0.6	3.5	1.4	0.72	0.27	9.9	2.8	-0.02	0.1	-0.037	0.086	0.028	0.037	0.09	0.14	-0.07	0.11	-0.00226	0.00075	0.2	0.53	-0.001	0.068	0.04	0	0.02	0.032	-0.04	0.29	0.017	0.024	0.13	0.31	0.0187	0.0062	0.06	0.099	0.48	0.24	-21	95	0.049	0.029
BMB5867	Zircon_Sample-128.FIN2	Fe-rich	700000		-0.18	0.13	1.7	2.6	4.99	0.17	14.4	2.1	821	27	503	16	968	57	13	5.6	1.61	0.72	0.51	0.2	8.28	0.9	-0.024	0.064	-0.013	0.049	0.01	0.025	-0.01	0.13	0.12	0.12	0.035	0.027	0.35	0.46	0.011	0.038	0.26	0	0.033	0.053	-0.08	0.12	-0.0008	0.0043	0.07	0.13	0.004	0.012	0.026	0.072	0.42	0.2	-20	130	0.031	0.053
BMB5867	Zircon_Sample-129.FIN2	Fe-rich	700000		-0.2	0.1	7.8	2.9	4.99	0.38	12.3	3.6	704	54	443	32	893	90	4.18	0.91	2.58	0.26	0.43	0.17	7	1	-0.022	0.035	0.012	0.072	-0.036	0.026	0.06	0.1	0.02	0.15	0.037	0.035	-0.19	0.54	0.031	0.043	-0.04	0	0.02	0.035	-0.2	0.16	0.0043	0.0086	-0.03	0.12	0.0168	0.0067	0	0.05	0.4	0.16	0	140	0.095	0.096
BMB5867	Zircon_Sample-130.FIN2	Fe-rich	700000		-0.3	0.32	-1.1	4.2	6.92	0.62	15.39	0.73	701	69	452	15	990	160	5.5	3.1	3.5	1.6	0.74	0.34	11	3.9	-0.071	0.046	0.06	0.1	0.018	0.02	0.004	0.049	0.07	0.15	0.01	0.023	0.62	0.81	-0.008	0.042	0.104	0	-0.013	0.031	0	0.14	0.03	0.044	0.012	0.053	0.011	0.018	-0.028	0.056	0.52	0.16	0	230	0.071	0.026
BMB5867	Zircon_Sample-137.FIN2	Fe-rich	700000		-0.19	0.12	3	3.3	6.47	0.59	16.5	3.9	646	36	425	19	820	100	5.74	0.36	2.83	0.94	1.05	0.41	10	1.8	-0.01	0.081	-0.06	0.082	-0.008	0.047	0.01	0.12	0.07	0.21	0.012	0.013	0.22	0.45	0.008	0.033	0.04	0	-0.005	0.053	-0.09	0.15	0.0061	0.0095	0.002	0.072	0.012	0.027	-0.03	0.042	0.63	0.27	-76	48	0.017	0.023
BMB5867	Zircon_Sample-138.FIN2	Fe-rich	700000		-0.11	0.25	4.6	7.5	5.1	1.2	14.5	5.6	754	79	447	15	969	46	8.8	4.6	3.1	2.1	0.81	0.44	10.2	4.8	-0.023	0.08	-0.035	0.049	0.06	0.14	0.05	0.29	-0.02	0.12	0.011	0.025	0.28	0.64	0.07	0.11	-0.03	0	-0.01	0.025	0.03	0.14	-0.0009	0.0056	-0.05	0.14	0.042	0.041	-0.002	0.075	0.55	0.38	-50	220	0.091	0.093
BMB5867	Zircon_Sample-139.FIN2	Fe-rich	700000		-0.06	0.13	4.4	2.4	5.25	0.43	15.5	2.8	836	74	495	14	1070	120	12.2	4.4	1.93	0.79	0.94	0.31	9.6	2.1	0.016	0.089	-0.048	0.06	0.005	0.019	0.08	0.18	0.23	0.22	0.017	0.019	0.03	0.33	0.054	0.07	-0.01	0	0.001	0.041	-0.05	0.19	0.008	0.012	0.02	0.12	0.05	0.038	0.04	0.16	0.39	0.26	-80	110	0.12	0.11
BMB5867	Zircon_Sample-140.FIN2	Fe-rich	700000		-0.088	0.024	15	16	5.7	2.8	16	11	770	240	507	33	1005	11	160	150	2.2	1.7	0.94	0.57	8.9	1.9	-0.01	0.11	0.054	0.045	-0.006	0.044	0.02	0.12	0.136	0.052	0.022	0.026	0.54	0.39	0.023	0.022	-0.046	0	0.013	0.03	-0.07	0.15	0.018	0.024	-0.004	0.035	0.017	0.025	0.019	0.082	0.525	0.086	90	180	0.039	0.015
BMB5867	Zircon_Sample-141.FIN2	Fe-rich	700000		-0.195	0.014	6	5.2	5.48	0.64	17.4	2.3	751	43	453	19	859	41	8.09	0.48	2.2	1.2	0.89	0.33	8.74	0.92	0	0.082	0.025	0.085	0.005	0.017	0.053	0.089	0.37	0.16	-0.00202	0.00052	0.66	0.93	0.012	0.026	0.15	0	0.02	0.019	0.04	0.15	0.0053	0.0072	0.048	0.065	0.004	0.01	0.033	0.048	0.4	0.12	10	180	0.054	0.034
BMB5867	Zircon_Sample-142.FIN2	Fe-rich	700000		-0.261	0.071	7.1	4.3	10.6	3.5	29.2	9.6	1010	410	600	180	1090	320	7.5	1.3	5.6	4	2.2	1.2	17.1	6.1	0.002	0.08	0.015	0.064	0.015	0.015	0	0.16	0.25	0.16	0.022	0.022	0.43	0.54	0.011	0.02	0.01	0	-0.016	0.026	0.15	0.2	0.015	0.02	0.043	0.04	0.0101	0.0088	0.018	0.072	0.96	0.42	40	250	0.066	0.042
BMB5867	Zircon_Sample-143.FIN2	Fe-rich	700000		-0.104	0.096	3.6	4.1	4.79	0.44	15.1	3.1	747	53	466	20	950	39	6.6	1.6	1.61	0.98	1.44	0.39	8.63	0.91	0.023	0.046	0.05	0.054	-0.01	0.036	-0.03	0.11	0.19	0.14	0.033	0.038	-0.07	0.22	-0.015	0.025	0.1	0	-0.037	0.026	0.18	0.12	0.02	0.021	-0.054	0.045	0.011	0.013	0.056	0.056	0.327	0.048	70	180	0.027	0.069
BMB5867	Zircon_Sample-150.FIN2	Fe-rich	700000		0.13	0.12	44.7	9.6	66	10	107	28	2500	830	670	110	2190	800	42	26	19	2.3	16.1	8	49	20	0.013	0.048	0.021	0.044	0.052	0.042	-0.019	0.066	0.066	0.074	0.017	0.019	0.06	0.3	-0.019	0.027	-0.07	0	0.019	0.037	0.02	0.24	0.018	0.022	-0.048	0.049	0.01	0.018	0.12	0.13	1.95	0.4	170	100	0.55	0.18
BMB5867	Zircon_Sample-151.FIN2	Fe-rich	700000		-0.047	0.051	32.6	4.6	47.7	5.1	46.9	7	746	80	460	27	550	66	9.5	3	13.8	3.1	4.33	0.94	17.2	3.8	-0.021	0.052	-0.04	0.048	-0.006	0.016	0.09	0.16	0.009	0.06	0.0008	0.0059	0.11	0.38	0.036	0.038	0.04	0	-0.005	0.018	0.05	0.17	0.008	0.01	0.066	0.073	0.01	0.012	-0.008	0.074	1.45	0.28	-50	140	0.043	0.036
BMB5867	Zircon_Sample-152.FIN2	Fe-rich	700000		-0.095	0.093	3.2	6.2	8.4	0.79	17.5	3.5	830	120	434	30	777	57	8.7	1.7	2.94	0.67	3.1	2.1	9.9	1.2	-0.038	0.069	-0.028	0.073	0.016	0.052	-0.001	0.074	0.14	0.18	0.016	0.016	0.11	0.65	-0.02	0.019	0.05	0	-0.005	0.035	-0.05	0.33	0.007	0.012	0.026	0.099	0.014	0.02	0.01	0.17	0.58	0.22	80	190	0.37	0.23
BMB5867	Zircon_Sample-153.FIN2	Fe-rich	700000		0.103	0.029	24.7	6.4	27.7	3.7	49.8	5.5	960	200	451	52	760	130	3	1.9	7.5	1.1	2.7	1	8.7	1	0.013	0.078	-0.02	0.069	-0.0265	0.0082	-0.04	0.1	0.023	0.061	0.0024	0.0093	0.06	0.29	0.01	0.036	-0.06	0	0.002	0.029	0	0.16	0.003	0.0066	-0.033	0.059	0.014	0.017	0.03	0.11	0.98	0.21	90	180	0.548	0.089
BMB5867	Zircon_Sample-154.FIN2	Fe-rich	700000		-0.019	0.083	36.8	8.5	38.7	4.1	43.4	3.7	878	40	478	29	455	36	21	15	9.1	1.7	3.8	1.3	11.5	1.9	-0.028	0.034	-0.019	0.045	0.002	0.025	0.12	0.2	0.07	0.12	0.021	0.017	-0.22	0.46	0.022	0.019	0.14	0	0.022	0.026	-0.02	0.19	0.0026	0.0071	0.04	0.1	0.022	0.02	0.22	0.18	1.08	0.3	10	140	0.071	0.084
BMB5867	Zircon_Sample-155.FIN2	Fe-rich	700000		-0.08	0.1	58.8	4.9	87	5.8	67.1	8	900	140	482	74	370	37	5.4	3.6	26.1	3.4	4	2	12.1	2.8	0.007	0.074	0.05	0.08	0.001	0.015	-0.13	0.12	-0.025	0.09	0.013	0.02	0.06	0.32	0.005	0.077	0.11	0	0.007	0.027	0.06	0.32	0.009	0.016	0.082	0.059	0.019	0.018	0.01	0.12	1.71	0.5	40	180	0.117	0.09
BMB5867	Zircon_Sample-156.FIN2	Fe-rich	700000		0.025	0.068	42.9	4.5	189	23	148	16	860	240	1110	260	1320	120	83	44	65.1	9.8	10.9	3	42	10	-0.006	0.025	-0.016	0.025	0.002	0.018	0.016	0.038	0.13	0.11	0.0019	0.0069	0.17	0.42	-0.01	0.038	-0.071	0	-0.022	0.027	-0.018	0.086	0.008	0.012	0.027	0.042	0.0147	0.0076	0.11	0.17	6.9	1.2	23	92	0.18	0.12
BMB5867	Zircon_Sample-163.FIN2	Fe-rich	700000		34	16	8700	4700	250	190	220	250	6800	3500	438	76	1170	850	104	37	7.5	3.1	13.1	4.2	4.1	1.5	69	30	154	68	15.2	6.6	63	25	15.9	7.4	2.73	0.88	10.7	2.9	2.06	0.8	14.8	6	4.2	1.6	8.3	3.7	1.23	0.93	5.5	1.8	0.97	0.43	4.8	2.3	2.45	0.73	45	96	113	47
BMB5867	Zircon_Sample-164.FIN2	Fe-rich	700000		24	11	5900	1900	146	73	160	150	6000	2100	495	57	333	80	54	15	3.9	3.6	7	2.3	2.6	1.9	31	12	91	39	6.5	2.6	29	15	5.2	2.9	2.1	1.3	5.9	1.5	0.56	0.27	7.8	3	2	1.1	2.8	1.1	0.25	0.19	1.89	0.64	0.42	0.32	3.2	1.9	3	1.3	210	170	64	20
BMB5867	Zircon_Sample-165.FIN2	Fe-rich	700000		40	15	11200	5100	310	110	231	85	4800	1100	249.5	6.4	291	44	215	82	4.8	4.3	6.1	1.4	2.5	1.6	85	25	220	69	19.6	6	72	19	17.4	5.9	3.1	1.2	10.9	3.8	1.98	0.52	15	4	3.9	1.1	7.9	1.4	0.85	0.18	8.1	4.2	1.18	0.29	9.1	3.9	1.65	0.7	260	310	114	24
BMB5867	Zircon_Sample-166.FIN2	Fe-rich	700000		0.196	0.039	94	36	3.1	1.5	7.4	4	3420	890	681	62	3110	700	12.2	2.3	5.03	0.74	20.5	7	125	28	3.59	0.66	9.4	1.4	0.72	0.11	2.59	0.53	0.52	0.11	0.127	0.027	0.51	0.22	0.079	0.019	0.66	0	0.193	0.039	0.38	0.12	0.037	0.019	0.33	0.11	0.053	0.013	0.63	0.35	1.11	0.32	2700	1500	8.2	2.9
BMB5867	Zircon_Sample-167.FIN2	Fe-rich	700000		0.26	0.2	121	85	6.6	4.6	16.3	2.4	1280	550	950	160	3980	130	16.8	7	49	15	8.05	0.85	98	11	2.5	1.1	6.4	3.1	0.45	0.21	2.05	0.96	0.42	0.25	0.105	0.047	0.29	0.22	0.049	0.034	0.348	0	0.074	0.045	0.129	0.056	0.023	0.017	0.084	0.056	0.022	0.016	0.89	0.62	3.5	1	520	280	1.78	0.78
BMB5867	Zircon_Sample-168.FIN2	Fe-rich	700000		-0.058	0.066	38.3	5.9	45.4	5.5	91	49	1650	260	560	60	1040	250	20	14	12	1.3	3.05	0.69	30.1	7.2	0.025	0.083	0.015	0.037	0.007	0.021	-0.04	0.12	-0.068	0.041	0.034	0.029	-0.07	0.16	0.027	0.028	-0.007	0	0.008	0.035	-0.03	0.16	0.008	0.013	0	0.082	0.013	0.019	0.051	0.079	1.05	0.22	270	340	0.108	0.092
BMB5867	Zircon_Sample-169.FIN2	Fe-rich	700000		0.036	0.05	20.8	3.7	51.3	7.2	81	11	1690	230	1160	270	1510	170	55	72	18.5	2	2.69	0.14	25.3	3	0.027	0.09	0.051	0.021	0.002	0.025	0.06	0.18	-0.05	0.11	0.013	0.018	-0.03	0.32	0.015	0.038	0.09	0	-0.001	0.01	0.1	0.18	0.007	0.014	0.03	0.13	-0.003	0.0011	0.006	0.046	1.73	0.21	150	150	0.47	0.34
BMB5867	Zircon_Sample-176.FIN2	Fe-rich	700000		0.083	0.094	45	13	43.9	4.3	58.4	2.7	1270	110	837	98	1330	230	133	54	10.6	1.7	1.75	0.33	24.2	4.7	-0.018	0.066	-0.021	0.066	-0.002	0.015	-0.03	0.13	-0.017	0.091	0.009	0.01	0.22	0.28	-0.005	0.035	-0.04	0	0.025	0.044	0.03	0.12	0.015	0.016	0.004	0.069	0.014	0.012	0.08	0.13	1.7	0.38	70	120	0.131	0.099
BMB5867	Zircon_Sample-177.FIN2	Fe-rich	700000		0.02	0.15	23.2	8.1	38.2	4.9	40.1	8.9	757	50	431	31	423	45	1040	220	9	1.7	0.5	0.33	6.6	1.6	0.016	0.073	0.015	0.041	0	0.021	-0.05	0.1	-0.024	0.096	0.042	0.04	-0.04	0.54	-0.03	0.035	-0.05	0	0.023	0.073	0.02	0.15	0.0126	0.0095	-0.035	0.069	0.01	0.012	0.09	0.15	0.96	0.14	61	89	0.22	0.2
BMB5867	Zircon_Sample-178.FIN2	Fe-rich	700000		0.175	0.067	29.7	4.4	53.2	4.8	64	12	940	270	1310	440	1680	610	9.1	2.8	42.7	7.3	6.6	1.6	84	24	-0.053	0.065	0.044	0.049	0.007	0.022	-0.07	0.14	0.21	0.2	0.023	0.022	-0.18	0.23	-0.02	0.049	0.15	0	0.026	0.091	0.06	0.2	0.021	0.012	0.135	0.098	0.026	0.037	0.17	0.23	2.77	0.41	-30	100	0.43	0.22
BMB5867	Zircon_Sample-179.FIN2	Fe-rich	700000		0.109	0.076	32.8	5.6	75	15	61	11	418	48	1050	350	1090	480	9.4	5.2	52.2	9.8	6.9	5.2	45	14	0.05	0.11	0.026	0.031	-0.0147	0.0072	0.14	0.16	-0.059	0.097	0.015	0.018	0.35	0.45	0.006	0.032	0.02	0	0.03	0.031	0.01	0.21	0.029	0.015	0.062	0.079	0.005	0.012	0.07	0.11	4.59	0.85	110	240	0.293	0.075
BMB5867	Zircon_Sample-180.FIN2	Fe-rich	700000		0.128	0.055	27.2	6.9	39.5	6.6	85	17	2600	540	820	120	3800	1200	21	4	13.1	1	4.4	1	42	13	-0.036	0.044	0.033	0.038	0.002	0.012	0.037	0.073	0.012	0.057	0.0017	0.0058	-0.19	0.23	0	0.018	-0.068	0	0.001	0.015	-0.064	0.044	0.0056	0.0088	-0.007	0.066	0.008	0.011	0.069	0.085	2.26	0.32	-20	140	0.88	0.43
BMB5867	Zircon_Sample-181.FIN2	Fe-rich	700000		0.09	0.13	37	13	64	11	65	18	1450	590	600	150	770	510	4	2.8	15.54	0.56	1.26	0.96	11.7	8.9	0.013	0.036	0.027	0.069	0	0.024	0.002	0.089	-0.019	0.09	0.011	0.012	0.22	0.61	-0.014	0.058	-0.014	0	-0.012	0.037	0.058	0.091	0.0066	0.0096	0.029	0.072	0.015	0.011	0.046	0.068	1.46	0.41	-10	160	0.054	0.042
BMB5867	Zircon_Sample-182.FIN2	Fe-rich	700000		38	20	7700	1700	199	51	161	42	3900	1100	1440	400	573	76	710	230	2.9	1.1	9.5	2.2	6	2.7	48	16	117	38	12.1	3.6	48	14	12.8	3.5	2.87	0.56	13.7	3.7	2.01	0.24	17.7	3	4.21	0.65	12	3.3	1.35	0.39	8.3	2.1	1.23	0.29	290	420	5	1.2	800	200	350	190

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe_2O_3 x 0.89981.

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CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5868	Zircon_Sample-085.FIN2	Fe-rich	700000		0.122	0.037	27	18	1.88	0.41	8.2	2.4	8610	390	0.12	0.25	1.78	0.41	10.8	4.9	0.27	0.15	0.75	0.19	0.102	0.03	0.6	0.13	1	0.18	0.126	0.025	0.5	0.11	0.091	0.039	0.0161	0.0095	0.029	0.099	0.0245	0.0086	0.052	0	0.0173	0.0094	0.03	0.029	0.0081	0.003	0.06	0.035	0.0063	0.0047	0.016	0.024	0.275	0.084	450	320	9.1	2.3
BMB5868	Zircon_Sample-086.FIN2	Fe-rich	700000		0.38	0.17	112	91	5.7	1.6	24.9	5.6	9900	1400	0.11	0.38	2.65	0.42	18	4.2	0.34	0.44	2.18	0.1	0.115	0.047	1.78	0.46	3.8	1.1	0.351	0.059	1.34	0.29	0.48	0.33	0.051	0.019	0.34	0.17	0.072	0.046	0.243	0	0.068	0.019	0.17	0.19	0.0152	0.0034	0.124	0.034	0.022	0.012	0.076	0.043	0.325	0.082	130	100	51	16
BMB5868	Zircon_Sample-087.FIN2	Fe-rich	700000		0.041	0.02	7	10	0.41	0.15	4.2	3.2	8670	260	-0.03	0.49	0.28	0.22	6.7	3.9	0.28	0.15	0.16	0.31	0.085	0.022	0.22	0.12	0.32	0.2	0.014	0.016	0.15	0.14	0.047	0.034	0.0087	0.0094	-0.031	0.066	0.003	0.032	0.026	0	0.005	0.012	-0.012	0.063	0.0017	0.002	0.03	0.016	0.0117	0.002	0.029	0.05	0.051	0.028	320	510	1.22	0.72
BMB5868	Zircon_Sample-088.FIN2	Fe-rich	700000		0.039	0.028	4.7	7.3	0.99	0.99	8.2	3.3	6480	240	0.2	0.12	1.06	0.88	3.81	0.6	0.418	0.094	0.33	0.36	0.085	0.049	0.16	0.12	0.34	0.24	0.048	0.039	0.21	0.11	0.032	0.025	0.009	0.01	0.076	0.012	0.011	0.033	0.054	0	0.0002	0.0037	0.041	0.023	0.0036	0.0042	0.024	0.017	0.002	0.0022	0.006	0.021	1.3	1.1	430	350	3.7	4.3
BMB5868	Zircon_Sample-089.FIN2	Fe-rich	700000		0.029	0.024	0.15	0.95	0.1	0.11	4.8	5.5	6500	1100	1.9	3.1	0.47	0.27	37	47	0.39	0.43	0.17	0.11	0.0171	0.0079	0.009	0.014	0.019	0.015	0.0012	0.0046	0.017	0.034	0.018	0.042	0.0005	0.0018	-0.042	0.056	0.0023	0.0097	0.013	0	0.0022	0.0066	0.006	0.03	0.0015	0.0032	0.025	0.02	0.0024	0.0018	0.013	0.017	0.079	0.081	380	240	1.1	1.4
BMB5868	Zircon_Sample-090.FIN2	Fe-rich	700000		0.624	0.09	161	62	7.03	0.39	35.6	4.3	9400	1000	0.591	0.091	1.66	0.23	17.5	2.3	0.57	0.23	0.89	0.21	0.116	0.034	2.66	0.18	5.25	0.66	0.63	0.18	3.2	1.4	0.78	0.29	0.113	0.027	0.74	0.2	0.111	0.053	0.59	0	0.125	0.019	0.26	0.11	0.0221	0.0071	0.209	0.026	0.0278	0.007	0.095	0.053	0.419	0.077	467	73	10.1	4
BMB5868	Zircon_Sample-091.FIN2	Fe-rich	700000		0.099	0.073	14.3	9.7	0.756	0.079	6	3.6	6710	790	0.35	0.14	1.24	0.81	8.2	7.6	0.8	0.24	0.2	0.13	0.212	0.033	0.23	0.052	0.47	0.014	0.066	0.028	0.148	0.052	0.066	0.064	0.0084	0.0091	0.18	0.12	0.0041	0.0096	0.064	0	0.007	0.013	0.032	0.04	0.0015	0.0019	0.047	0.047	0.0047	0.0072	0.031	0.021	0.187	0.044	210	290	5.8	1.2
BMB5868	Zircon_Sample-098.FIN2	Fe-rich	700000		0.44	0.32	121	35	5.3	2.2	31	16	9400	610	0.6	0.16	1.16	0.38	11.7	4.5	0.52	0.18	0.77	0.72	0.049	0.02	1.85	0.12	3.47	0.47	0.31	0.11	1.25	0.31	0.44	0.22	0.072	0.023	0.17	0.17	0.0322	0.007	0.15	0	0.034	0.012	0.142	0.089	0.006	0.0084	0.073	0.04	0.018	0.012	0.071	0.086	0.133	0.058	540	220	9	3.1
BMB5868	Zircon_Sample-099.FIN2	Fe-rich	700000		0.0297	0.0085	1.1	1.5	0.252	0.028	4.4	5.2	8040	370	0.37	0.26	0.3	0.086	3.1	0.8	0.403	0.058	0.104	0.047	0.074	0.028	0.158	0.042	0.255	0.045	0.02	0.017	0.065	0.021	0.015	0.016	0.009	0.011	0.15	0.21	0.0069	0.0094	0.068	0	0.0032	0.0033	0.005	0.018	0.0034	0.0015	0.013	0.0058	0.0029	0.0037	0.021	0.024	0.042	0.03	50	200	0.284	0.052
BMB5868	Zircon_Sample-100.FIN2	Fe-rich	700000		0.133	0.07	30	26	2.2	1.2	6	12	7690	590	0.05	0.31	0.62	0.12	11	5.1	0.37	0.25	0.26	0.22	0.061	0.049	0.3	0.21	0.65	0.45	0.07	0.047	0.3	0.24	0.1	0.19	0.01	0.011	0.13	0.33	0.022	0.013	0.14	0	0.024	0.028	0.061	0.049	0.0065	0.0066	0.11	0.15	0.01	0.014	0.32	0.61	0.252	0.064	160	130	2.8	1.5
BMB5868	Zircon_Sample-101.FIN2	Fe-rich	700000		0.069	0.021	3.18	0.99	2.3	1	5.8	2.8	10220	500	13.6	7.9	0.93	0.31	20.6	8.5	1.1	0.59	0.31	0.17	0.087	0.039	0.68	0.085	1.11	0.19	0.098	0.053	0.43	0.16	0.127	0.038	0.019	0.016	0.1	0.16	0.018	0.023	0.153	0	0.019	0.012	0.016	0.064	0.0053	0.0059	0.017	0.024	0.008	0.017	0.014	0.022	0.131	0.076	570	350	280	170
BMB5868	Zircon_Sample-102.FIN2	Fe-rich	700000		0.029	0.016	1.6	1.3	0.325	0.069	5.3	1.9	8880	240	0.59	0.13	0.44	0.14	9.1	4.5	0.32	0.27	0.047	0.045	0.064	0.012	0.41	0.075	0.85	0.078	0.094	0.029	0.329	0.095	0.027	0.044	0.0232	0.0081	0.029	0.075	-0.0012	0.0085	0.064	0	0.0115	0.0031	0.026	0.034	0.003	0.0025	0.029	0.026	0.0059	0.006	0.0127	0.0081	0.034	0.018	270	240	2.05	0.42
BMB5868	Zircon_Sample-103.FIN2	Fe-rich	700000		0.09	0.034	24	15	1.34	0.59	9.6	5.5	9680	740	0.22	0.32	1.02	0.46	13.8	5.2	0.57	0.21	0.44	0.25	0.071	0.027	0.29	0.17	0.5	0.16	0.051	0.025	0.203	0.08	0.062	0.085	0.0134	0.0056	0.009	0.086	0.0083	0.0098	0.044	0	0.0057	0.0085	0.013	0.022	0.002	0.0013	0.038	0.037	0.01	0.0092	0.017	0.017	0.145	0.05	250	230	7.4	5.7
BMB5868	Zircon_Sample-104.FIN2	Fe-rich	700000		0.026	0.011	4.8	4.4	0.63	0.2	3.5	1.7	9800	1100	2.8	2.6	0.52	0.17	9.9	2.5	0.77	0.12	0.11	0.071	0.074	0.013	0.321	0.015	0.502	0.067	0.041	0.017	0.284	0.066	0.044	0.057	0.0112	0.0045	0.082	0.095	0.019	0.0075	0.025	0	0.0055	0.0056	0.015	0.047	0.00225	0.00095	0.001	0.0077	0.0068	0.0075	0.009	0.014	0.075	0.013	440	350	21	30
BMB5868	Zircon_Sample-111.FIN2		700000		4180	380	60000	14000	200	320	12000	17000	3600	2600	2500	5000	620	310	1600	1100	1000	2200	-490	250	98	67	-100	250	200	160	25	50	-110	210	700	1200	-4.9	3.4	340	680	-60	210	-200	##	-40	75	-410	390	27	44	310	550	10	27	280	600	-17	12	130	510	90	110
BMB5868	Zircon_Sample-112.FIN2		700000		-15000	23000	-800000	260000	-1400	2100	260000	410000	-11000	16000	-28000	62000	-70000	11000	-25000	53000	10000	40000	700	5800	-2400	4900	-1200	3300	-180	270	400	560	-1500	5400	-3700	6800	-500	870	-70000	28000	970	880	40000	##	10	280	-300	6200	-40	210	-80000	16000	-250	730	1400	1400	-1800	3000	210	200	-800	1700
BMB5868	Zircon_Sample-113.FIN2		700000		290	390	430	990	5	16	-3800	9400	9100	2300	120	270	100	160	490	490	100	170	70	160	1.6	2.1	-10	24	40	71	0.8	2.1	22	38	12	19	9	18	-150	250	3	23	-8.7	9	0	1.2	13	33	1.5	2.8	-2.1	5	1.5	2.3	4.5	6.9	13	12	-20	120	4.9	7.6
BMB5868	Zircon_Sample-114.FIN2		700000		-8000000	1400000	-10000000	18000000	-17000	35000	60000000	11000000	-130000	230000	10000000	1800000	-38000	69000	26000	71000	-120000	230000	110000	190000	-15000	25000	12000	20000	-27000	51000	-1600	6800	-12000	24000	400000	120000	-100000	17000	800000	230000	3600	6400	1000000	##	12000	23000	28000	93000	20	300	32000	61000	100	1500	18000	31000	-15000	29000	180	170	-90000	23000
BMB5868	Zircon_Sample-115.FIN2		700000		70000	35000	-200000	350000	30	450	-170000	180000	80000	18000	-13000	37000	-20000	13000	700	9600	40000	26000	-200	4000	-480	950	1350	800	-200	4200	80	880	1700	2800	-2900	9200	-240	700	-6300	7000	800	1800	4500	##	-900	2000	-300	2100	-60	410	-80	420	100	150	400	1700	330	320	50	180	700	5400
BMB5868	Zircon_Sample-116.FIN2		700000		300000	130000	8000000	4900000	-700	2600	-200000	170000	70000	45000	20000	39000	7300	9000	28000	66000	-12000	22000	0	11000	600	1500	-740	860	-1800	1400	80	750	1500	7000	-900	2800	-160	780	30000	13000	-700	1100	-7700	##	370	690	-1400	4500	-80	440	400	2600	150	870	-2700	3400	700	2600	130	72	700000	140000
BMB5868	Zircon_Sample-117.FIN2		700000		6900	7600	110000	110000	4100	4700	600000	160000	7000	6400	-80000	16000	-800	1600	-1600	3900	-700	3300	600	2900	500	500	930000	910000	1900000	1700000	220000	190000	930000	820000	240000	230000	37000	33000	140000	130000	16000	12000	63000	##	7800	6300	17000	13000	920	590	3500	3000	800	1000	-400	1200	800	1300	80	120	20000	20000
BMB5868	Zircon_Sample-124.FIN2		700000		-28000	53000	-700000	190000	2400	3600	-260000	950000	-60000	12000	25000	38000	1000	2800	-300000	150000	-80000	19000	4800	7000	-1200	1100	300	1300	-1400	1900	-400	1100	-1900	5800	-1500	6400	-400	750	5000	9900	-450	740	-70000	##	390	680	1600	6600	-150	320	-1100	1800	-160	250	-3100	3800	-1100	3300	150	140	-2100	3100
BMB5868	Zircon_Sample-125.FIN2		700000		92000	90000	3100000	2800000	600	2500	5000000	1200000	60000	24000	-700000	150000	30000	14000	13000	52000	-63000	94000	-16000	27000	3900	8700	-1400	4100	-2700	7100	-1700	2400	70000	30000	-10000	11000	1100	1700	12000	75000	-2000	6700	800	##	-2200	2900	30000	17000	50	120	5000	5100	800	1400	10000	25000	4300	6000	320	140	1900	3800
BMB5868	Zircon_Sample-126.FIN2		700000		-19000	25000	110000	210000	-200	1400	300000	500000	-2000	6000	90000	29000	-3600	8500	19000	23000	13000	13000	500	4100	52	73	-1300	2400	-180	540	360	420	1500	4400	-200	1100	20	360	-4200	9800	140	700	-3800	##	-690	730	-60000	12000	40	190	0	1500	-100	410	700	1200	-500	1500	140	210	30	890
BMB5868	Zircon_Sample-127.FIN2	Fe-rich	700000		2.9	1.7	740	340	29	17	128	81	8820	200	2.9	1.7	1.74	0.29	43	18	0.41	0.25	1.06	0.2	0.092	0.072	19	17	31	28	3.2	2.8	13	11	2.4	1.7	0.38	0.26	1.87	0.55	0.2	0.055	1.59	0	0.302	0.049	0.82	0.2	0.081	0.026	0.68	0.38	0.104	0.019	0.48	0.13	0.43	0.019	490	300	14.8	3.3
BMB5868	Zircon_Sample-128.FIN2	Fe-rich	700000		0.221	0.058	76	45	3.31	0.92	15.4	2.8	7950	530	2	2.1	1.18	0.22	17.3	4	0.47	0.15	0.64	0.13	0.075	0.035	0.448	0.081	0.79	0.1	0.076	0.019	0.495	0.077	0.084	0.05	0.029	0.015	0.061	0.089	0.0036	0.0098	0.072	0	0.0108	0.0068	0.069	0.036	0.0021	0.0019	0.05	0.021	0.0126	0.004	0.088	0.077	0.27	0.039	290	250	8.7	1.9
BMB5868	Zircon_Sample-129.FIN2	Fe-rich	700000		0.102	0.047	17	18	2.88	0.93	7.3	5.4	13500	6100	12	13	1.84	0.77	26	15	21	12	0.93	0.41	0.9	0.47	1.3	0.21	2.26	0.57	0.238	0.061	0.76	0.11	0.17	0.14	0.043	0.029	0.187	0.072	0.0371	0.0067	0.207	0	0.0199	0.0097	-0.009	0.054	0.0106	0.0092	0.069	0.071	0.0037	0.004	0.031	0.03	0.71	0.55	900	280	22	32
BMB5868	Zircon_Sample-130.FIN2	Fe-rich	700000		33	16	4770	960	210	49	1100	270	8500	1500	1560	300	244	45	1040	350	33	36	223	82	13	4.2	97	76	116	41	19	15	54	28	8.4	3.5	2.7	1.8	8.8	8.6	0.57	0.81	7.3	6	1.3	0.45	3.7	2	0.66	0.33	5.4	4.8	0.56	0.28	-0.2	3.2	1.5	1.4	590	130	15800	2900
BMB5868	Zircon_Sample-137.FIN2	Fe-rich	700000		0.043	0.079	8.3	6.2	8.6	1.4	22	7.1	9410	140	12.5	3.7	18.6	6.3	1.6	1	3.7	0.45	1.29	0.69	9.5	3.2	0.007	0.048	0.001	0.037	-0.011	0.037	0.124	0.098	-0.002	0.06	0.021	0.029	0.4	1.2	-0.007	0.031	-0.173	0	-0.005	0.037	0.14	0.13	0.0014	0.0027	-0.008	0.077	0.005	0.012	0	0.16	1.32	0.2	310	600	0.259	0.09
BMB5868	Zircon_Sample-138.FIN2	Fe-rich	700000		-0.011	0.024	4.1	3.2	6.88	0.53	25	4.7	10300	1500	10.6	4.1	19.7	3.7	1.49	0.57	3.59	0.51	0.87	0.39	11.9	2.7	-0.059	0.057	-0.023	0.052	0.006	0.012	-0.083	0.033	0.012	0.031	0.008	0.01	-0.03	0.54	-0.026	0.017	-0.1	0	-0.0023	0.009	0.082	0.096	0.0083	0.0091	-0.001	0.053	0.0115	0.0099	0.001	0.038	1.45	0.3	120	190	0.191	0.064
BMB5868	Zircon_Sample-139.FIN2	Fe-rich	700000		-0.02	0.11	6.5	2.8	5.8	0.91	21.8	5.9	8680	360	11.3	4.7	18.4	8	1	0.27	2.34	0.78	0.97	0.71	10	4.4	0.002	0.041	0.027	0.044	0.001	0.031	0.08	0.058	0.1	0.13	0.015	0.025	0.22	0.37	-0.006	0.034	0.11	0	-0.014	0.015	0.13	0.18	0.0055	0.0085	0.07	0.17	0.01	0.015	0.013	0.053	0.9	0.22	330	230	0.255	0.079

BMB5868	Zircon_Sample-140.FIN2	Fe-rich	700000		0.044	0.066	5.5	2.3	5.65	0.65	26	15	7840	730	10.8	2.8	20	9.7	0.67	0.37	2.57	0.58	1.2	0.29	9.9	2.9	0.013	0.029	-0.021	0.014	-0.004	0.014	0.005	0.063	0.054	0.053	0.009	0.013	-0.12	0.3	-0.013	0.022	-0.018	0	0.0071	0.0089	-0.054	0.065	0.0026	0.0051	0.019	0.041	-0.00073	0.00023	-0.01	0.04	0.85	0.19	185	91	0.204	0.094
BMB5868	Zircon_Sample-141.FIN2	Fe-rich	700000		0.041	0.099	22	14	19	11	67	14	7650	760	22	12	23	11	2.22	0.69	6	2.3	1.4	0.51	16	5.3	0.0233	0.0081	0.014	0.034	0.00029	0.00012	-0.018	0.063	0.036	0.049	0.008	0.019	-0.18	0.29	-0.015	0.037	0	0	0.0042	0.0074	-0.0909	0.0065	0.002	0.0039	0.021	0.045	-0.00062	0.00027	0.013	0.036	3.1	1.6	340	290	2.5	2.2
BMB5868	Zircon_Sample-142.FIN2	Fe-rich	700000		-0.04	0.15	5.1	4.5	7.6	1	22.5	9.8	9100	1300	8	1.8	17.6	6.7	1.35	0.56	2.98	0.6	1.23	0.39	9.7	3.9	0.02	0.1	0.003	0.013	-0.005	0.026	0.01	0.14	0.03	0.12	0.012	0.016	0.17	0.4	-0.035	0.075	0.046	0	0.003	0.02	0.24	0.41	0.0035	0.0068	-0.03	0.052	0.023	0.023	-0.04	0.068	1.08	0.26	180	240	0.22	0.11
BMB5868	Zircon_Sample-143.FIN2	Fe-rich	700000		0.062	0.033	2.3	4.1	6.21	0.85	21.1	7.4	9770	930	9.3	2.3	17.2	5.6	0.92	0.33	2.74	0.77	1.78	0.6	8	2.1	-0.02	0.043	-0.016	0.03	0.0077	0.0074	-0.05	0.14	0.114	0.099	0.016	0.022	-0.07	0.25	-0.001	0.012	-0.05	0	-0.002	0.015	-0.05	0.1	0.01	0.012	0.014	0.039	0.0041	0.0062	-0.069	0.034	0.95	0.18	350	360	0.3	0.22
BMB5868	Zircon_Sample-150.FIN2	Fe-rich	700000		-0.057	0.089	5.1	1.1	6.56	0.55	25	11	9330	410	11.27	0.41	11.1	2.5	1.403	0.071	2.57	0.36	0.7	0.18	7.1	2.3	0.07	0.1	0.001	0.04	-0.001	0.028	0.12	0.11	0.106	0.079	0.005	0.012	-0.23	0.49	-0.074	0.011	-0.03	0	-0.009	0.012	-0.02	0.24	0.0037	0.0069	-0.052	0.039	0.013	0.016	0.03	0.21	0.97	0.19	286.197	0.07	0.17	0.13
BMB5868	Zircon_Sample-151.FIN2	Fe-rich	700000		0.07	0.16	8.3	2.6	6.1	0.49	32	28	9360	240	9	4.4	12.7	2.9	1.57	0.28	4.88	0.73	1.28	0.68	8	3.6	0.11	0.17	0.035	0.053	-0.007	0.02	-0.15	0.1	0.1	0.17	0.031	0.041	0.41	0.34	0.036	0.065	0.27	1	-0.01	0.012	0.13	0.31	0.000388	0.00008	-0.055	0.057	0.032	0.023	-0.024	0.066	1.04	0.3	-10	120	0.125	0.026
BMB5868	Zircon_Sample-152.FIN2	Fe-rich	700000		-0.12	0.12	2.8	3	6.02	0.5	17.8	3.8	9100	1200	6.6	3.1	20	12	3.7	1.5	2.52	0.87	1.91	0.62	11.7	6.4	0.08	0.12	0.013	0.064	-0.02	0.011	-0.13	0.22	0.15	0.12	0.015	0.021	0.3	1.3	-0.01	0.071	-0.19	0	-0.015	0.012	-0.05	0.3	0.037	0.049	0.12	0.12	0.019	0.019	-0.067	0.076	0.88	0.23	240	150	0.39	0.2
BMB5868	Zircon_Sample-153.FIN2	Fe-rich	700000		0.014	0.068	4.1	2.5	5.24	0.18	15	12	8740	580	6.9	2.7	12.6	9.5	4.5	2.4	2.7	1	1.15	0.94	7.8	4.3	0.011	0.08	-0.024	0.046	0.014	0.031	-0.059	0.099	0.21	0.17	0.065	0.045	0.21	0.52	0.004	0.068	-0.12	0	0	0.016	0.22	0.33	0.028	0.024	0.11	0.27	0.025	0.03	-0.04	0.12	0.762	0.058	-27	83	0.23	0.12
BMB5868	Zircon_Sample-154.FIN2	Fe-rich	700000		0.12	0.033	4	6.9	6.1	1.1	16.7	8.8	10850	490	9.5	1.6	16.4	6.5	1.77	0.44	2.7	1.5	1.91	0.3	12.2	4.4	-0.083	0.035	0.027	0.054	-0.014	0.014	0.04	0.16	0.11	0.12	0.02	0.024	0.5	1.1	-0.009	0.032	-0.18	0	-0.0025	0.0091	-0.089	0.081	0.0049	0.009	0.04	0.14	0.037	0.039	-0.055	0.09	1.264	0.037	-100	180	0.207	0.092
BMB5868	Zircon_Sample-155.FIN2	Fe-rich	700000		0.081	0.062	8.8	5.7	5.52	0.63	21.2	9.9	11700	1300	6.9	1.5	17.1	7.9	1.4	1.1	3.5	2	1.5	1.3	12.8	5	-0.028	0.051	-0.016	0.047	-0.012	0.039	-0.08	0.15	0.1	0.17	0.007	0.018	-0.28	0.74	-0.079	0.041	-0.11	0	0.01	0.018	0.2	0.28	0.0035	0.0062	0.0365	0.0068	0.008	0.011	0.08	0.088	1.52	0.47	153	97	0.29	0.14

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5870 CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5870	Zircon_Sample-072.FIN2	Fe-rich	700000		0.006	0.069	3.71	0.23	4.58	0.72	0.26	0.46	2200	190	0.25	0.084	0.83	0.24	19.9	2.3	3.6	1	0.75	0.43	1.55	0.24	0.034	0.03	0.05	0.015	0.01	0.011	0.047	0.06	0.028	0.024	0.0038	0.0056	0.03	0.21	-0.0056	0.005	-0.024	0	0.008	0.012	-0.018	0.023	0.0037	0.0049	0.02	0.029	0.0042	0.0059	0.002	0.036	0.0086	0.0058	30	200	1.57	0.52
BMB5870	Zircon_Sample-073.FIN2	Fe-rich	700000		0.03	0.048	4.7	2.9	9.3	4.8	0.57	0.33	2950	240	0.45	0.13	3	2	23.2	2.6	2.28	0.86	0.97	0.41	1.3	0.55	0.052	0.03	0.078	0.018	0.006	0.011	0.097	0.051	0.007	0.036	0.0049	0.003	-0.01	0.071	-0.007	0.014	0.009	0	0.0051	0.0048	-0.0094	0.0095	0.0047	0.0045	0.027	0.036	0.008	0.012	0.024	0.04	0.0258	0.0097	217	94	2.6	2.3
BMB5870	Zircon_Sample-074.FIN2	Fe-rich	700000		0.041	0.039	2.55	0.91	18.7	6.4	0.62	0.32	2430	300	0.173	0.052	3.24	0.42	30.3	2.1	2.39	0.7	0.75	0.28	1.59	0.44	0.0382	0.0081	0.07	0.017	0.006	0.0054	0.058	0.064	-0.016	0.019	0.0031	0.0046	0.12	0.15	0.0134	0.0098	0.033	0	0.0043	0.0042	-0.006	0.015	0.0021	0.003	0.007	0.014	0.0075	0.0096	0.001	0.018	0.031	0.021	28	75	0.98	0.28
BMB5870	Zircon_Sample-075.FIN2	Fe-rich	700000		0.044	0.038	4.9	2.7	19.4	3.9	0.09	0.63	2210	300	0.22	0.14	4.02	0.4	28.9	5.4	2.93	0.51	0.594	0.078	1.87	0.36	0.04	0.037	0.065	0.022	0.0071	0.0074	0.036	0.025	-0.016	0.031	0.0033	0.0033	-0.036	0.056	0.005	0.016	0.032	0	0.0061	0.0075	0.028	0.014	0.0058	0.0086	-0.0029	0.0044	0.0006	0.002	0.018	0.013	0.03	0.013	180	150	0.404	0.086
BMB5870	Zircon_Sample-076.FIN2	Fe-rich	700000		0.167	0.067	21.8	6.5	10	5.7	0.7	0.38	1880	280	0.69	0.15	12	6	44	24	1.711	0.062	2.1	0.86	4	2.9	0.0226	0.0076	0.055	0.041	0.0031	0.0068	0.057	0.091	0.06	0.12	0.0107	0.007	0.111	0.042	0.001	0.028	0.085	0	0.0032	0.0073	-0.008	0.035	0.0094	0.0028	0.019	0.023	0.0015	0.0042	0.018	0.081	0.015	0.013	480	510	6.1	4.3
BMB5870	Zircon_Sample-077.FIN2	Fe-rich	700000		0.046	0.011	18	12	8.7	1.3	1.11	0.38	1870	490	3.53	0.75	92	17	117	34	2.07	0.61	8.62	0.87	2.25	0.4	0.103	0.051	0.253	0.054	0.036	0.016	0.114	0.085	0.037	0.034	0.014	0.013	0.11	0.12	-0.002	0.018	0.054	0	0.0022	0.0028	0.022	0.025	0.0075	0.0038	0.001	0.011	0.0061	0.0078	0.021	0.054	0.0097	0.0072	450	250	10.3	3.4
BMB5870	Zircon_Sample-078.FIN2	Fe-rich	700000		0.095	0.047	12.7	8.5	6	4.2	0.47	0.5	1370	340	12	11	11.5	3.6	47	17	4	2.4	5.4	4.2	3	1.2	0.11	0.12	0.23	0.17	0.04	0.046	0.14	0.1	0.048	0.031	0.0072	0.0031	-0.064	0.064	0.001	0.02	0.03	0	0.004	0.0026	0.029	0.072	0.0031	0.0025	0.029	0.019	0.011	0.004	0.019	0.043	0.032	0.022	160	300	9.5	5.1
BMB5870	Zircon_Sample-085.FIN2	Fe-rich	700000		5.5	8.5	560	660	41	60	31	45	2220	140	20	34	40	44	170	160	0.6	1.9	7.1	3.3	0.82	0.14	5	6.1	13	18	1.5	1.8	7.8	8.7	2.3	2.2	0.22	0.23	1.5	1.8	0.24	0.32	1.1	1	0.15	0.18	0.69	0.81	0.078	0.082	0.33	0.42	0.09	0.11	0.39	0.51	0.113	0.063	-100	210	76	74
BMB5870	Zircon_Sample-086.FIN2	Fe-rich	700000		0.108	0.097	2.6	1.9	4.5	1.1	1.8	1.7	1880	200	-0.03	0.11	13	24	33.5	6	0.65	0.52	0.59	0.97	0.33	0.2	0.036	0.076	0.05	0.11	0.005	0.014	0.031	0.047	0.002	0.05	0.0035	0.0056	0.01	0.26	-0.017	0.024	-0.001	0	0.009	0.012	0.011	0.024	0.0015	0.0035	0.024	0.02	-0.0008	0.00044	-0.008	0.034	0.022	0.021	0	130	1.9	3.3
BMB5870	Zircon_Sample-087.FIN2	Fe-rich	700000		0.027	0.067	8.9	2.4	4.96	0.74	1.04	0.28	2020	300	4.3	3.4	40	20	68	22	0.58	0.56	4.2	2.5	1.16	0.57	0.153	0.089	0.45	0.26	0.042	0.029	0.24	0.13	0.02	0.078	0.0034	0.0059	0.17	0.17	0.016	0.013	0.016	0	0.0077	0.0056	0.068	0.097	0.0031	0.0041	0.034	0.038	0.01	0.0084	-0.008	0.057	0.01	0.012	110	190	3.9	1.7
BMB5870	Zircon_Sample-088.FIN2	Fe-rich	700000		0.124	0.093	70	110	5.4	3.7	2.2	1.4	1050	300	0.01	0.2	6.3	7.8	22	12	1.03	0.37	0.05	0.14	0.44	0.19	0.024	0.04	0.036	0.086	0.001	0.013	0.027	0.095	-0.033	0.039	-0.00121	0.0007	0.03	0.25	-0.014	0.048	0.07	0	0.00535	0.00065	0.011	0.026	0.0027	0.0032	-0.006	0.015	0.005	0.01	-0.043	0.07	0.016	0.012	330	120	1.1	2
BMB5870	Zircon_Sample-089.FIN2	Fe-rich	700000		0.089	0.067	12	11	4.16	0.96	0.91	0.43	2030	800	1.3	0.74	56	28	60	14	1.4	1.1	1.5	0.71	0.833	0.071	0.145	0.061	0.26	0.13	0.026	0.031	0.074	0.079	0.012	0.04	0.0039	0.0061	0.25	0.15	0	0.032	0.079	0	0.0056	0.0061	-0.01	0.05	0.0059	0.0076	0.007	0.019	0.0089	0.0071	0.008	0.038	0.012	0.013	46	96	1.80E+03	2.10E+03
BMB5870	Zircon_Sample-090.FIN2	Fe-rich	700000		0.114	0.025	23.4	1.2	0.91	0.73	0.73	0.76	6850	590	0.29	0.25	1.7	2.6	13	22	-0.17	0.35	0.9	1	0.281	0.072	0.018	0.033	0.039	0.093	0.0039	0.0027	0.002	0.078	0.037	0.04	0.0017	0.0051	0.1	0.15	-0.002	0.018	0.029	0	0.0085	0.0038	-0.001	0.056	0.0028	0.0036	0.032	0.033	0.011	0.02	-0.031	0.031	0.007	0.01	180	130	1.3	2.1
BMB5870	Zircon_Sample-091.FIN2	Fe-rich	700000		0.071	0.063	27.3	4.2	0.247	0.076	0.38	0.97	7237	96	0.45	0.15	0.23	0.28	0.6	0.14	0.27	0.35	0.28	0.17	0.043	0.032	0	0.027	-0.0066	0.0089	0.0085	0.0033	-0.015	0.029	0.041	0.043	-0.00093	0.00011	0.15	0.17	0.025	0.037	0	0	0.006	0.008	0.051	0.035	-0.000207	0.000025	-0.002	0.013	0.00742	0.0009	0.048	0.043	-0.000193	0.000023	170	140	0.033	0.075
BMB5870	Zircon_Sample-098.FIN2	Fe-rich	700000		0.12	0.18	8.1	6.5	22	14	5.9	9.6	1490	260	0.22	0.35	3.4	1.7	74	36	5.1	4	0.43	0.59	1.1	1.4	-0.021	0.056	-0.025	0.068	0.001	0.013	-0.09	0.2	0.11	0.2	0.0005	0.0065	0.18	0.46	-0.06	0.14	0.028	0	-0.0013	0.0059	-0.1	0.27	0.017	0.035	-0.019	0.039	0.0018	0.0093	-0.045	0.032	0.051	0.044	150	170	0.5	0.4
BMB5870	Zircon_Sample-099.FIN2	Fe-rich	700000		0.052	0.072	4.8	2.1	4.53	0.96	1.09	0.54	1920	370	0.17	0.47	10.5	3.8	33.2	3.2	3.2	2	2.19	0.93	1.83	0.95	0.129	0.038	0.24	0.1	0.026	0.015	0.072	0.082	0.042	0.042	0.0126	0.0086	0.1	0.12	0.022	0.017	0.036	0	0.0093	0.0049	0.042	0.068	0.0034	0.0054	0.031	0.024	0.0071	0.0071	-0.016	0.04	0.037	0.018	60	250	5.3	2.9
BMB5870	Zircon_Sample-100.FIN2	Fe-rich	700000		0.101	0.033	27	6.9	0.48	0.23	-0.05	0.78	4380	380	1.06	0.35	0.2	0.1	2.7	2.1	0.86	0.36	0.47	0.17	0.277	0.05	0.009	0.021	0.014	0.015	0.0022	0.0028	-0.011	0.028	-0.002	0.044	0.0012	0.0027	0.1	0.16	0.019	0.016	0.032	0	0.0044	0.0034	0.005	0.032	0.0022	0.003	0.008	0.022	0.0063	0.0091	0.013	0.028	0.0027	0.0037	-122	96	0.15	0.13
BMB5870	Zircon_Sample-101.FIN2	Fe-rich	700000		0.178	0.059	26.3	6.3	0.7	0.27	0.13	0.53	4380	580	0.82	0.22	0.83	0.79	3.31	0.62	0.96	0.32	0.44	0.12	0.325	0.08	0.028	0.023	0.006	0.02	0.0082	0.0055	0.018	0.048	0.017	0.034	0.0091	0.0071	0.09	0.23	-0.011	0.029	0.027	0	0.0096	0.0053	-0.019	0.044	0.0008	0.0023	0.022	0.049	0.0009	0.0042	0.055	0.024	0.0051	0.0067	-70	250	0.044	0.017
BMB5870	Zircon_Sample-102.FIN2	Fe-rich	700000		0.085	0.047	15.1	4.7	4.14	0.6	0.84	0.92	2030	220	1.45	0.4	11.5	2.9	91	25	2.14	0.97	5.3	1.3	1.1	0.46	0.23	0.11	0.56	0.26	0.056	0.038	0.243	0.072	0.07	0.11	0.012	0.012	0.22	0.12	0.008	0.014	0.047	0	0.0132	0.0091	0.062	0.042	0.0055	0.0032	0.01	0.026	0.0023	0.004	0.061	0.082	0.015	0.013	130	260	12	3.7
BMB5870	Zircon_Sample-103.FIN2	Fe-rich	700000		0.23	0.14	24.2	9.6	5.73	0.61	0.86	0.74	2250	360	0.69	0.72	53.8	9.8	223	83	2.12	0.69	8.9	1.7	0.97	0.26	0.29	0.21	0.56	0.26	0.052	0.05	0.314	0.087	0.019	0.022	0.006	0.011	0.01	0.4	0.015	0.025	0.055	0	0.0112	0.0096	0.11	0.12	0.017	0.019	0.016	0.044	0.008	0.018	0.02	0.076	0.024	0.019	360	150	53	37
BMB5870	Zircon_Sample-104.FIN2	Fe-rich	700000		0.044	0.045	-1.9	1.1	0.3	0.14	2.2	1.7	6.4	1.1	187	52	143	31	0.89	0.65	11.5	2.5	44	17	3.6	1.7	0.019	0.029	0.043	0.044	0.005	0.015	0.017	0.022	-0.001	0.013	0.0012	0.0037	-0.049	0.056	0.006	0.02	0.0201	0	-0.0003	0.0018	0.08	0.16	0.006	0.0082	0	0.017	0.01	0.014	0.008	0.039	1.56	0.71	20	320	0.22	0.2
BMB5870	Zircon_Sample-111.FIN2	Fe-rich	700000		0.071	0.064	0.7	1.7	0.109	0.041	0.7	0.35	6.49	0.59	73	13	28.6	5	0.45	0.14	3.1	1.1	7.7	2.2	0.548	0.064	0.007	0.017	0.0099	0.0076	0	0.013	0.014	0.014	0.017	0.026	-0.0001	0.0014	-0.04	0.11	0.015	0.046	0	0	-0.0001	0.0025	0.013	0.083	-0.00034	0.00023	0.0047	0.0089	0.014	0.014	0.031	0.019	0.61	0.36	60	210	0.08	0.14
BMB5870	Zircon_Sample-112.FIN2	Fe-rich	700000		0.06	0.11	11.2	8	0.62	0.26	0.78	0.21	27	9.1	50.3	8.3	26.3	8.2	0.66	0.51	8.5	2.4	23	7	2.23	0.69	0.43	0.54	0.88	0.81	0.147	0.09	0.38	0.23	0.1535	0.0086	0.0106	0.0097	0.05	0.44	0.052	0.027	0.27	0	0.049	0.022	0.291	0.099	0.034	0.017	0.113	0.049	0.039	0.069	0.076	0.024	10.3	3.7	51	17	0.09	0.12
BMB5870	Zircon_Sample-113.FIN2	Fe-rich	700000		0.024	0.03	-0.26	0.39	0.148	0.05	0.03	0.57	6.4	0.54	55	17	37	19	0.24	0.22	5.2	2.5	19	11	1.04	0.63	0.014	0.0084	0.042	0.024	0.0093	0.0053	0.011	0.016	0.016	0.015	0.0001	0.0014	-0.02	0.11	0.004	0.016	0.045	0	0.0046	0.0032	0.043	0.041	0.005	0.0088	0.0141	0.0093	0.0048	0.0056	-0.004	0.015	2.1	1.6	-10	160	0.59	0.3
BMB5870	Zircon_Sample-114.FIN2	Fe-rich	700000		0.008	0.062	15.8	5.6	9.4	3.6	0.34	0.63	1360	310	0.35	0.46	0.35	0.1	42.2	7.8	5	1.6	2.09	0.62	2.06	0.99	-0.017	0.029	0.02	0.021	0.0053	0.0091	0.026	0.035	0.027	0.051	0.005	0.011	0.19	0.42	0.024	0.017	0.09	0	0.0052	0.006	0.057	0.035	-0.00045	0.00037	-0.005	0.014	-0.0018	0.0015	0.039	0.041	0.035	0.038	60	180	0.49	0.22
BMB5870	Zircon_Sample-115.FIN2	Fe-rich	700000		0.011	0.02	1.86	0.97	2.7	1	0.7	0.35	1945	94	0.14	0.11	0.56	0.17	28.3	7	3.8	1.2	1.45	0.23	0.7	0.33	0.012	0.012	0.022	0.01	0.0052	0.0076	0.031	0.026	0.017	0.03	0.005	0.0035	-0.03	0.16	-0.011	0.023	0.007	0	0.006	0.011	0.02	0.031	0.017	0.019	-0.002	0.01	0.009	0.013	0.009	0.028	0.012	0.021	-20	160	0.3	0.14
BMB5870	Zircon_Sample-116.FIN2	Fe-rich	700000		-0.01	0.036	0.04	0.51	0.113	0.018	0.47	0.17	6.93	0.93	78.5	5.4	34.6	7.3	0.46	0.19	2.4	1	7.9	1.2	0.632	0.09	0.012	0.012	0.053	0.029	0.0187	0.0084	0.04	0.035	0.026	0.026	0.0027	0.0067	0.087	0.098	0.013	0.021	0.024	0	0.0081	0.0072	0.007	0.068	0.0073	0.0078	0.015	0.011	0.012	0.012	0.036	0.033	0.8	0.32	30	130	0.83	0.62
BMB5870	Zircon_Sample-117.FIN2	Fe-rich	700000		1	1.2	210	260	17	16	5	4.9	1510	200	5.9	2.3	31	12	199	22	3.6	1.3	9.8	3.5	1.82	0.1	4	5.5	9	12	1.5	2	4.1	5.2	1.8	2.6	0.16	0.24	1.1	1.6	0.22	0.32	0.46	1	0.09	0.12	0.39	0.7	0.053	0.053	0.14	0.16	0.051	0.073	0.3	0.37	0.0258	0.0051	460	310	61	23
BMB5870	Zircon_Sample-124.FIN2	Fe-rich	700000		-0.31	0.25	-25.3	1.8	8	1.1	0.993	0.064	4.00E+03	1.00E+03	12.3	9.2	25	12	77	10	2.2	1.5	2.37	0.11	1.07	0.48	-0.22	0.32	8	10	0.045	0.044	-0.07	0.22	0.016	0.037	-0.0011	0.0052	0.48	0.26	0.024	0.055	0.038	0	0.01	0.017	0.08	0.14	0.01	0.022	0.051	0.097	0.01	0.025	0.01	0.031	0.0075	0.0086	510	180	9.5	9.2
BMB5870	Zircon_Sample-125.FIN2	Fe-rich	700000		-4.60E+05	9.10E+05	-6.00E+05	8.70E+05	6.00E+04	1.00E+04	3.60E+04	7.10E+04	9.90E+03	1.20E+03	6.00E+04	1.30E+04	-7.00E+04	1.50E+04	-7.00E+04	1.50E+04	6.00E+04	1.30E+04	-7.00E+04	1.30E+04	-60	200	-4.10E+03	8.10E+03	-8.00E+04	1.50E+04	1.20E+03	2.30E+03	-1.00E+04	2.00E+04	-9.00E+04	1.80E+04	-3.60E+03	7.10E+03	1.90E+04	3.90E+04	-2.10E+03	3.90E+03	1.00E+05	##	3.00E+03	6.00E+03	-1.50E+04	3.10E+04	3.50E+03	7.00E+03	5.00E+04	1.10E+04	2.50E+03	4.80E+03	2.30E+04	4.60E+04	490	930	60	140	1.00E+03	1.80E+03
BMB5870	Zircon_Sample-126.FIN2	Fe-rich	700000		-0.18	0.1	-22	8.6	17.8	4.2	0.45	0.85	1.54E+04	1.90E+03	0.33	0.11	0.47	0.16	61	13	2.4	0.92	1.45	0.38	0.76	0.18	-0.011	0.029	-0.12	0.1	0.007	0.015	-0.08	0.18	0.05	0.13	-0.0085	0.0037	-0.01	0.44	-0.008	0.055	0.061	0	0.028	0.028	-0.122	0.039	0.047	0.043	-0.064	0.086	0.022	0.034	0.22	0.13	0.0112	0.0079	-30	120	0.73	0.18
BMB5870	Zircon_Sample-127.FIN2	Fe-rich	700000		-0.102	0.054	-32	45	20.8	4.6	1.13	0.8	2.27E+04	2.50E+03	0.326	0.076	1.02	0.44	81	52	5.7	4.7	0.82	0.58	2	1.7	-0.071	0.048	-0.4	0.31	0.06	0.05	0.007	0.044	0.11	0.37	0.0001	0.0039	-0.6	1	-0.066	0.045	-0.03	0	0.056	0.04	-0.0804	0.0088	-0.0071	0.0063	0.021	0.037	0.002	0.019	-0.17	0.47	0.013	0.02	0	360	4	2.8
BMB5870	Zircon_Sample-128.FIN2	Fe-rich	700000		-0.037	0.016	0.4	1.7	0.15	0.1	0.22	0.5	343	29	88	31	45	12	1.2	1.5	4.1	2	7.1	3.6	0.46	0.23	-0.1	0.17	-0.34	0.44	0.047	0.085	-0.071	0.095	0.07	0.15	-0.0015	0.0029	-0.16	0.52	0.016	0.045	0.138	0	0.14	0.11	0.04	0.15	0.28	0.28	-0.038	0.053	0.016	0.02	0.01	0.15	0.21	0.18	30	160	4	7
BMB5870	Zircon_Sample-129.FIN2	Fe-rich	700000		-0.04	0.046	-11.3	7.1	27.9	3.8	0.11	0.72	-1.28E+05	6.10E+03	0.25	0.11	0.61	0.22	53.1	2.9	3.96	0.55	1.61	0.51	1.03	0.2	-0.017	0.023	-0.035	0.013	-0.007	0.028	0.04	0.019	0.22	0.32	-0.0056	0.0065	0.3	0.98	-0.09	0.1	0.12	0	0.36	0.57	-0.18	0.26	-0.71	0.88	-0.001	0.028	0.025	0.063	0.1	1.3	0.0144	0.0046	220	130	0.55	0.16
BMB5870	Zircon_Sample-130.FIN2	Fe-rich	700000		-0.41	0.16	-124	36	37.7	8.1	3.6	1.8	-9.60E+04	1.20E+04	10.7	3.3	1280	260	18.3	4	0.6	0.6	3.75	0.18	178	48	-1.45	0.31	-5.6	1.2	1.79	0.35	-1.559	0.054	1.15	0.14	-0.046	0.019	4.3	1	0.35	0.17	1	0	-1.1	0.4	1.38	0.56	-0.304	0.085	-0.06	0.075	0.253	0.053	-9	12	0.447	0.099	340	110	16.5	1.8

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5871 CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5871	Zircon_sample-007.FIN2	Fe-rich	700000		-0.14	0.062	3.7	2.7	32.2	3.7	-2.5	1.3	319	48	6.85	0.97	18.5	2	3.4	1.9	6.5	1.5	10.25	0.99	31.8	5	-0.05	0.097	-0.006	0.05	-0.014	0.023	0.08	0.16	0.03	0.17	0.024	0.017	-0.3	0.25	-0.003	0.053	-0.02	0	0	0.016	-0.14	0.13	0.0078	0.0098	-0.047	0.084	0.016	0.015	-0.017	0.08	8.2	2.5	0	110	0.033	0.051
BMB5871	Zircon_sample-008.FIN2	Fe-rich	700000		-0.02	0.22	5.6	5.4	23.1	4.5	2.8	2.9	295	26	7.3	2.4	27.3	5.1	3.3	2.6	5.2	2.4	10	2.7	35.5	9.1	-0.031	0.088	-0.024	0.066	-0.008	0.02	0.03	0.12	0.07	0.21	0.019	0.019	0.02	0.57	0.03	0.042	0.1	0	0.022	0.039	0.09	0.21	0.011	0.01	0.08	0.3	0.0031	0.0081	-0.047	0.031	7.4	3.7	-40	150	0.064	0.036
BMB5871	Zircon_sample-009.FIN2	Fe-rich	700000		0.08	0.18	5.2	2.3	46	5.8	2.1	1.1	279	14	6.4	2.1	30	2.8	3.2	1.7	8.9	4	11.6	2.5	37.7	9.7	-0.035	0.035	-0.034	0.079	0.025	0.016	-0.01	0.14	0.02	0.13	0.042	0.077	-0.16	0.31	0.013	0.04	0.19	0	0.027	0.023	-0.04	0.11	0.0027	0.0079	0.023	0.084	0.017	0.016	0.086	0.069	10.7	6.2	-9	85	0.068	0.069
BMB5871	Zircon_sample-010.FIN2	Fe-rich	700000		0.03	0.12	4.2	2.2	21.4	4.1	1.2	1.2	237.7	9.8	7.3	2.6	32.6	4.9	2.69	0.5	3.3	1.4	7.39	0.94	28.2	6	-0.01	0.13	0.017	0.066	-0.032	0.018	-0.07	0.15	0.018	0.062	0.007	0.013	-0.27	0.6	-0.024	0.021	-0.05	0	0.002	0.016	-0.03	0.2	0.009	0.021	-0.048	0.097	0.008	0.014	0.074	0.073	5.5	3.6	70	280	0.13	0.19
BMB5871	Zircon_sample-011.FIN2	Fe-rich	700000		-0.04	0.18	-0.3	5.1	7.4	1.1	-0.7	1.3	172	15	7.81	0.88	46	2.9	2.74	0.96	1.58	0.96	6.05	0.71	22	3.1	-0.007	0.03	-0.001	0.035	0.027	0.038	0.14	0.15	0.12	0.14	0.019	0.013	-0.15	0.3	-0.056	0.043	-0.02	0	-0.008	0.002	-0.02	0.1	0.007	0.011	-0.05	0.012	0.019	0.034	-0.004	0.031	1.75	0.28	0	110	0.101	0.097
BMB5871	Zircon_sample-012.FIN2	Fe-rich	700000		0.167	0.096	5.6	5.8	14.3	3.1	-0.5	1.3	241	23	7.8	1.9	35.1	4.9	7.5	4.9	2.56	0.45	7.52	0.69	25.3	5.6	-0.03	0.07	0.015	0.031	0.003	0.031	0.07	0.11	0.2	0.16	0.028	0.017	-0.04	0.35	-0.037	0.036	0.06	0	0.003	0.017	-0.001	0.095	0.0002	0.0056	-0.015	0.045	0.024	0.025	-0.003	0.065	3.5	0.74	-73	54	0.027	0.026
BMB5871	Zircon_sample-013.FIN2	Fe-rich	700000		-0.02	0.23	3.2	6.2	27.2	8.8	0	1.7	256	54	6.7	1.6	25.9	6.3	14	23	5.1	1.7	8.9	2.4	29.3	3.6	-0.006	0.018	0.016	0.054	-0.001	0.029	0.07	0.23	0.104	0.086	0.025	0.032	0.03	0.34	-0.017	0.039	-0.154	0	0.024	0.037	-0.02	0.15	0.0017	0.008	-0.104	0.051	0.016	0.019	0.035	0.055	4.8	1.1	-40	130	0.058	0.036
BMB5871	Zircon_sample-020.FIN2	Fe-rich	700000		0.17	0.16	4.2	6.6	34.4	6.6	0.21	0.84	309	44	5.6	1.4	22.1	1.6	1.84	0.27	6.1	1.9	10.2	1.5	31.2	3.1	-0.006	0.076	-0.008	0.063	-0.013	0.038	-0.02	0.1	0.065	0.079	0.006	0.011	-0.16	0.16	0.016	0.037	0.05	0	-0.009	0.022	0.1	0.24	0.008	0.014	-0.102	0.048	0.018	0.018	0.022	0.076	6.25	0.48	-10	210	0.054	0.049
BMB5871	Zircon_sample-021.FIN2	Fe-rich	700000		0	0.086	0.1	6.8	9.4	1.1	0.26	0.82	197	13	7	2	48.1	8.9	4.1	5.3	2.5	1.2	7	1.3	25.2	8.7	-0.073	0.054	-0.045	0.068	-0.005	0.037	0.21	0.27	-0.042	0.066	0.028	0.039	0.08	0.41	0.014	0.054	0.16	0	0.042	0.056	0.01	0.31	0.015	0.019	-0.088	0.073	0.01	0.013	0.072	0.02	2.1	1.1	80	190	0.102	0.051
BMB5871	Zircon_sample-022.FIN2	Fe-rich	700000		0.14	0.12	3.9	4.8	26.5	6	1.23	0.6	287	35	4.73	0.75	20.5	1.9	2	1.2	5.4	1.5	8.8	1	29.4	5	0	0.056	-0.001	0.076	0.014	0.025	0	0.15	0.04	0.12	0.0007	0.0075	-0.132	0.079	0.016	0.06	0.03	0	0.007	0.025	0.01	0.24	-0.0006	0.0074	-0.015	0.053	-0.00226	0.00045	0.012	0.029	5.2	0.86	-150	190	0.052	0.046
BMB5871	Zircon_sample-023.FIN2	Fe-rich	700000		0.09	0.25	5	9.2	23	3.2	2	1.3	259	24	4.5	1.1	22.7	2.1	1.59	0.87	3.02	0.53	9.4	1	28.3	4.5	-0.015	0.098	0.019	0.022	0.015	0.024	0.06	0.11	0.016	0.094	0.009	0.017	-0.2	0.12	0.02	0.1	0.09	0	0.008	0.015	0.07	0.16	0.003	0.012	0.06	0.13	0.012	0.024	0.09	0.18	4.9	1.6	110	190	0.011	0.023
BMB5871	Zircon_sample-024.FIN2	Fe-rich	700000		-0.2	0.27	6	5	73	13	1.75	0.64	279	32	4.9	1.3	16	5.7	3	2.9	13.9	2.8	13.8	2.4	42.3	8.5	-0.002	0.081	0.082	0.091	0.016	0.025	-0.01	0.1	0.008	0.05	0.015	0.016	-0.01	0.41	-0.032	0.048	0.034	0	0.0135	0.0091	-0.098	0.08	-0.0061	0.0086	0.07	0.17	0.019	0.014	0.06	0.12	12.9	3.1	60	130	0.091	0.058
BMB5871	Zircon_sample-025.FIN2	Fe-rich	700000		0.19	0.12	5.5	3.6	33.6	3.1	0.2	2.1	304.9	6.5	6.4	1.7	23.1	1.7	1.62	0.83	4.5	1.6	9.04	0.49	33.1	4.2	0.013	0.091	0	0.073	-0.019	0.021	0.13	0.36	0.08	0.15	0.016	0.029	0.05	0.54	0.004	0.073	0.12	0	-0.008	0.014	0.11	0.1	0.009	0.03	0.1	0.17	0.018	0.02	0.036	0.066	8.3	3.9	0	140	0.23	0.32
BMB5871	Zircon_sample-026.FIN2	Fe-rich	700000		0.08	0.3	9.5	5.3	37.5	2.1	-0.4	1.3	298	15	4.16	0.64	20.4	1.5	1.97	0.74	5.7	1.8	9.4	1.1	27.8	2.1	0.16	0.14	-0.053	0.048	0.003	0.051	0.1	0.46	0.14	0.15	0.026	0.055	-0.09	0.4	0.029	0.068	0.07	0	0.03	0.035	0.03	0.094	0.006	0.021	0.112	0.056	0.02	0.024	0.06	0.17	7.1	2.7	-140	180	0.097	0.064
BMB5871	Zircon_sample-033.FIN2	Fe-rich	700000		0.034	0.05	0.9	1.1	8.4	8.4	0.62	0.59	121	40	4.4	2.9	26	22	0.97	0.56	2.33	0.6	4.5	4.7	9	7.7	0.007	0.016	0.023	0.032	-0.0036	0.0073	0.036	0.056	-0.004	0.019	0.0023	0.0037	-0.067	0.049	0.007	0.016	-0.007	0	0.0003	0.0038	0.005	0.051	-0.00325	0.00067	0.017	0.031	0.0053	0.0035	-0.004	0.019	2.7	1.4	-102	83	0.89	0.64
BMB5871	Zircon_sample-034.FIN2	Fe-rich	700000		0.007	0.055	2.37	0.55	32	23	1.73	0.94	118	24	7.8	2.6	31	12	0.49	0.24	5.2	0.69	12.1	8	25	13	0.026	0.027	0.026	0.02	0.0064	0.0096	-0.027	0.015	0.03	0.033	0.0005	0.0026	-0.07	0.097	-0.0049	0.0097	0	0	0.0044	0.0073	-0.0328	0.009	0.0078	0.008	0.022	0.03	0.0025	0.004	0.007	0.036	2.63	0.93	-10	130	0.83	0.46
BMB5871	Zircon_sample-035.FIN2	Fe-rich	700000		-0.04	0.032	7.5	4.5	68	45	3.14	0.16	207	63	9.8	4.8	54	47	3.3	2.2	10.6	6.2	16.2	9.7	42	28	0.014	0.033	0.047	0.048	0.005	0.016	-0.01	0.14	-0.009	0.0045	0.004	0.011	-0.05	0.17	-0.003	0.015	-0.052	0	-0.001	0.0051	0.057	0.052	-0.0002	0.0097	0.0037	0.0016	0.006	0.013	0.008	0.022	8.18	0.38	60	150	1.2	1.7
BMB5871	Zircon_sample-036.FIN2	Fe-rich	700000		0.041	0.05	2.9	2.5	17	18	1.3	1.2	188	45	5.1	3.1	10	13	0.43	0.19	6.3	5.2	3.7	4.7	21	31	0.083	0.035	0.17	0.11	0.024	0.014	0.048	0.051	0.002	0.028	0.0027	0.0033	0.122	0.088	0.0023	0.0085	-0.01	0	0.0009	0.0037	0.005	0.062	0	0.004	0.029	0.043	0.0028	0.0048	0.025	0.025	5.8	3.6	150	230	0.86	0.32
BMB5871	Zircon_sample-037.FIN2	Fe-rich	700000		0.029	0.019	6	11	120	130	4.2	4.5	153	25	7.2	1.6	34	29	0.83	0.51	20.9	7.6	22	19	59	22	0.008	0.02	0.004	0.012	0.0014	0.0066	-0.009	0.058	0.009	0.057	0.0022	0.0063	0.02	0.16	-0.0273	0.0066	0.019	0	0.0034	0.0075	0.001	0.034	-0.0007	0.0035	0.045	0.018	0.0017	0.0047	-0.019	0.017	12.3	2	30	120	0.6	1.1
BMB5871	Zircon_sample-038.FIN2	Fe-rich	700000		-0.009	0.025	3.7	2.8	54	36	2.5	1.5	115	25	4.2	2.8	24	16	6.3	8.1	9.6	6.6	10.3	6.3	22	14	-0.002	0.014	0.013	0.027	0.0057	0.0095	-0.018	0.058	-0.005	0.021	0.0023	0.0041	-0.049	0.058	0.0046	0.0073	-0.006	0	0.004	0.0074	-0.023	0.03	0.0016	0.0031	0.016	0.028	0.01	0.012	0.053	0.047	5.4	3.9	-30	110	1.59	0.52
BMB5871	Zircon_sample-039.FIN2	Fe-rich	700000		-0.01	0.044	2.9	2.9	11	17	0.9	1.4	175	41	3.8	2.9	4.9	3.4	0.43	0.34	3	2.3	1.7	2.9	4.2	5.7	0.005	0.031	0.064	0.082	0.019	0.015	0.004	0.07	0.02	0.035	0.0067	0.0057	0.007	0.056	0.014	0.014	-0.009	0	0.015	0.011	0.028	0.037	-0.0051	0.0021	0	0.025	0.0024	0.004	0.002	0.019	5	2.8	10	100	1.09	0.65
BMB5871	Zircon_sample-046.FIN2	Fe-rich	700000		0.04	0.12	2.7	4.4	7.96	0.34	-1.3	1.4	202.7	7.1	8.14	0.81	39.5	2.9	1.5	0.43	1.86	0.93	6.7	1.3	21.5	1.6	-0.014	0.081	-0.03	0.12	0.004	0.052	0.17	0.14	0.12	0.24	0.001	0.0099	-0.22	0.15	0.004	0.039	0.09	0	0.007	0.017	-0.01	0.19	-0.01	0.013	-0.047	0.053	0.024	0.022	0.078	0.079	1.51	0.14	80	140	0.072	0.067
BMB5871	Zircon_Sample-047.FIN2	Fe-rich	700000		0.09	0.19	3.1	4.3	20.3	3.1	2.7	1.1	255	15	8	1.7	24.8	2.6	1.99	0.73	4.97	0.92	9.5	1.3	29.4	4.2	0.004	0.052	-0.002	0.034	-0.001	0.041	0	0.13	-0.088	0.09	0.008	0.023	-0.3	0.32	0.003	0.075	0.096	0	0.005	0.022	0.027	0.02	0.023	0.027	0.19	0.22	0.007	0.011	0.018	0.092	3.8	0.66	140	140	0.05	0.078
BMB5871	Zircon_Sample-048.FIN2	Fe-rich	700000		0.09	0.12	0.3	3.6	7.93	0.94	0.8	1.6	211	25	9.63	0.8	47.9	6.9	64	54	2.1	1.1	7.7	1.7	20.5	2.6	0.02	0.11	-0.046	0.034	0.029	0.03	0.04	0.22	0.03	0.15	0.01	0.019	0.44	0.97	0.02	0.048	0.05	0	0.006	0.014	0.03	0.14	-0.0058	0.0087	0.13	0.13	0.007	0.019	0.11	0.16	1.34	0.17	-90	130	0.53	0.36
BMB5871	Zircon_Sample-049.FIN2	Fe-rich	700000		-0.07	0.11	4.9	2.4	9.89	0.46	1.6	1.5	192	15	7.28	0.83	33.3	1.8	2.4	1.1	2.4	0.82	7.59	0.7	21.99	0.84	-0.055	0.089	0.006	0.048	-0.018	0.029	0.01	0.16	0.07	0.11	0.004	0.015	-0.36	0.33	0.055	0.058	0.09	0	0.016	0.024	0.1	0.2	-0.012	0.011	0.149	0.063	0.006	0.01	0.057	0.074	1.91	0.34	50	150	0.053	0.058
BMB5871	Zircon_Sample-050.FIN2	Fe-rich	700000		-0.089	0.094	8	2.9	13.5	2.1	3.3	1.3	226	28	6.1	1.1	30.9	5	2.9	2.5	2.74	0.8	7.7	1.1	25.2	2.4	-0.088	0.03	-0.03	0.03	-0.01	0.033	0.2	0.19	-0.03	0.14	0.013	0.014	-0.03	0.6	0.003	0.064	-0.04	0	0.006	0.02	0.03	0.19	-0.0204	0.0047	0.088	0.096	0.006	0.011	-0.047	0.041	3	0.6	50	110	0.1	0.11
BMB5871	Zircon_Sample-051.FIN2	Fe-rich	700000		0	0.27	6.7	6.5	9.4	1.1	1.5	2.8	205	16	6.7	1.5	35.2	1.5	4.1	2.7	2.24	0.63	8	1.2	21.1	5.3	0.07	0.19	-0.03	0.087	-0.022	0.054	-0.12	0.19	0.22	0.19	0.021	0.021	0.4	1.2	0.003	0.035	-0.03	0	0.025	0.024	-0.1	0.11	0.006	0.039	0.06	0.18	0.022	0.027	0.09	0.16	2.27	0.76	79	67	0.13	0.17
BMB5871	Zircon_Sample-052.FIN2	Fe-rich	700000		-0.12	0.19	8.1	5.5	33	5.5	3.8	3	420	110	6.94	0.78	17.6	5.4	2.9	2.8	8.1	1.1	11.1	1.8	33.5	5.2	-0.07	0.12	0.021	0.065	0.024	0.023	0.07	0.12	0.01	0.15	0.059	0.063	-0.27	0.37	-0.036	0.053	0.02	0	0.006	0.033	0.03	0.11	-0.014	0.014	0.12	0.1	0.015	0.016	0.01	0.14	7.1	1.1	90	110	0.066	0.088
BMB5871	Zircon_Sample-059.FIN2	Fe-rich	700000		0.04	0.15	2.9	6.1	6.21	0.54	0.3	2.5	164	12	6.19	0.82	41.8	3	2.9	1.4	1.39	0.68	6.2	1.4	18.8	2.8	0.043	0.066	-0.012	0.059	0.005	0.022	-0.06	0.11	0.02	0.15	0.0009	0.0092	0.4	1.3	0.023	0.066	0.02	0	0.009	0.016	-0.11	0.17	-0.002	0.013	-0.033	0.042	0.0182	0.0029	0.002	0.051	1.13	0.27	30	190	0.102	0.051
BMB5871	Zircon_Sample-060.FIN2	Fe-rich	700000		0.061	0.093	0.6	7.3	15	1.1	3.6	2.4	261.4	6.9	5.96	0.87	25.8	2.1	2.1	1.1	3.68	0.57	9.2	1.2	27.3	1.5	0.01	0.13	0.021	0.075	0.049	0.06	0	0.21	-0.07	0.12	0.008	0.015	0.8	1.5	-0.024	0.043	0.15	0	0.008	0.022	0.2	0.18	0.013	0.017	-0.019	0.077	0.0012	0.0089	0.009	0.089	2.75	0.27	110	160	0.13	0.11
BMB5871	Zircon_Sample-061.FIN2	Fe-rich	700000		0.007	0.067	4.3	2.1	33.2	5.1	2.3	1.7	359	52	5.96	0.53	18.3	1.1	1.56	0.79	9.8	2.6	10.7	3.8	29.4	9.4	-0.004	0.023	0.04	0.12	0.013	0.048	0.05	0.15	0.07	0.16	-0.0041	0.0012	0.12	0.83	-0.014	0.045	0.15	0	0.013	0.037	0.12	0.14	0.012	0.056	-0.057	0.089	0.019	0.021	0.16	0.14	5.67	0.89	7	66	0.105	0.081
BMB5871	Zircon_Sample-062.FIN2	Fe-rich	700000		0.203	0.09	0.6	4.2	9.1	1.2	1.7	1.6	200.3	9.9	6.79	0.55	34.9	2.9	21	22	2.43	0.56	6.98	0.68	19.5	2.8	0.01	0.065	0.01	0.038	0.028	0.034	0.04	0.15	-0.044	0.087	0.046	0.042	-0.2	1.1	-0.016	0.029	-0.17	0	0.004	0.022	-0.051	0.055	0.011	0.039	-0.01	0.16	0.01	0.013	-0.041	0.093	2.04	0.57	96	99	0.055	0.086
BMB5871	Zircon_Sample-063.FIN2	Fe-rich	700000		0.11	0.25	2.4	2.7	24.1	3.8	1	1.7	233	28	6.42	0.77	28.6	2.2	1.64	0.3	5.2	2	8.8	1.4	26.2	4.6	0.005	0.099	-0.007	0.022	-0.029	0.032	-0.09	0.1	-0.08	0.22	0.012	0.026	0.1	2.6	-0.056	0.085	-0.03	0	0	0.015	0.1	0.34	-0.005	0.023	0.16	0.2	0.015	0.018	0.05	0.16	3.6	1.3	79	23	0.17	0.22
BMB5871	Zircon_Sample-064.FIN2	Fe-rich	700000		0.01	0.16	-3.2	2.9	9	1.7	11	11	480	210	4.77	0.97	41	14	63	48	3	1.3	7.5	2	23	5.4	-0.03	0.12	0.03	0.14	0.051	0.048	-0.1	0.16	0.04	0.21	0.034	0.024	1.1	1.1	0.031	0.068	-0.07	0	-0.001	0.015	-0.14	0.18	-0.017	0.013	-0.045	0.027	0.027	0.043	-0.035	0.08	2.23	0.76	120	130	0.52	0.75
BMB5871	Zircon_Sample-065.FIN2	Fe-rich	700000		-0.13	0.24	4	4.1	101	36	4.6	1.2	198	33	4.7	2.3	18.4	8.7	4.6	3.8	28.1	7.6	15.1	4.2	46.3	9.3	-0.07	0.18	-0.01	0.14	0.028	0.053	0.12	0.32	0.11	0.22	0.02	0.02	0.18	0.95	-0.034	0.07	0.13	0	0.006	0.014	0.027	0.097	-0.007	0.011	0.03	0.1	0.009	0.016	-0.05	0.11	16.7	5.3	80	130	0.034	0.037
BMB5871	Zircon_Sample-072.FIN2	Fe-rich	700000		-0.07	0.16	10	5.9	22.8	5.4	0.7	4.3	266	28	5.45	0.74	24.9	1.8	1.8	1.3	4.4	1.6	8.8	1.1	26.8	3	-0.048	0.062	0.08	0.12	0.026	0.032	0.15	0.3	0.14	0.2	0.013	0.019	-0.03	0.27	0.022	0.064	0.08	0	-0.019	0.011	0.2	0.17	-0.013	0.021	0.03	0.13	0.0177	0.0054	0.11	0.12	2.39	0.3	16	60	0.028	0.04
BMB5871	Zircon_Sample-073.FIN2	Fe-rich	700000		-0.14	0.16	4.5	3.8	78.3	7.5	6	1.9	214	18	2.8	0.81	11.8	1.1	4.2	1.4	17.3	2.6	15.4	1.1	36.2	6.4	0.052	0.068	0.015	0.049	0.027	0.065	0.04	0.14	0.01	0.13	0.011	0.013	-0.16	0.44	0.027	0.063	-0.02	0	0.0151	0.0085	0	0.17	-0.004	0.015	0.07	0.13	0.026	0.019	0.074	0.099	8.98	0.73	70	120	0.029	0.043
BMB5871	Zircon_Sample-074.FIN2	Fe-rich	700000		0.04	0.085	5.3	4.2	14.1	3.4	1.7	2.1	218	23	5.37	0.43	28.8	1.6	2.39	0.57	3.1	1.4	8.8	1.7	24.5	4.7	0.013	0.063	-0.009	0.016	0.004	0.036	-0.13	0.1	-0.02	0.15	0.005	0.011	-0.43	0.53	0.019	0.05	0.17	0	-0.003	0.016	-0.06	0.1	-0.01	0.011	0.084	0.095	0.034	0.03	0.059	0.06	2.07	0.37	-140	150	0.063	0.062
BMB5871	Zircon_Sample-075.FIN2	Fe-rich	700000		0.15	0.13	3.6	3.3	8.5	0.83	5.2	2.9	177.6	9.2	6.14	0.84	52	14	1.8	1.2	2.38	0.62	8.22	0.68	18.5	3.2	-0.03	0.11	0	0.1	0.032	0.052	0.06	0.11	0.18	0.19	0.016	0.027	0.3	1.2	-0.007	0.046	0.04	0	0.019	0.012	0.04	0.21	-0.011	0.02	-0.01	0.11	0.007	0.019	0.042	0.079	1.28	0.24	23	94	0.059	0.062
BMB5871	Zircon_Sample-076.FIN2	Fe-rich	700000		0.03	0.16	3	5.1	38.6	9.2	3	2.8	244	23	3.9	1.6	18.5	3	2.86	0.91	10.1	3.7	12.2	1.5	27.9	4.1	-0.001	0.061	-0.091	0.037	0.012	0.016	-0.002	0.091	0.06	0.12	0.013	0.017	0.35	0.53	0.007	0.083	0.02	0	0.007	0.014	0.049	0.075	-0.005	0.018	-0.098	0.041	0.011	0.018	-0.032	0.046	4.9	1.1	80	150	0.018	0.045
BMB5871	Zircon_Sample-077.FIN2	Fe-rich	700000		0	0.2	0.4	4.6	17.92	0.79	-2.4	3.8	225	17	5.8	0.99	25.9	1.5	10.7	6.3	4.22	0.5	10.5	1.9	25.6	3.2	0.034	0.087	-0.016	0.018	0.005	0.053	0.04	0.17	0.016	0.094	0.005	0.021	0.2	0.44	0.03	0.074	0	0	0.002	0.028	0.06	0.27	0.004	0.029	0.08	0.19	0.017	0.021	0.03	0.11	2.9	1.1	-25	81	0.053	0.074
BMB5871	Zircon_Sample-078.FIN2	Fe-rich	700000		0.03	0.15	0.9	9.6	12	1.6	-0.6	4.3	209	13	6.3	1.4	31.1	3.9	3.7	2.1	2.6	1.3	9.1	1.2	22	1.7	-0.011	0.049	0.005	0.08	-0.035	0.033	-0.07	0.13	0.065	0.056	0.018	0.045	0.22	0.35	0.033	0.075	0.07	0	0.0048	0.009	-0.07	0.12	-0.016	0.022	0.02	0.14	0.014	0.021	0.19	0.29	2.01	0.61	-50	160	0.38	0.78

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5872 CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5872	Zircon_Sample-150.FIN2	Fe-rich	700000		1.37	0.35	478	77	37.1	2.8	12	1.6	81	11	3.98	0.27	1.96	0.13	8.88	0.63	9.5	1.9	0.657	0.093	0.83	0.23	2.2	3.1	5	5.8	0.46	0.68	1.4	2	0.31	0.35	0.039	0.037	0.11	0.1	0.027	0.016	0.103	0	0.021	0.017	0.043	0.032	0.0118	0.0054	0.104	0.081	0.024	0.02	0.2	0.12	0.47	0.11	270	360	5.18	0.63
BMB5872	Zircon_Sample-151.FIN2	Fe-rich	700000		3.03	0.56	744	51	49	2.5	14.8	2.8	109	10	6.1	1.7	4.8	5.1	70	110	14.7	3.7	1.62	0.62	0.86	0.11	2.4	1.2	37	64	0.52	0.27	1.22	0.54	0.32	0.11	0.038	0.016	0.2	0.14	0.014	0.027	0.142	0	0.056	0.027	0.085	0.041	0.034	0.031	0.132	0.087	0.023	0.016	0.44	0.38	1.05	0.2	220	200	8.1	2.3
BMB5872	Zircon_Sample-152.FIN2	Fe-rich	700000		1.33	0.55	390	290	18.9	6.1	15.4	4.6	94	10	4.04	0.46	2.45	0.48	14.3	6.6	19.3	1.9	1.35	0.74	2.45	0.29	0.96	0.57	1.5	0.81	0.168	0.092	0.61	0.34	0.132	0.087	0.027	0.011	0.019	0.091	0.01	0.015	0.032	0	0.018	0.017	0.036	0.045	0.0099	0.0072	0.047	0.04	0.0124	0.0076	0.186	0.083	0.411	0.054	420	140	4.8	1.1
BMB5872	Zircon_Sample-153.FIN2	Fe-rich	700000		0.7	1	100	190	23	11	170	290	83.5	7.1	-10	29	-3	13	180	350	16.8	1.9	-1.7	4.9	4	2.6	-1.5	3.9	1.8	2.3	0.9	1.7	-2.4	5.2	1.1	1.9	-0.05	0.16	-4.6	9.1	0.18	0.4	2.9	6	0.5	0.98	-6	11	-0.005	0.035	2.8	5.6	-0.016	0.053	1.7	3.2	6	11	380	260	4.9	1.3
BMB5872	Zircon_Sample-154.FIN2		700000		430	770	70000	10000	104	91	13000	21000	340	350	550	740	25000000	50000000	1500	2900	-900	2200	160	200	-16	44	80	180	45	81	29	47	35	71	140	250	45	92	-440	840	42	84	-70	##	23	44	-140	310	17	34	-10	100	-1.2	2.1	-12	21	260	460	440	320	150	250
BMB5872	Zircon_Sample-155.FIN2	Fe-rich	700000		1.36	0.16	340	150	41.4	7.9	20.2	1.7	97.3	4.3	7.48	0.42	1.84	0.21	16.1	1.2	23	2.2	0.78	0.3	2.43	0.18	0.9	0.55	2.2	2.5	0.208	0.081	0.61	0.26	0.147	0.092	0.029	0.017	0.05	0.14	0.0011	0.0031	0.042	0	0.0136	0.0091	0.016	0.02	0.0117	0.0041	0.041	0.03	0.016	0.012	0.19	0.1	0.486	0.066	311	47	4.32	0.2
BMB5872	Zircon_Sample-156.FIN2	Fe-rich	700000		1.65	0.11	580	120	31.49	0.97	13.8	1.1	91.4	5	5.71	0.23	1.765	0.074	11.6	1.3	18.08	0.44	0.77	0.15	1.58	0.2	1.29	0.38	2.24	0.83	0.27	0.17	1.9	2.6	0.195	0.071	0.041	0.016	0.299	0.078	0.053	0.029	0.42	1	0.044	0.054	0.13	0.12	0.025	0.022	0.16	0.17	0.034	0.043	0.38	0.27	0.5	0.18	550	310	4.81	0.19
BMB5872	Zircon_Sample-163.FIN2	Fe-rich	700000		60	110	1700	540	68	37	20	38	79.7	7	-7	22	3.1	6.9	55	34	-15	45	1.5	5.1	3.7	7.1	300	340	400	460	80	100	330	390	46	56	4	4.6	-2	19	-0.6	1.6	0.8	2	0.41	0.53	1	1.2	0.005	0.031	-0.08	0.83	0.048	0.099	1.9	2.8	3.6	2.8	650	220	13.8	6.5
BMB5872	Zircon_Sample-164.FIN2		700000		3.22	0.96	780	750	136	15	18	3.5	55	11	1.69	0.35	11	18	24	38	8.9	2.4	1.61	0.43	0.236	0.062	1.41	0.33	2.2	0.88	0.3	0.17	1.05	0.28	0.214	0.097	0.049	0.027	0.22	0.25	0.025	0.043	0.22	0	0.043	0.067	0.19	0.31	0.034	0.056	0.21	0.29	0.044	0.054	0.7	1.2	21	7.7	300	360	5.8	1.2
BMB5872	Zircon_Sample-165.FIN2		700000		-70000	10000	-130000	260000	-200	3200	-690000	810000	11000	43000	50000	14000	19000	13000	-56000	78000	60000	10000	30000	13000	-50000	11000	700	1100	2000	2400	-1300	1300	1800	5800	-3800	8300	-900	1200	14000	26000	-200	1100	-4500	##	0	760	2000	4200	69	79	-2200	4000	-310	790	-60000	14000	-70000	12000	510	200	-500	2300
BMB5872	Zircon_Sample-166.FIN2	Fe-rich	700000		0.59	0.19	200	110	8.6	2.2	4.15	0.63	34	5	0.58	0.12	10.2	7.9	46	67	1.04	0.23	0.18	0.15	0.15	0.11	1	1.5	0.8	0.46	0.15	0.13	0.38	0.37	0.109	0.091	0.024	0.026	0.05	0.14	0.006	0.0099	0.054	0	0.0104	0.007	0.066	0.035	0.0038	0.0017	0.021	0.014	0.0025	0.0033	0.14	0.17	0.305	0.076	335	83	3.2	1.5
BMB5872	Zircon_Sample-167.FIN2	Fe-rich	700000		6.8	8.2	320	170	51.7	6.4	6	10	44.9	3.2	1.19	0.59	15	17	90	170	10.7	6.5	0.62	0.3	0.7	1	0.61	0.48	1.26	0.82	0.1	0.13	0.54	0.48	0.25	0.19	0.05	0.026	0.59	0.91	-0.06	0.16	0.04	0	0.015	0.02	-0.09	0.11	0.005	0.012	-0.003	0.044	0.0098	0.0094	0.02	0.13	2.5	1.1	230	430	14.4	9.9
BMB5872	Zircon_Sample-168.FIN2	Fe-rich	700000		4.3	2.5	350	120	33.6	6.8	7.8	3.4	43.4	3.6	1.3	1.2	9	10	70	120	3.6	1.1	0.62	0.5	0.15	0.17	0.95	0.42	2	1.5	0.17	0.12	0.36	0.22	0.1	0.17	0.032	0.013	0.31	0.83	0.06	0.12	-0.05	0	0.029	0.027	-0.07	0.18	0.034	0.04	0.2	0.17	0.028	0.034	0.56	0.42	6.5	2.1	190	150	5.2	1.4
BMB5872	Zircon_Sample-169.FIN2	Fe-rich	700000		1.07	0.13	458	48	84	29	13	1.9	57.7	2.4	1.65	0.37	6.4	5.9	37	49	5.8	2.2	0.62	0.1	0.256	0.053	0.98	0.3	1.75	0.71	0.7	1.1	0.81	0.43	0.22	0.12	0.0232	0.0078	0.14	0.11	0.0176	0.0093	0.113	0	0.0259	0.0063	0.025	0.021	0.0219	0.0085	0.156	0.084	0.0092	0.0079	0.25	0.17	26	19	380	200	5.1	2.4
BMB5872	Zircon_Sample-176.FIN2	Fe-rich	700000		3.5	0.71	990	420	77	20	32.7	8.9	166	27	7.4	2	7.1	3	77	49	15.1	1.8	1.81	0.32	1.28	0.24	2.6	0.99	3.34	0.59	0.47	0.23	2.3	1.4	0.62	0.45	0.13	0.1	0.37	0.33	0.069	0.063	0.241	0	0.053	0.02	0.35	0.45	0.0265	0.0083	0.154	0.065	0.031	0.015	0.61	0.47	1.1	0.66	540	360	7	0.94
BMB5872	Zircon_Sample-177.FIN2	Fe-rich	700000		0.99	0.23	316	81	14.6	3	8.82	0.84	67.4	9.3	2.84	0.26	3	2.8	29	46	16.3	1.2	0.55	0.23	1.55	0.19	0.68	0.37	1.47	0.84	0.096	0.055	0.48	0.29	0.091	0.047	0.026	0.014	0.076	0.021	0.009	0.012	0.079	0	0.022	0.018	0.039	0.041	0.011	0.011	0.16	0.2	0.0052	0.0034	0.2	0.15	0.3	0.12	500	230	3.04	0.54
BMB5872	Zircon_Sample-178.FIN2	Fe-rich	700000		3.74	0.61	1360	320	74	3.3	45.8	3.5	162	18	8.01	0.83	7.16	0.48	18.4	3.2	28.7	3.6	1.77	0.4	9.9	1.2	3.08	0.87	6.7	4.7	0.399	0.091	2.04	0.69	0.48	0.21	0.07	0.034	0.62	0.74	0.09	0.035	0.42	0	0.18	0.15	1.1	1.4	0.063	0.044	3	4.9	0.072	0.073	0.89	0.75	2.8	2.2	710	210	10.8	2.4
BMB5872	Zircon_Sample-179.FIN2	Fe-rich	700000		8.4	1.4	2800	1200	181	30	66	12	205.8	8.1	11.7	1.3	13.8	1.4	37	46	43	12	4.05	0.73	9.6	2.1	4.6	4.1	4.9	2.1	0.5	0.18	2.6	1.4	0.25	0.13	0.068	0.044	1.19	0.48	-0.001	0.054	0.5	0	0.105	0.092	0.48	0.22	0.11	0.11	0.44	0.28	0.055	0.032	0.93	0.42	3.8	1.7	290	160	11.5	4.3
BMB5872	Zircon_Sample-180.FIN2	Fe-rich	700000		3.23	0.23	1070	130	105.7	7.4	38.9	2.4	229	26	8.21	0.71	10.4	1.6	21.3	4.9	31.4	2.5	1.66	0.35	8.92	0.8	2.9	1.4	3.19	0.36	0.54	0.35	1.17	0.2	0.314	0.086	0.066	0.032	0.26	0.21	0.031	0.011	0.189	0	0.052	0.017	0.113	0.045	0.0201	0.0063	0.162	0.09	0.014	0.01	0.73	0.56	2.27	0.72	660	310	8.3	1.8
BMB5872	Zircon_Sample-181.FIN2		700000		-170000	420000	-2700000	5700000	18000	36000	340000	780000	900000	200000	-150000	280000	-700000	150000	42000	91000	19000	20000	-4000	8300	6700	9500	800	1600	18000	34000	-14000	29000	80000	16000	-24000	48000	1400	1900	43000	83000	20000	38000	13000	##	2300	4000	80000	22000	220	300	-500000	100000	150	910	12000	23000	-32000	64000	288	88	1300	1700
BMB5872	Zircon_Sample-182.FIN2	Fe-rich	700000		10	16	1280	500	52.3	6.1	17.9	5.7	112	14	3.5	0.88	5.4	6.9	30	33	34.5	3.5	1.59	0.73	6.8	1.2	2.13	0.39	2.92	0.54	0.18	0.3	0.6	1.5	-0.04	0.43	0.15	0.21	-1.8	4.4	0.16	0.26	0.69	1	0.1	0.1	-0.26	0.82	0.016	0.012	0.36	0.28	0.022	0.019	0.03	0.83	0.99	0.34	490	440	8.4	1.8
BMB5872	Zircon_Sample-189.FIN2		700000		-29000	37000	-1000000	180000	2000	2100	-600000	140000	-70000	14000	15000	30000	-12000	19000	80000	20000	-10000	14000	-10000	12000	-1100	2800	-800	3100	-400	1200	-800	2100	-800	5100	-2500	3600	-220	590	-2000	5100	-220	880	-30000	##	-1600	2600	-300	2600	-380	560	-1400	1700	-600	1300	-800	1200	-2400	3200	140	230	-700	1400
BMB5872	Zircon_Sample-190.FIN2		700000		200000	100000	8000000	2800000	-4200	8500	-120000	320000	36000	74000	-50000	91000	700000	130000	-10000	17000	600000	110000	-50000	26000	50000	12000	150000	370000	210000	430000	38000	86000	270000	560000	27000	44000	60000	14000	300000	120000	60000	18000	43000	##	80000	19000	600000	130000	-1200	2600	60000	19000	40000	12000	80000	17000	3500	9000	110	180	14000	58000
BMB5872	Zircon_Sample-191.FIN2		700000		40000	35000	2000000	1100000	5100	7400	48000	90000	80000	23000	-1900	6800	24000	33000	0	21000	5200	5200	-3100	4000	800	2400	-500	1300	430	580	800	1600	2800	5500	1900	2900	700	1300	5500	4500	10	460	-2900	##	220	280	700	2200	500	950	250	970	800	1600	3500	5200	2600	2700	230	270	400	1400
BMB5872	Zircon_Sample-192.FIN2		700000		-40000	52000	-4000000	1900000	1900	4400	-19000	67000	1000	3500	21000	39000	-13000	46000	10000	95000	23000	40000	28000	54000	-2400	5700	1600	3000	-800	3700	-700	1700	-2800	9200	-100	1400	-2400	5000	15000	28000	-1300	2700	10	##	-310	600	-60000	12000	-1100	2400	-600	2000	-700	1300	3700	8400	2300	2200	100	200	1100	7900
BMB5872	Zircon_Sample-193.FIN2		700000		8000000	1700000	14000000	37000000	27000	32000	-9000000	1500000	-270000	500000	30000	45000	-800000	230000	-160000	230000	350000	490000	74000	94000	-18000	21000	11000	33000	-18000	24000	11000	18000	900000	220000	32000	90000	-5900	8800	-280000	390000	-25000	57000	-14000	##	-6200	7500	600000	130000	-200	580	-17000	49000	-200	1100	-12000	31000	1000000	190000	160	150	-17000	31000
BMB5872	Zircon_Sample-194.FIN2		700000		-230000	410000	-1600000	3000000	-12000	24000	-200000	160000	-28000	45000	-500000	140000	-1000	15000	19000	11000	-40000	28000	30000	26000	1900	1500	-2200	2800	800	2600	700	1100	5500	8900	-2800	5700	-800	1800	80000	52000	-2600	2200	70000	##	-2300	4800	-2900	4100	-320	480	400	2600	-270	630	200	9900	-2900	4800	150	290	-2400	3200

BMB5872	Zircon_Sample-195.FIN2		700000		70000	34000	400000	550000	-70000	17000	-50000	25000	-14000	79000	-5100	6600	14000	13000	-1300	3700	-30000	25000	-60000	17000	-2100	4200	-1200	2100	2100	3700	600	1300	-1300	2300	-80000	16000	120	200	-3100	8100	-700	2100	-200	##	-240	480	-1100	3600	13	39	2500	3300	-400	1100	-60000	11000	-600	3900	110	170	0	2700
BMB5872	Zircon_Sample-202.FIN2		700000		40000	34000	600000	130000	-500	5200	-13000	93000	2500	6100	100000	28000	53000	54000	53000	63000	0	15000	1900	5700	2000	3000	1200	1300	-800	1300	120	390	800	2600	-540	870	30	200	-50000	10000	0	610	0	##	1100	1100	-700	2800	-13.3	7.3	120	530	250	340	500	2400	600	1300	192	99	2100	1400
BMB5872	Zircon_Sample-203.FIN2		700000		19000	30000	270000	580000	2600	3500	-20000	44000	90000	12000	20000	17000	40000	16000	21000	50000	200	9600	100	9700	50000	52000	900	1600	530	680	40	190	500	1900	200	1900	580	690	-700	4500	70	940	-400	##	350	120	1400	3300	23	63	-1600	1300	-13	25	600	1900	90000	15000	100	120	15000	24000
BMB5872	Zircon_Sample-204.FIN2		700000		-2000	100000	110000	130000	-800	1900	-25000	15000	-70000	20000	-90000	20000	70000	17000	0	30000	90000	13000	40000	11000	100	3000	-10	660	590	530	140	520	-1300	1800	2000	2000	500	970	-1000	12000	100	1300	500	##	-360	540	300	1500	-240	670	390	620	12	34	-1200	3000	2900	4700	-22	97	1000	1200
BMB5872	Zircon_Sample-205.FIN2		700000		-210000	450000	-2900000	6100000	-90000	17000	-240000	470000	-2800	8600	800000	170000	-1500000	3000000	-1800000	3600000	-1000000	210000	-1400	2300	3100	5300	-3600	8900	-12000	24000	-1400	2500	-11000	28000	10000	19000	-1600	4600	-15000	30000	4500	8400	80000	##	900	1700	-37000	71000	70	140	90000	19000	440	620	2400	4100	-45000	90000	160	210	-27000	60000
BMB5872	Zircon_Sample-206.FIN2		700000		-150000	230000	-2000000	2700000	-1400	3900	210000	300000	-13000	28000	51000	50000	-15000	26000	-10000	110000	50000	21000	-10000	11000	300	2400	1800	3200	700	2700	600	1200	3700	3300	700	6600	-1000	2300	30000	33000	-700	1200	-80000	##	-600	1600	4000	4200	-380	610	0	1200	-1600	2100	2500	4800	700	3700	-30	120	-7800	8200
BMB5872	Zircon_Sample-207.FIN2		700000		10000	13000	61000	65000	1000	1500	30000	32000	-100	3300	-3100	9200	1500	2400	8800	7700	2300	6400	800	4700	110	550	440	880	-30	580	5	93	600	1400	900	1700	30	120	-4500	4700	-120	220	410	##	340	380	1100	1000	270	350	-300	450	170	350	340	870	570	920	70	130	410	430
BMB5872	Zircon_Sample-208.FIN2		700000		1700	1500	19000	18000	30	150	800	1000	400	1200	-600	1200	-120	740	3000	2300	-10	480	-210	590	-8	55	38	53	40	130	11	28	-30	230	70	120	17	25	350	860	36	46	70	##	29	41	40	190	8	17	-110	100	8	18	210	270	270	210	30	260	46	42

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5877 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5877	Zircon_sample-007.FIN2	Fe-rich	700000		0.011	0.092	12	6.6	60.5	4.1	33.8	3.7	656	34	13.37	0.35	20.5	2.3	0.42	0.41	26.8	3.8	1.88	0.64	2.09	0.51	0.06	0.14	0.031	0.073	0.007	0.012	0.011	0.081	-0.016	0.044	0.024	0.02	-0.28	0.49	-0.017	0.019	-0.11	0	0.006	0.012	0.09	0.17	0.0031	0.0066	-0.012	0.037	0.016	0.022	-0.086	0.051	1.36	0.33	132	54	0.028	0.033
BMB5877	Zircon_sample-008.FIN2	Fe-rich	700000		-0.036	0.06	18	6.2	49.8	3	25.4	2.2	633	49	16.21	0.9	30.1	1.9	0.2	0.27	16	3.3	0.7	1.1	1.99	0.32	0.005	0.052	-0.002	0.03	0.006	0.028	0.042	0.094	0.057	0.072	0.013	0.012	0.2	0.6	0.009	0.013	-0.03	0	-0.001	0.012	-0.014	0.088	0.0018	0.0038	0.011	0.034	0.013	0.017	0.041	0.078	1.02	0.19	64	40	0.24	0.18
BMB5877	Zircon_sample-009.FIN2	Fe-rich	700000		-0.029	0.051	570	720	460	180	77	14	570	340	18.9	9.8	19.8	8.5	0.21	0.18	139	46	2.6	1.4	3.27	0.62	-0.03	0.039	-0.028	0.032	0.009	0.028	0.03	0.13	0.088	0.068	-0.000955	0.000093	0.34	0.66	0.004	0.034	0.01	0	0.003	0.012	-0.041	0.066	0.003	0.0062	0.043	0.052	-0.00073	0.000072	0.03	0.19	7.2	5.2	-27	93	0.33	0.13
BMB5877	Zircon_sample-010.FIN2	Fe-rich	700000		0.063	0.078	20	5.9	57.9	6.7	27.3	5.1	670	51	18.3	2.1	33.4	4.1	0.34	0.26	21.1	2.2	1.16	0.76	2.01	0.38	0.023	0.067	-0.031	0.048	-0.003	0.013	-0.082	0.04	0.026	0.032	0.027	0.023	-0.1	0.17	0.002	0.033	-0.069	0	0.008	0.015	-0.015	0.084	0.0053	0.0067	0.024	0.054	0.017	0.022	0.127	0.081	1.16	0.34	70	140	0.23	0.21
BMB5877	Zircon_sample-011.FIN2	Fe-rich	700000		-0.03	0.1	15.1	2.1	41.3	6.2	20.3	4.2	594	44	17.4	1.8	30.8	2.8	0.44	0.16	14.7	2.4	0.83	0.37	1.88	0.29	0.014	0.053	0.007	0.034	0.013	0.025	0.044	0.06	0.05	0.14	0.022	0.02	-0.22	0.4	-0.012	0.038	-0.03	0	0.005	0.012	0.01	0.13	-0.000121	0.000017	0.052	0.059	0.0047	0.0066	0.027	0.085	0.89	0.19	80	170	0.046	0.047
BMB5877	Zircon_sample-012.FIN2	Fe-rich	700000		-0.091	0.075	9.5	2.4	72	15	24.5	5	630	130	16.4	1.4	29.7	1.9	0.54	0.23	30	9.1	1.05	0.72	1.61	0.11	0.018	0.051	-0.039	0.03	0	0.02	0.05	0.16	0.005	0.081	0.017	0.036	-0.08	0.21	0.012	0.02	0.02	0	-0.0038	0.0084	-0.03	0.064	0.013	0.013	0.072	0.089	0.0053	0.0075	0.069	0.094	1.51	0.36	40	180	0.26	0.14
BMB5877	Zircon_sample-013.FIN2	Fe-rich	700000		-0.045	0.052	15.3	6.9	72.4	3.1	29.4	3.1	706	64	12.96	0.86	17.5	1.5	0.71	0.2	28.2	4	0.7	0.9	2.26	0.12	0.033	0.058	-0.011	0.033	-0.015	0.011	0.05	0.18	0.05	0.17	0.011	0.024	0.05	0.79	0.016	0.064	-0.1	0	0.0047	0.0073	0.03	0.16	0.0026	0.0056	0.12	0.16	0.0062	0.009	0.06	0.17	1.63	0.19	3	85	1.9	3.5
BMB5877	Zircon_sample-020.FIN2	Fe-rich	700000		-0.059	0.046	109	60	450	110	53.6	4.7	277	63	10.4	1.2	10.6	1.4	0.52	0.43	183	47	2.28	0.98	3.2	0.46	0.027	0.084	-0.045	0.04	0.015	0.041	0.18	0.23	-0.077	0.058	0.021	0.029	-0.49	0.45	-0.021	0.051	-0.01	0	-0.001	0.011	0.016	0.04	0.0046	0.0095	0.02	0.14	0.014	0.019	0.01	0.21	5.9	0.68	-50	120	0.2	0.13
BMB5877	Zircon_sample-021.FIN2	Fe-rich	700000		0	0.11	42	45	147	14	29.1	2	1320	610	13.3	1.8	23.3	4.7	0.75	0.49	61.1	4.1	1.11	0.62	2.57	0.18	0.064	0.074	0.005	0.037	-0.011	0.014	0.044	0.089	0.02	0.15	0.02	0.02	-0.13	0.3	-0.022	0.037	-0.049	0	-0.0026	0.0072	0.09	0.14	0.009	0.012	0.14	0.16	0.014	0.013	0.026	0.054	2.61	0.3	137	94	0.08	0.044
BMB5877	Zircon_sample-022.FIN2	Fe-rich	700000		0.125	0.074	129	21	443	57	50.1	2	344	66	11.84	0.48	12.3	1.2	0.69	0.21	195	39	1.9	1	3.24	0.55	-0.041	0.062	0.028	0.044	-0.016	0.039	0.12	0.15	-0.06	0.13	0.024	0.017	-0.3	1.1	0.055	0.052	-0.002	0	0.039	0.042	-0.04	0.11	-0.00015	0.000034	0.07	0.23	-0.00073	0.00016	-0.059	0.09	5.1	0.91	120	230	0.2	0.14
BMB5877	Zircon_sample-023.FIN2	Fe-rich	700000		-0.014	0.072	127	25	590	69	62.6	2.6	172	10	11.01	0.42	8.4	2	0.43	0.39	235	15	1.3	1.1	4.2	0.39	-0.056	0.046	0.039	0.085	-0.026	0.015	-0.1	0.22	0.05	0.13	0.007	0.016	-0.02	0.63	-0.001	0.032	-0.121	0	0.015	0.019	-0.045	0.089	0.0109	0.0091	0.09	0.11	-0.00077	0.00017	0.02	0.12	6.47	0.94	-106	74	0.26	0.14
BMB5877	Zircon_sample-024.FIN2	Fe-rich	700000		0.039	0.022	38	13	174	15	46.5	6.5	680	150	35.6	1.1	64.7	6.4	0.132	0.055	70.6	8	2.1	0.19	4.71	0.15	0.003	0.018	0.0038	0.0093	0.0064	0.0036	0.038	0.071	-0.019	0.022	0.0021	0.0047	-0.094	0.061	0	0.01	-0.025	0	0.0018	0.0032	-0.001	0.022	0.0017	0.0023	0.02	0.035	0.0011	0.0025	0.009	0.031	4.24	0.79	-70	180	0.4	0.18
BMB5877	Zircon_sample-025.FIN2	Fe-rich	700000		0.113	0.09	38	20	143	19	29.5	3.9	390	120	11.3	1.4	12.5	1.1	0.73	0.74	92	52	1.4	1.5	3.96	0.65	-0.021	0.069	0.004	0.019	0.001	0.03	0.4	0.37	-0.045	0.094	0.01	0.013	-0.19	0.27	0.02	0.1	-0.028	0	0.027	0.023	0.01	0.12	-0.000141	0.000041	0.104	0.039	0.0024	0.0063	0.12	0.31	3.15	0.86	90	150	0.202	0.055
BMB5877	Zircon_sample-026.FIN2	Fe-rich	700000		-0.07	0.14	700	1100	275	75	40.3	4	3.40E+03	4.30E+03	11.4	1.8	12.5	1.7	1.02	0.59	168	26	2.36	0.41	4.44	0.54	-0.005	0.036	-0.052	0.047	-0.0075	0.0071	0.09	0.18	0.07	0.21	0.023	0.016	-0.11	0.63	-0.029	0.041	-0.09	0	-0.0043	0.0092	-0.13	0.12	0.012	0.023	-0.0511	0.0095	0.005	0.012	-0.03	0.13	4.17	0.36	0	110	0.28	0.23
BMB5877	Zircon_sample-033.FIN2	Fe-rich	700000		0.026	0.045	3.688	0.049	23.6	2.3	7.3	3.1	740	340	8	4.1	7.1	2.7	0.096	0.018	14.2	3.3	0.272	0.066	0.77	0.48	-0.000963	0.000025	0.004	0.013	-0.00181	0.00013	0.01	0.034	0.007	0.017	0.00468	0.00034	0.0275	0.0019	-0.0075	0.0069	-0.016	0	-0.00156	0.00011	-0.036	0.011	-0.0000291	0.0000021	0.023	0.022	0.0014	0.0031	0.016	0.017	0.66	0.37	-102	25	0.0011	0.0093
BMB5877	Zircon_sample-034.FIN2	Fe-rich	700000		0.026	0.03	170	260	236	71	36.1	2.3	1.90E+03	2.10E+03	49.2	9	49.5	6.9	0.09	0.1	80	22	1.95	0.32	5.5	0.66	0.009	0.031	0.013	0.012	0.007	0.011	0.01	0.043	-0.008	0.014	0.0037	0.004	0.06	0.19	0.007	0.027	-0.022	0	0.0014	0.0039	0.017	0.037	0.0051	0.0069	0.006	0.032	0.0013	0.0028	0.07	0.11	2.93	0.95	30	180	0.1705	0.0048
BMB5877	Zircon_sample-035.FIN2	Fe-rich	700000		0.042	0.01	500	290	520	240	76	30	3.50E+03	3.00E+03	37	22	101	19	0.141	0.038	124	54	1.78	0.12	5.1	2.9	0.022	0.037	0.0236	0.0054	0.0017	0.0025	0.01	0.07	0.019	0.04	0.0079	0.0053	-0.04	0.14	0.006	0.021	-0.013	0	0.0045	0.0062	0.001351	0.0000052	0.0038	0.0077	0.024	0.066	0.0017	0.0038	0.017	0.052	5.53	0.57	0	180	0.14	0.098
BMB5877	Zircon_sample-036.FIN2	Fe-rich	700000		0.058	0.058	29	19	279	42	49.2	8	939	27	43.1	4.7	46	17	0.08	0.12	96.7	4.6	1.9	0.35	4.41	0.16	0.019	0.023	0.009	0.051	-0.0007	0.0092	0.021	0.018	0.008	0.037	0.0067	0.0077	0.13	0.19	0.011	0.012	-0.013	0	0.0029	0.007	-0.012	0.038	-0.0000507	0.0000058	-0.001	0.02	0.0016	0.0036	0.0112	0.0012	3.8	0.55	-40	130	0.273	0.074
BMB5877	Zircon_sample-037.FIN2	Fe-rich	700000		0	0.019	4.2	8.4	90	150	19	30	570	190	7.4	8.5	8	13	0.28	0.23	39	62	0.55	0.79	1.6	2.5	0.006	0.012	0.002	0.012	-0.0033	0.0029	-0.003	0.018	0.048	0.076	0.003	0.0038	0.08	0.13	0.0045	0.0096	-0.008	0	0.0009	0.0058	-0.02	0.046	0.0037	0.0047	0.016	0.037	0.0009	0.0021	-0.012	0.017	2.4	4	0	160	-0.00268	0.00018
BMB5877	Zircon_sample-038.FIN2	Fe-rich	700000		0.001	0.016	1.04	0.88	3.51	0.41	1.26	0.32	305	15	1.53	0.27	0.35	0.18	0.131	0.052	7.4	1.2	0.15	0.2	0.056	0.019	0.003	0.012	-0.005	0.01	-0.0016	0.004	0.029	0.053	0.041	0.039	0.0037	0.0021	0	0.15	0.0046	0.0038	0.03	0	0.0035	0.007	-0.003	0.033	0.0007	0.0015	0.018	0.029	0.0058	0.0039	-0.007	0.012	0.319	0.065	100	140	0.011	0.015
BMB5877	Zircon_sample-039.FIN2	Fe-rich	700000		-0.011	0.038	-0.87	0.87	0.149	0.034	0.5	0.32	362	49	1.23	0.24	0.07	0.15	0.09	0.13	0.69	0.53	0.01	0.12	0.011	0.012	0.008	0.014	-0.008	0.0094	0.0043	0.0069	0.013	0.018	-0.002	0.016	0.0009	0.0025	0.077	0.057	0.0129	0.0051	0.03	0	0.0014	0.0044	0.044	0.016	0.0039	0.0032	0.014	0.017	0.0016	0.0034	-0.011	0.014	0.011	0.012	-30	230	0.009	0.016
BMB5877	Zircon_sample-046.FIN2	Fe-rich	700000		0.064	0.046	17	12	170	130	38	29	840	260	25	17	28	19	0.21	0.14	71	49	1.21	0.82	3.6	2.7	-0.0023	0.0071	0.004	0.011	-0.0013	0.0037	-0.018	0.015	-0.015	0.018	-0.000342	0.00009	0.025	0.086	0.004	0.012	0.014	0	0.0027	0.0035	0.002	0.033	-0.000077	0.000021	0.024	0.026	0.0041	0.0056	-0.003	0.021	3.1	2.5	100	140	0.056	0.05
BMB5877	Zircon_Sample-047.FIN2	Fe-rich	700000		0.027	0.016	1.6	1	0.19	0.15	0.62	0.97	430	120	2.7	1.8	0.12	0.14	0.25	0.15	0.77	0.68	0.035	0.093	0.016	0.019	0.003	0.02	0.007	0.012	0.0003	0.0097	-0.011	0.026	0.019	0.018	0.008	0.011	0.029	0.059	0.014	0.018	-0.011	0	0.01	0.0081	0.021	0.028	0.003	0.0062	0.05	0.049	0.0034	0.0072	0.016	0.066	0.0094	0.0051	130	130	0.022	0.033
BMB5877	Zircon_Sample-048.FIN2	Fe-rich	700000		0.049	0.024	4.3	6.3	4.5	4.5	15	13	550	140	2.8	2.9	3.7	3.6	0.24	0.23	2.3	1.5	0.11	0.12	0.14	0.16	0.003	0.017	0.0011	0.0087	-0.0005	0.0047	0.001	0.026	-0.0052	0.0013	0.0073	0.0069	0.07	0.19	-0.0006	0.0074	0.007	0	0.0025	0.0045	-0.006	0.014	0.006	0.0035	0.005	0.015	0.0019	0.0041	0.007	0.026	1.3	1.3	150	180	0.082	0.097
BMB5877	Zircon_Sample-049.FIN2	Fe-rich	700000		0.007	0.024	0.7	2.3	0.54	0.83	0.6	0.3	590	38	4.14	0.6	0.67	0.85	0.18	0.14	1.7	0.36	0.24	0.22	0.055	0.055	0.001	0.015	0.001	0.013	-0.0021	0.0054	0.004	0.013	0.005	0.034	0.0015	0.0036	-0.01	0.14	-0.0001	0.0068	0.003	0	0.0053	0.0053	-0.014	0.022	-0.000067	0.000019	0.024	0.022	0.0026	0.0038	0.001	0.023	0.079	0.066	-3	83	0.006	0.005
BMB5877	Zircon_Sample-050.FIN2	Fe-rich	700000		-0.002	0.039	9.7	7.7	58	33	19.4	8.9	291	26	18.7	4.8	9.5	7.8	0.09	0.13	30	16	0.33	0.3	1.1	0.94	-0.005	0.016	0	0.01	0.0034	0.0086	0.016	0.036	0.018	0.033	0.001	0.0024	0.04	0.11	0.0025	0.0067	0.009	0	-0.0002	0.0017	-0.0003	0.0094	0.0059	0.0047	0.006	0.015	0.0007	0.0017	0.009	0.041	1.27	0.42	0	13	0.073	0.051
BMB5877	Zircon_Sample-051.FIN2	Fe-rich	700000		0.016	0.016	0.5	1.2	2.54	0.24	7.3	1	242	27	1.621	0.097	0.29	0.22	0.091	0.042	2.51	0.66	0.061	0.086	0.071	0.032	0.001	0.014	0.002	0.012	0.0033	0.0082	-0.02	0.012	-0.016	0.028	-0.000286	0.000081	-0.068	0.067	0.0026	0.0076	0.01	0	0.0061	0.0024	0.011	0.023	-0.000067	0.000019	0.03	0.037	0.0024	0.0031	0.002	0.033	0.282	0.069	110	120	0.0082	0.0073
BMB5877	Zircon_Sample-052.FIN2	Fe-rich	700000		0.024	0.023	1.4	2.7	0.28	0.11	1.55	0.85	505	64	2.65	0.43	0.74	0.2	0.117	0.052	1.2	0.36	0.024	0.057	0.0318	0.0048	0.003	0.013	0	0.015	0.0017	0.0082	-0.001	0.032	-0.016	0.025	0.0007	0.0021	0.016	0.086	0.0083	0.0094	0	0	0.0034	0.0047	0.007	0.044	-0.000067	0.000024	0.027	0.019	0.0041	0.0025	-0.012	0.015	0.132	0.057	0	100	0.019	0.015

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5890 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5890	Zircon_Sample-072.FIN2	Fe-rich	700000		0.04	0.13	0	5.6	14.1	2.3	1.3	1.4	331	20	12.75	0.82	112	8	2.1	0.69	1.7	1.5	8.59	0.57	9.3	1.7	0.09	0.13	0.032	0.033	0.004	0.016	-0.01	0.17	0.044	0.099	0.025	0.027	0.02	0.19	0.042	0.065	0.02	0	0.0047	0.008	0.042	0.095	0.014	0.013	-0.0084	0.0016	0.009	0.014	0.03	0.11	11.1	1.6	120	160	0.044	0.058
BMB5890	Zircon_Sample-073.FIN2	Fe-rich	700000		0.02	0.12	2.6	2.2	18.1	2.9	3.2	1.7	361	28	22.1	5.3	133	18	1.19	0.69	2.91	0.9	10	1.6	11	1.6	-0.003	0.019	-0.024	0.031	-0.0024	0.0097	-0.019	0.063	0.046	0.071	0.02	0.02	0.25	0.4	-0.016	0.046	-0.033	0	0.0152	0.0069	-0.065	0.057	-0.000136	0.000044	0.026	0.03	0.0088	0.0069	0.14	0.11	15.9	3.6	10	160	0.036	0.028
BMB5890	Zircon_Sample-074.FIN2	Fe-rich	700000		0.012	0.033	7.6	4.1	19.8	5.5	3.4	1.3	410	67	13.1	2.8	109	23	0.44	0.32	3	1.5	9.4	3	8.5	2.8	0.019	0.02	-0.012	0.019	0.009	0.013	0.06	0.04	0.021	0.031	-0.000183	0.000048	0.08	0.14	0.0215	0.0035	0.05	0	0.0057	0.0066	0.07	0.11	0.0087	0.0091	0.014	0.016	0.0028	0.004	-0.005	0.026	17.9	2.4	200	140	0.038	0.026
BMB5890	Zircon_Sample-075.FIN2	Fe-rich	700000		0.057	0.072	3.1	3.5	17.9	2.8	2.86	0.53	417	19	17.2	2.4	130.2	9	0.55	0.38	3.7	2.1	8.8	1.3	9.4	1.6	0.007	0.031	0.027	0.017	0.0003	0.0058	0.064	0.065	0.024	0.08	0.014	0.016	-0.02	0.25	0.028	0.035	-0.024	0	0.017	0.013	0.02	0.13	0.0026	0.0034	0.008	0.027	-0.00039	0.00011	0.008	0.065	21	13	30	120	0.0725	0.0056
BMB5890	Zircon_Sample-076.FIN2	Fe-rich	700000		0.16	0.14	-0.7	5.6	20.5	2.2	4.2	3.2	390	32	10.4	1.3	75.2	9.8	0.25	0.38	4.1	1.9	8.15	0.65	8.84	0.9	-0.029	0.026	0.005	0.019	0.005	0.014	0.11	0.13	0.07	0.12	0.018	0.018	-0.06	0.25	0.025	0.071	0.06	0	0.0052	0.0081	-0.01	0.14	0.0072	0.009	0.079	0.071	0.005	0.0076	-0.008	0.05	14.4	1.3	57	74	0.037	0.038
BMB5890	Zircon_Sample-077.FIN2	Fe-rich	700000		-0.021	0.055	9.7	2.4	26.2	4.9	4.9	1	365	27	15.47	0.7	181	15	0.81	0.94	4.6	1.1	12.1	2	14.7	3.2	0.001	0.033	0.015	0.019	0.004	0.014	-0.033	0.025	-0.004	0.046	0.0078	0.0081	0.17	0.14	0.005	0.057	0.013	0	-0.00082	0.00023	0.068	0.097	-0.000104	0.000035	0.082	0.068	0.0054	0.0076	-0.008	0.022	16.6	2.6	150	190	0.025	0.027
BMB5890	Zircon_Sample-078.FIN2	Fe-rich	700000		-0.046	0.06	-1	2.2	13.12	0.91	2.3	2.1	311	19	11.5	1.1	96	11	1.3	0.75	2.51	0.79	6.96	0.72	7.67	0.97	-0.034	0.04	-0.011	0.034	0.022	0.02	-0.054	0.053	-0.017	0.063	0.0097	0.0093	0.16	0.44	-0.032	0.063	-0.05	0	0.025	0.026	0.08	0.19	0.014	0.012	0.09	0.1	-0.00067	0.00018	0.08	0.16	11	1.1	20	110	0.025	0.033
BMB5890	Zircon_Sample-085.FIN2	Fe-rich	700000		0.117	0.049	3.6	3.5	45.1	5.6	6.3	3.6	435	29	23.6	1.8	166	55	1.22	0.6	7.6	1.4	10.3	1.9	12.5	1.7	-0.0279	0.0073	0.015	0.031	-0.0093	0.0067	-0.099	0.041	0.071	0.043	0.012	0.013	-0.11	0.33	-0.027	0.047	0.03	0	0.03	0.029	0.02	0.088	0.0076	0.0098	-0.0076	0.0015	0.0036	0.0054	0.029	0.054	30.8	3.5	150	100	0.064	0.052
BMB5890	Zircon_Sample-086.FIN2	Fe-rich	700000		0.14	0.15	9.8	8.9	47.3	3.1	8	2.2	483	37	8.67	0.71	41.8	5.6	1.07	0.35	7.9	1.3	10.13	0.62	10.52	0.82	0.022	0.093	0.022	0.02	-0.006	0.025	-0.09	0.11	0.085	0.097	-0.00036	0.00013	0.3	0.55	0.064	0.053	0.024	0	0.0044	0.0076	0.065	0.076	0.01	0.014	0.052	0.047	0.01	0.01	0.22	0.34	34.1	5.9	-70	130	0.035	0.038
BMB5890	Zircon_Sample-087.FIN2	Fe-rich	700000		0.165	0.095	13.9	8.4	33.9	3.8	6.8	1.3	456	25	11.9	2.2	87	25	0.71	0.64	7	1	9.1	1.1	9.7	0.9	0.005	0.025	-0.015	0.021	-0.001	0.014	-0.059	0.036	0.14	0.22	0.022	0.012	0.04	0.26	-0.001	0.069	0.04	0	0.0084	0.0083	0.1	0.16	0.0027	0.0057	0.012	0.044	-0.00061	0.00022	0.062	0.073	21.1	2.1	-20	150	0.006	0.016
BMB5890	Zircon_Sample-088.FIN2	Fe-rich	700000		0.06	0.13	2.3	6.3	650	160	24.2	6.6	77.5	5.2	6.9	1.2	20.7	3.3	2.36	0.2	90.8	9.8	3.8	1.7	5.2	2.8	0.05	0.1	0.069	0.064	-0.017	0.022	0.08	0.15	-0.02	0.11	0.02	0.041	0.06	0.24	0.068	0.083	0.18	0	0.026	0.056	0.02	0.16	-0.000208	0.000022	0.09	0.13	-0.000786	0.000081	0.06	0.09	236	14	20	160	0.0517	0.0054
BMB5890	Zircon_Sample-089.FIN2	Fe-rich	700000		-0.14	0.12	2.5	2.3	18.5	2.6	3.43	0.89	322	38	11.41	0.53	92	11	1.48	0.72	4.9	2	6.2	1.4	8	1.4	0.012	0.038	0.007	0.031	0	0.012	-0.07	0.053	-0.001	0.082	0.0089	0.0081	0.17	0.18	-0.084	0.058	-0.063	0	0.024	0.026	0.16	0.14	0.0046	0.0062	0.091	0.065	0.013	0.018	-0.03	0.056	12.6	2.1	30	150	0.024	0.035
BMB5890	Zircon_Sample-090.FIN2	Fe-rich	700000		-0.11	0.15	5.1	5	24.3	2.4	4.5	1.5	405	21	9.79	0.58	59.6	3.7	1.35	0.52	5.55	0.9	6.92	0.79	8.38	0.81	0.004	0.06	0.031	0.042	0.01	0.027	-0.072	0.053	-0.034	0.054	-0.000333	0.000066	0.24	0.28	-0.029	0.035	0.04	0	0.014	0.015	-0.066	0.071	0.013	0.012	0.018	0.039	0.0044	0.0067	-0.029	0.041	19.8	1.5	60	120	0.075	0.069
BMB5890	Zircon_Sample-091.FIN2	Fe-rich	700000		-0.088	0.076	13	3.7	371	40	28.3	2	318	44	19.3	5	88.8	8	0.66	0.2	42	2.9	20.1	5.4	23.8	5.2	0.012	0.027	0.045	0.032	0.003	0.013	-0.106	0.055	0.004	0.083	0.019	0.014	-0.07	0.52	0.027	0.074	-0.039	0	0.014	0.012	0.06	0.14	0.0041	0.0086	0.04	0.038	0.0061	0.0076	0.06	0.059	184	25	-50	120	0.051	0.023
BMB5890	Zircon_Sample-098.FIN2	Fe-rich	700000		0.036	0.042	1.1	2.7	15.9	6.7	9.5	1.7	131	24	15.64	0.8	50	27	0.29	0.11	3.8	1.5	3.6	1.5	4.3	2.6	0.015	0.018	0.003	0.012	0.0014	0.0028	-0.005	0.05	0.022	0.055	0.004	0.0032	0.051	0.093	0.016	0.021	0.016	0	0.0014	0.0019	-0.002	0.035	0.0025	0.0031	0.041	0.031	0.0007	0.0018	-0.001	0.025	17.5	3	140	270	0.024	0.02
BMB5890	Zircon_Sample-099.FIN2	Fe-rich	700000		0.0301	0.0099	1.08	0.82	0.086	0.017	0.26	0.21	74.6	5.6	1.13	0.16	1.5	0.26	0.26	0.23	0.12	0.17	0.143	0.049	0.0141	0.0096	0.03	0.015	0.0642	0.0087	0.0065	0.0034	0.024	0.026	-0.001	0.019	0.0042	0.0034	-0.025	0.067	-0.0033	0.0078	0.007	0	0.0066	0.0044	0.021	0.04	0.0013	0.0012	0.012	0.01	0.0051	0.0028	0.008	0.014	0.803	0.048	176	60	0.016	0.011
BMB5890	Zircon_Sample-100.FIN2	Fe-rich	700000		0.024	0.023	0.8	1.2	0.15	0.2	-0.02	0.47	169	15	1.44	0.15	2.69	0.28	0.202	0.054	1.8	1.4	0.118	0.081	0.24	0.25	0.049	0.015	0.124	0.014	0.0084	0.0061	0.058	0.059	-0.008	0.014	0.0051	0.0044	-0.005	0.09	0.0001	0.0044	0.026	0	0.0088	0.0034	0.001	0.019	0.0025	0.0027	0.0016	0.0075	0.0023	0.0025	-0.011	0.01	1.9	1	140	170	0.003	0.0039
BMB5890	Zircon_Sample-101.FIN2	Fe-rich	700000		0.023	0.02	0.8	1.3	0.66	0.76	0.76	0.4	301	50	4.7	2.1	1.65	0.58	0.175	0.068	0.98	0.52	0.092	0.073	0.24	0.14	-0.0018	0.0031	0.003	0.01	0.0036	0.0022	-0.006	0.013	-0.01	0.024	0.0017	0.0035	0.005	0.068	-0.0065	0.005	0.017	0	0.0015	0.0032	0.047	0.015	0.0005	0.0012	0.0029	0.0056	0.0032	0.0031	-0.008	0.011	2.9	4.6	120	140	0.007	0.01
BMB5890	Zircon_Sample-102.FIN2	Fe-rich	700000		0.031	0.024	-0.17	0.86	0.56	0.26	1.1	0.74	206	97	5.24	0.83	7	3.8	3.7	7.1	0.52	0.29	0.12	0.11	0.045	0.019	-0.0009	0.0039	0.015	0.012	0.008	0.012	0.015	0.02	0.016	0.03	0.0028	0.0037	0.011	0.04	0.007	0.01	-0.011	0	0.0004	0.0015	-0.002	0.036	0.0013	0.0015	0.0187	0.0088	0.0028	0.0024	0.011	0.013	0.148	0.079	20	120	0.07	0.12
BMB5890	Zircon_Sample-103.FIN2	Fe-rich	700000		0.014	0.01	0.29	0.53	0.54	0.19	0.63	0.59	370	67	4.54	0.46	3.6	1.6	0.39	0.29	0.22	0.26	0.072	0.059	0.054	0.023	-0.001	0.011	0.0089	0.0045	-0.0032	0.0022	0.022	0.012	-0.0184	0.0061	0.003	0.0032	-0.012	0.087	-0.0038	0.0097	0.019	0	-0.00096	0.00028	-0.009	0.023	0.001	0.0013	0.007	0.01	0.003	0.002	-0.008	0.015	0.137	0.034	78	89	0.0015	0.0033
BMB5890	Zircon_Sample-104.FIN2	Fe-rich	700000		0.029	0.012	9	1.9	63	21	9.9	2.2	144	36	45.4	2.5	310	61	0.181	0.069	32	4.9	13.8	3	21.6	5.5	0	0.019	0.017	0.02	0.0007	0.0023	0.044	0.02	-0.012	0.028	-0.000068	0.000028	0.071	0.073	0.005	0.013	-0.011	0	0.0012	0.0035	0.028	0.081	-0.000038	0.000016	0.0072	0.0071	0.0005	0.0013	0.017	0.038	15.9	3	150	360	0.061	0.035
BMB5890	Zircon_Sample-111.FIN2	Fe-rich	700000		0.003	0.061	-0.2	1	0.126	0.049	3.9	5.1	193	49	5.01	0.31	11.03	0.97	67	71	-0.21	0.34	0.15	0.18	0.15	0.14	0.08	0.15	0.029	0.037	0.0053	0.0058	-0.002	0.045	0.07	0.13	0.0024	0.005	0.12	0.11	-0.0055	0.0064	0.012	0	0.0043	0.0061	0.03	0.11	-0.000052	0.000021	0.019	0.044	-0.000192	0.000079	0.018	0.053	0.12	0.15	0	150	0.49	0.89
BMB5890	Zircon_Sample-112.FIN2	Fe-rich	700000		0.022	0.026	0.8	1.6	1.94	0.61	2.1	1.2	118	19	11.7	3.8	2.6	1.1	0.013	0.057	1.55	0.66	0.6	0.24	0.46	0.21	-0.0003	0.006	-0.0018	0.0043	-0.0025	0.0053	-0.019	0.012	0.009	0.013	0.0042	0.0069	0.064	0.061	0	0.011	0.002	0	0.0011	0.0023	-0.001	0.018	-0.000034	0.0000034	0.015	0.013	0.0026	0.0028	0	0.014	3.8	1	150	190	0.0098	0.0091
BMB5890	Zircon_Sample-113.FIN2	Fe-rich	700000		0.022	0.014	-0.2	1.1	0.112	0.054	0.68	0.47	371.8	9.9	4.71	0.4	0.98	0.3	0.085	0.071	0.24	0.16	0.031	0.031	0.016	0.013	-0.004	0.0071	0.0019	0.007	-0.0013	0.0032	-0.013	0.03	0.0041	0.0092	0.0018	0.0026	0.04	0.13	-0.0028	0.0097	0.002	0	0.0007	0.0023	0.01	0.032	0.0018	0.0017	0.0072	0.0086	-0.000143	0.000046	0.0065	0.0092	0.16	0.12	124	68	0.01	0.011
BMB5890	Zircon_Sample-114.FIN2	Fe-rich	700000		0.01	0.023	-0.6	1.8	0.6	0.93	0.5	0.31	314	39	3.69	0.71	9	15	0.094	0.051	0.43	0.15	0.09	0.1	0.09	0.11	-0.0026	0.0046	0.0021	0.0046	-0.003	0.003	0.004	0.026	-0.0116	0.0078	0.0054	0.0074	0.071	0.023	0.0046	0.0086	0.014	0	0.0009	0.002	0.037	0.044	0.0042	0.0036	0.01	0.01	0.0005	0.0013	0	0.027	0.15	0.17	27	35	0.0124	0.0079
BMB5890	Zircon_Sample-115.FIN2	Fe-rich	700000		0.022	0.022	0.94	0.89	2.47	0.84	5.2	1.8	134	21	7.92	0.42	2.79	0.59	0.067	0.049	1.18	0.3	0.262	0.087	0.18	0.11	0	0.011	0.0073	0.0069	-0.0021	0.0026	0.012	0.023	0.001	0.011	0.0046	0.0046	0.023	0.083	-0.0071	0.0026	0.0134	0	0.0008	0.0035	0.01	0.032	0.0011	0.0014	0.02	0.013	0.0009	0.0021	0.016	0.021	5	3	60	100	0.0135	0.0093
BMB5890	Zircon_Sample-116.FIN2	Fe-rich	700000		0.01	0.018	1.7	1.1	2.8	3.1	2.3	1.2	233	44	4.7	2.1	25	12	0.104	0.086	0.85	0.7	0.63	0.75	0.95	0.92	-0.0027	0.0053	-0.0063	0.0073	-0.0011	0.0024	0.013	0.022	0.001	0.01	0.0018	0.0024	-0.026	0.058	-0.0085	0.0064	-0.0047	0	0.0015	0.0018	0.001	0.03	0.0015	0.0013	0.0053	0.007	0.001	0.0023	-0.0131	0.0076	7.5	3.7	90	110	0.0032	0.0038
BMB5890	Zircon_Sample-117.FIN2	Fe-rich	700000		0.051	0.022	20	15	61	19	16.7	2.4	403	37	29.7	3.8	205	14	0.18	0.13	10.8	5.3	8.6	1.1	13.7	3	0.008	0.01	0.007	0.011	0.0006	0.0014	0.018	0.033	0.004	0.021	0.0025	0.0034	0.034	0.087	0.0058	0.0077	0.004	0	0.0004	0.0034	-0.009	0.018	-0.000041	0.000017	0.006	0.011	0.0011	0.0025	-0.005	0.023	77	12	130	200	0.0253	0.0076

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5891 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5891	Zircon_sample-007.FIN2	Fe-rich	700000		-0.128	0.072	4.6	3	5.35	0.33	3.6	1.5	7320	150	6.1	1	7.12	0.92	1.47	0.59	0.36	0.61	0.9	0.72	9.9	1	-0.021	0.054	0.009	0.022	-0.006	0.013	0.002	0.096	0.17	0.19	0.021	0.029	0.28	0.39	-0.027	0.026	-0.044	0	-0.01	0.012	0.05	0.11	0.004	0.0082	0.032	0.061	0.008	0.011	0.035	0.082	1.02	0.25	90	110	0.115	0.068
BMB5891	Zircon_sample-008.FIN2	Fe-rich	700000		-0.06	0.11	6.1	7.4	28.2	2.5	14.1	1.2	14890	260	4.33	0.45	2.18	0.6	0.73	0.66	3.34	0.78	2	0.76	14.8	1.1	0.078	0.085	0.026	0.034	0	0.028	0.03	0.13	0.05	0.12	0.009	0.012	0.05	0.38	-0.034	0.033	-0.02	0	-0.0107	0.0085	0.04	0.098	0.018	0.024	0.13	0.096	-0.00037	0.00013	0.07	0.14	4.14	0.61	120	150	0.3	0.18
BMB5891	Zircon_sample-009.FIN2	Fe-rich	700000		0.026	0.09	2.2	2.7	16.6	5	8.2	1.9	12400	1900	5.8	1.2	4.04	0.95	1.29	0.73	3	1.5	2.6	1.2	14.4	1.6	0.046	0.058	0.036	0.056	0.009	0.016	-0.05	0.1	-0.02	0.1	0.017	0.014	0.03	0.47	-0.023	0.042	-0.09	0	-0.004	0.016	-0.02	0.14	0.011	0.023	0.028	0.053	0.0011	0.003	0.01	0.037	2.47	0.58	70	160	0.15	0.12
BMB5891	Zircon_sample-010.FIN2	Fe-rich	700000		-0.09	0.13	3.6	7.6	4.88	0.66	5.2	1.6	8270	780	5.41	0.9	5.682	0.062	1.67	0.98	1.45	0.74	1.6	1.1	10.9	2.2	0.009	0.045	-0.008	0.028	0.004	0.011	0.04	0.12	-0.036	0.056	0.02	0.022	-0.19	0.57	-0.014	0.017	-0.028	0	0.004	0.01	-0.04	0.13	0.016	0.027	0.033	0.04	0.009	0.02	0.053	0.068	0.84	0.18	90	150	0.089	0.095
BMB5891	Zircon_sample-011.FIN2	Fe-rich	700000		-0.023	0.097	3.5	4.6	19.2	6.3	8.4	2.6	10490	660	5.5	1.8	4.7	1.4	1.02	0.5	2.97	0.57	2.82	0.58	12.4	1.4	-0.004	0.069	0.023	0.014	-0.004	0.02	-0.025	0.071	-0.083	0.01	0.012	0.016	0.01	0.35	0.001	0.026	-0.031	0	-0.0073	0.0067	-0.015	0.046	-0.000125	0.000027	0.048	0.049	-0.000348	0.000047	0.059	0.061	2.92	0.44	50	110	0.097	0.053
BMB5891	Zircon_sample-012.FIN2	Fe-rich	700000		-0.042	0.091	-0.8	3.9	5.48	0.47	5.5	2.2	7950	310	5.09	0.44	5.48	0.32	1.26	0.29	2.07	0.53	1.9	1.6	12.51	0.98	0.011	0.033	-0.005	0.025	0.013	0.019	0.152	0.084	0.073	0.083	0.0105	0.0098	-0.2	0.23	0.008	0.039	0	0	0	0.011	-0.046	0.077	-0.000136	0.000035	0.081	0.086	0.005	0.0076	0.03	0.051	1.15	0.25	-7	85	0.091	0.073
BMB5891	Zircon_sample-013.FIN2	Fe-rich	700000		-0.041	0.066	7.3	7	15.57	0.91	8.7	1.4	11220	630	4.24	0.43	3.5	0.31	0.9	0.57	2	1.3	3.7	1	12.59	0.96	-0.007	0.031	-0.02	0.033	0.011	0.012	-0.071	0.038	0.085	0.088	0.009	0.012	0.07	0.27	0.002	0.016	-0.015	0	-0.0004	0.0084	0.01	0.082	-0.000113	0.000025	0.123	0.077	0.0024	0.0054	0.047	0.043	2.43	0.25	-20	190	0.075	0.054
BMB5891	Zircon_sample-020.FIN2	Fe-rich	700000		0.094	0.08	13.2	6.5	23.78	0.97	9.6	1.7	12150	830	4.61	0.12	3.53	0.4	0.86	0.56	3.48	0.77	2.4	1.2	10.31	0.96	-0.007	0.057	-0.023	0.024	0	0.02	0.077	0.087	-0.14	0.15	-0.00041	0.00011	0.32	0.23	-0.007	0.031	0.17	0	0.02	0.019	0.06	0.14	0.01	0.014	0.048	0.046	0.0037	0.0053	0.14	0.14	3.71	0.3	80	150	0.117	0.091
BMB5891	Zircon_sample-021.FIN2	Fe-rich	700000		0.08	0.11	5.9	4.5	6.27	0.52	5.46	0.89	8560	650	5.81	0.53	5.69	0.6	1.35	0.91	1.3	1	19	32	9.7	1.2	-0.003	0.069	0.024	0.045	-0.002	0.018	-0.003	0.049	0	0.11	0.011	0.022	0.4	0.64	0.027	0.043	-0.018	0	0.003	0.021	0.084	0.087	-0.000146	0.000036	0.034	0.03	0.007	0.011	0.01	0.059	1.13	0.21	-90	150	0.12	0.093
BMB5891	Zircon_sample-022.FIN2	Fe-rich	700000		0	0.13	8.8	6.3	19.8	6	6.9	2.2	11600	1600	5.6	0.38	4.41	0.45	1.44	0.55	2.2	1.7	2.32	0.96	9.48	0.71	0.003	0.015	-0.013	0.037	-0.01	0.034	0.02	0.17	0.1	0.25	0.016	0.022	-0.29	0.38	0.025	0.031	0.01	0	0.011	0.013	0.034	0.081	0.0104	0.0094	0.066	0.051	0.0036	0.0081	0.084	0.094	2.94	0.94	30	100	0.121	0.092
BMB5891	Zircon_sample-023.FIN2	Fe-rich	700000		0.09	0.11	5	2.9	6.6	0.85	3.9	2.9	8620	340	6.22	0.37	6.74	0.89	1.7	0.24	1.4	1.2	2.2	0.87	9.66	0.84	0.003	0.089	-0.016	0.058	0.005	0.019	-0.07	0.11	0.09	0.13	0.009	0.012	-0.01	0.33	0.008	0.021	-0.057	0	-0.0028	0.0076	0.01	0.12	0.008	0.01	0.01	0.022	0.011	0.011	0.034	0.043	1.07	0.22	-130	180	0.19	0.23
BMB5891	Zircon_sample-024.FIN2	Fe-rich	700000		-0.05	0.13	3.6	4.7	3.64	0.44	3.1	1.1	7220	610	5.83	0.95	7.19	0.46	1.11	0.27	0.7	1.4	1.56	0.64	6.68	0.99	-0.013	0.05	0	0.012	0.007	0.017	0.084	0.097	-0.04	0.13	0.021	0.03	0.1	0.54	0.004	0.03	-0.055	0	0	0.014	0.05	0.16	-0.000181	0.000067	0.076	0.052	-0.0005	0.00017	0.024	0.058	0.86	0.22	-22	59	0.15	0.13
BMB5891	Zircon_sample-025.FIN2	Fe-rich	700000		-0.152	0.073	4.6	2.1	4.85	0.33	3.9	1.6	7940	220	6.08	0.74	6.66	0.55	1.41	0.52	0.9	1.4	1.4	1.6	8.34	0.97	-0.008	0.02	-0.007	0.034	0.01	0.033	-0.065	0.077	-0.07	0.12	0.0045	0.0098	-0.28	0.39	-0.034	0.035	0.05	0	-0.0044	0.006	0.05	0.18	0.0061	0.0082	0.045	0.062	-0.000451	0.000092	0.09	0.11	0.89	0.24	104	99	0.127	0.081
BMB5891	Zircon_sample-026.FIN2	Fe-rich	700000		-0.2	0.13	2.5	6.2	3.87	0.43	2.6	1.3	6720	340	5.44	0.26	6.57	0.61	1.9	0.72	1.9	1.8	1.2	1.2	7.13	0.55	0.045	0.056	0.013	0.064	0.023	0.027	-0.117	0.028	0.09	0.3	0.029	0.024	0.19	0.27	0.017	0.033	0.08	0	0.015	0.017	0.02	0.2	0.023	0.019	0.061	0.083	0.019	0.02	0.035	0.057	0.71	0.24	-70	130	0.079	0.089
BMB5891	Zircon_sample-033.FIN2	Fe-rich	700000		-0.06	0.14	10	2.7	47	20	14.3	4.4	12900	2600	5.91	0.78	3.95	0.38	0.56	0.82	6.32	0.92	1.12	0.69	9.8	2.2	0.057	0.068	0.045	0.048	0.027	0.016	0.099	0.09	0.12	0.22	0.012	0.015	0.7	0.22	0.024	0.042	0.1	0	0.009	0.017	-0.089	0.06	0.0045	0.0094	-0.00277	0.00059	-0.00054	0.00011	0.001	0.045	5.6	1.9	-10	190	0.11	0.08
BMB5891	Zircon_sample-034.FIN2	Fe-rich	700000		0.05	0.17	15	12	19	11	9.6	3.1	11550	770	5.2	1.4	2.82	0.95	2.15	0.89	1.1	1.2	1.2	1.3	8.7	1.8	0.001	0.097	-0.031	0.041	0.027	0.026	-0.06	0.26	-0.01	0.12	0.004	0.01	0	1.1	0.018	0.073	0.05	0	0.026	0.02	0.055	0.091	0.033	0.046	-0.0057	0.0018	0.008	0.018	0.041	0.084	2.01	0.44	40	140	0.17	0.2
BMB5891	Zircon_sample-035.FIN2	Fe-rich	700000		-0.05	0.22	21.5	8.3	20.58	0.82	10.6	4.7	10790	350	5	1.2	2.74	0.41	1.6	1.6	0.6	2.1	0.81	0.99	5.4	1.4	0.006	0.065	0.035	0.063	-0.008	0.051	-0.18	0.16	0.26	0.36	-0.00092	0.0002	-0.27	0.55	0.037	0.041	0.05	0	0.025	0.021	0.14	0.27	-0.000365	0.000097	-0.0068	0.0016	0.027	0.044	0.09	0.21	1.4	0.52	-101	80	0.13	0.13
BMB5891	Zircon_sample-036.FIN2	Fe-rich	700000		-0.05	0.23	9.3	4	3.64	0.21	0.2	2.2	7380	450	5.92	0.27	7.3	1.1	0.98	0.77	0.7	2.9	0.92	0.8	6.9	1.5	0.1	0.18	0.024	0.052	0.005	0.03	-0.04	0.26	-0.026	0.089	0.043	0.042	0	0.44	-0.001	0.062	0.18	0	0.029	0.032	0.1	0.11	0.009	0.012	0.11	0.052	0.048	0.027	0.11	0.2	0.77	0.26	-20	150	0.16	0.14
BMB5891	Zircon_sample-037.FIN2	Fe-rich	700000		0.07	0.23	22	13	15.1	1.6	6	5.7	9750	500	5.84	0.96	3.96	0.58	1.4	1.1	1.4	2.2	0.35	0.47	8.2	2.6	0.1	0.12	-0.08	0.057	0.02	0.13	-0.11	0.43	0.4	0.45	0.06	0.11	-0.53	0.76	-0.082	0.084	-0.2	0	0.029	0.021	0.07	0.3	-0.00046	0.00011	0.22	0.18	0.02	0.027	0.14	0.2	2.2	0.6	-55	89	0.35	0.14
BMB5891	Zircon_sample-038.FIN2	Fe-rich	700000		0.17	0.23	6	18	14	1.7	1.2	3.3	8990	600	4.8	1.7	4.22	0.9	1.4	1.6	1.5	1.1	-0.06	0.65	5.4	1.7	0	0.14	-0.069	0.081	0	0.056	-0.1	0.38	0.42	0.49	0.08	0.031	0.8	1.1	0.032	0.091	-0.01	0	0.01	0.017	0.13	0.16	-0.000444	0.000088	0.2	0.12	-0.00154	0.00028	0.05	0.16	0.99	0.34	0	120	0.16	0.2
BMB5891	Zircon_sample-039.FIN2	Fe-rich	700000		-0.12	0.15	24.8	5.7	15.6	3.2	5.3	1.6	9470	760	5.3	1.1	4.46	0.47	1.33	0.69	2.4	1	0.33	0.38	8.1	1.5	0.012	0.06	0.031	0.046	-0.022	0.047	0	0.14	0.058	0.094	-0.00067	0.00019	0.21	0.44	0.016	0.08	0.1	0	0.022	0.016	0.06	0.13	0.018	0.021	0.07	0.11	0.009	0.013	-0.066	0.018	3.04	0.74	-12	53	0.151	0.076
BMB5891	Zircon_sample-046.FIN2	Fe-rich	700000		0.25	0.14	6	4.1	16	1.6	7.6	3	9140	740	4.65	0.64	4.14	0.61	1.64	0.78	1.6	1.5	0.65	0.21	4.8	1	-0.017	0.046	0.008	0.031	-0.004	0.021	0.16	0.27	-0.03	0.11	-0.00053	0.00015	0.07	0.46	-0.003	0.015	-0.06	0	0.014	0.015	0.089	0.076	-0.000224	0.000051	0.025	0.04	-0.00078	0.00018	0.1	0.18	1.06	0.14	-20	210	0.15	0.1
BMB5891	Zircon_Sample-047.FIN2	Fe-rich	700000		0.087	0.097	9.3	3.3	16.8	1.7	7.4	2.6	10290	810	5.02	0.8	4.77	0.95	1.54	0.52	0.8	1.7	0.18	0.62	4.4	1.1	0.069	0.096	-0.036	0.067	0.008	0.022	0.08	0.18	0.13	0.24	0.0065	0.0091	0.24	0.74	0.03	0.06	0.02	0	0.023	0.018	0.1	0.14	0.02	0.022	-0.0064	0.0017	-0.00088	0.0002	0.056	0.065	1.63	0.21	70	120	0.092	0.09

BMB5891	Zircon_Sample-048.FIN2	Fe-rich	700000		0.18	0.11	12	1.8	14	1.3	6.1	1.3	8400	410	4.66	0.76	3.96	0.69	1.2	0.62	0.7	1.5	0.51	0.14	3.5	0.49	0.05	0.17	-0.011	0.041	0.002	0.042	0.02	0.15	-0.003	0.088	0.0026	0.0062	0.5	0.15	0.032	0.032	0	0	0.0131	0.0076	0.08	0.16	0.018	0.028	0.028	0.043	0.014	0.02	0.1	0.17	1.13	0.24	-80	110	0.1	0.12
BMB5891	Zircon_Sample-049.FIN2	Fe-rich	700000		0.012	0.029	35.9	7.6	20.3	2.6	8.31	0.7	13700	1200	13.02	0.69	14.6	6	0.19	0.19	4.3	1	0.75	0.12	21.9	1.7	-0.001	0.017	0.008	0.015	-0.0043	0.0039	-0.026	0.071	0.013	0.025	0.0026	0.0032	0.076	0.085	-0.0055	0.0065	0.036	0	0.0076	0.0088	0.006	0.035	0.0022	0.0026	0.009	0.022	0.0067	0.0033	-0.013	0.012	3.3	0.65	170	230	0.42	0.12
BMB5891	Zircon_Sample-050.FIN2	Fe-rich	700000		0.03	0.069	16.4	5	20.6	4.2	11.6	2.5	11700	1400	5.6	1.3	7.2	3.4	1.38	0.91	1	0.65	0.91	0.51	6.6	2.1	0.003	0.055	0.004	0.068	0.004	0.016	0.1	0.14	0.059	0.049	0.012	0.011	0.21	0.31	0.004	0.015	0.01	0	0.023	0.019	0.07	0.1	0.012	0.018	0.09	0.11	0.021	0.021	0.12	0.17	3.04	0.52	70	120	0.089	0.052
BMB5891	Zircon_Sample-051.FIN2	Fe-rich	700000		-0.05	0.05	53	20	30.8	5	10.9	3.2	11760	760	12.8	7.2	10.6	3.3	0.82	0.37	5.8	1.5	1.52	0.8	14.1	5.7	-0.029	0.083	0.011	0.031	-0.012	0.016	0.032	0.023	0.051	0.097	0.011	0.016	-0.21	0.53	0	0.03	-0.05	0	0.0108	0.0092	0.035	0.043	0.015	0.017	0.05	0.036	0.0009	0.0029	0	0.022	5.21	0.94	-10	270	0.53	0.12
BMB5891	Zircon_Sample-052.FIN2	Fe-rich	700000		-0.047	0.088	12.9	1.2	16.1	1.9	8.8	3.2	9990	450	5.7	1.2	5.9	2.2	1.05	0.41	2	1.8	0.49	0.19	5.7	1.7	-0.029	0.055	0.016	0.028	-0.005	0.02	0.07	0.21	0.066	0.065	0.012	0.017	-0.02	0.27	-0.009	0.015	0.005	0	0.007	0.01	0.008	0.043	-0.000162	0.000045	0.044	0.053	0.01	0.015	0.073	0.084	2.18	0.58	120	130	0.141	0.061
BMB5891	Zircon_Sample-059.FIN2	Fe-rich	700000		0.053	0.034	16.4	3.4	32.3	5.1	29.1	5.1	5270	450	15.54	0.62	27	14	1.22	0.24	4.7	0.72	2.82	0.3	21.6	1.7	-0.002	0.0088	0.015	0.024	0.002	0.004	-0.014	0.01	0.011	0.018	0.0018	0.0022	0.1	0.099	0.0006	0.0038	0.013	0	0.0018	0.0027	-0.0034	0.0065	0.0018	0.0021	0.015	0.014	-0.000121	0.000026	0.025	0.056	7.27	0.55	-10	230	0.107	0.06
BMB5891	Zircon_Sample-060.FIN2	Fe-rich	700000		0.035	0.021	18.1	3.9	29.6	9.2	13	2.2	12500	1800	24.2	3.2	17.5	2.3	0.88	0.12	7.8	1.4	2.22	0.22	22.3	2.9	-0.0026	0.0077	0.0088	0.0075	0.0017	0.0042	-0.003	0.025	0.028	0.019	0.0017	0.0023	0.022	0.072	0.0026	0.0057	0.015	0	0.0016	0.0017	0.014	0.016	0.001	0.0014	0.012	0.012	0.0012	0.0016	0.034	0.014	6.1	1.1	-60	140	0.63	0.12
BMB5891	Zircon_Sample-061.FIN2	Fe-rich	700000		0.032	0.015	2.6	1.2	2.71	0.9	2.8	1.2	11690	430	5.8	1.6	9.7	8.7	0.45	0.11	1.13	0.28	0.32	0.14	2.45	0.92	0.0003	0.0082	0.0082	0.0072	0.0007	0.0014	-0.002	0.012	0.014	0.016	0.0023	0.0016	-0.02	0.064	0.0024	0.005	0.002	0	0.0022	0.0018	0.008	0.015	-0.0000311	0.0000059	-0.00123	0.00023	0.0027	0.0029	0.004	0.011	0.97	0.11	90	140	0.03	0.016
BMB5891	Zircon_Sample-062.FIN2	Fe-rich	700000		0.004	0.016	-0.1	1.2	0.018	0.013	0.34	0.35	8200	1800	3.9	1.7	0.02	0.042	0.333	0.039	0.24	0.14	0.083	0.026	0.0012	0.0037	-0.0005	0.0042	-0.0011	0.0069	-0.0005	0.003	0	0.023	0.0093	0.007	0.0019	0.004	0.016	0.041	0.0017	0.0059	0.006	0	0.002	0.0021	0.01	0.031	0.0007	0.0014	0.0155	0.0082	0.0014	0.0017	0.017	0.01	0.895	0.087	50	210	0.0064	0.0052
BMB5891	Zircon_Sample-063.FIN2	Fe-rich	700000		-0.003	0.018	-0.31	0.89	0.0304	0.0098	0.93	0.37	5391	48	-0.019	0.076	-0.035	0.072	0.3	0.15	0.28	0.26	0.144	0.093	0.0006	0.0032	-0.0012	0.0096	0.0014	0.0029	0.0005	0.002	-0.004	0.012	0	0.012	0.0005	0.0011	-0.023	0.038	-0.0036	0.0045	0.008	0	0.0037	0.0044	0.017	0.0092	0.0021	0.0022	0.014	0.01	0.002	0.0026	0.011	0.015	1.084	0.074	-120	180	0.0035	0.0035
BMB5891	Zircon_Sample-064.FIN2	Fe-rich	700000		-0.007	0.012	-0.1	1.1	0.076	0.032	0.87	0.4	8500	1800	0.37	0.23	0.011	0.042	0.32	0.12	0.44	0.22	0.289	0.09	0.0026	0.0056	0.009	0.012	0.0017	0.0011	0.0051	0.0022	0.01	0.035	-0.002	0.019	0.0015	0.0019	0.005	0.045	0.0014	0.0042	0.015	0	0.00195	0.00016	0.0049	0.0096	0.0017	0.0022	0.004	0.0058	-0.0000975	0.000008	-0.0022	0.0057	0.862	0.059	20	150	0.007	0.011
BMB5891	Zircon_Sample-065.FIN2	Fe-rich	700000		-0.018	0.017	4.06	0.96	5.67	0.74	2.51	0.36	4930	210	7.36	0.28	0.68	0.2	0.156	0.05	0.55	0.32	0.438	0.076	1.48	0.21	0	0.0053	-0.001	0.0074	0.0009	0.0021	-0.02	0.015	-0.002	0.0067	-0.00007	0.000018	0.019	0.07	0.004	0.011	0.009	0	0.0016	0.0013	0.001	0.01	-0.0000322	0.0000081	0.012	0.014	0.0011	0.0017	0.009	0.016	1.26	0.24	48	89	0.0144	0.0036

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe_2O_3 x 0.89981.

BMB 5893 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5893	Zircon_Sample-267.FIN2	Fe-rich	700000		0	0.11	4.6	3.6	23.4	1.9	18.1	2.4	512	54	13.7	1.6	16.5	1.9	5.5	1.2	6.18	0.62	0.79	0.39	1.71	0.16	0.04	0.013	-0.049	0.044	0.018	0.052	0.02	0.1	0.045	0.097	0.024	0.031	0.41	0.48	-0.004	0.045	-0.068	0	0	0.057	0.01	0.19	-0.00186	0.00078	0.08	0.044	0.028	0.048	-0.053	0.08	0.989	0.099	65	65	0.1	0.18
BMB5893	Zircon_Sample-268.FIN2	Fe-rich	700000		-0.02	0.13	9.2	3.7	51	2	28.4	4.2	676	60	13.9	1.6	13.4	1.7	2.37	0.62	14.3	3.7	0.74	0.16	3.05	0.73	-0.014	0.081	0.006	0.039	-0.001	0.026	0.02	0.078	0.08	0.1	0.025	0.024	0.16	0.39	0.055	0.066	0	0	-0.008	0.017	0.05	0.22	0.012	0.012	0.089	0.09	0.015	0.017	0.027	0.071	2.19	0.41	120	140	-0.0054	0.001
BMB5893	Zircon_Sample-269.FIN2	Fe-rich	700000		-0.04	0.11	14.3	7.7	94	13	39.2	8.1	490	88	12.2	1.1	9.45	0.89	2.9	1	27	5.4	0.94	0.41	3.7	0.51	0.05	0.11	0.049	0.07	0.005	0.022	0.19	0.14	0.08	0.18	0.026	0.027	-0.24	0.68	0.031	0.045	-0.01	0	0.0158	0.0092	-0.02	0.12	0.01	0.016	0.09	0.1	-0.0003	0.0071	-0.036	0.053	4.09	0.69	-29	92	0.056	0.062
BMB5893	Zircon_Sample-270.FIN2	Fe-rich	700000		-0.056	0.068	10.4	2.6	52.6	3.1	27.2	4.3	704	44	13.82	0.37	12.91	0.9	2.45	0.26	13.1	1	0.53	0.13	2.76	0.57	-0.004	0.041	-0.01	0.059	-0.009	0.026	-0.01	0.19	-0.027	0.088	0.0124	0.0097	-0.17	0.46	-0.007	0.021	-0.105	0	-0.0062	0.008	0.15	0.22	0.0025	0.0081	0.15	0.12	0.009	0.018	-0.03	0.11	1.96	0.38	-40	66	0.039	0.064
BMB5893	Zircon_Sample-271.FIN2	Fe-rich	700000		-0.15	0.14	10.7	5.1	74	18	35.9	8.4	594	61	14.1	2.9	10.7	2.4	4.1	4.2	24.5	3.5	0.9	0.25	3.82	0.55	0.024	0.064	-0.02	0.028	0.016	0.018	0	0.2	0.13	0.15	0.016	0.016	-0.1	0.28	-0.027	0.024	0.04	0	0.007	0.038	0.133	0.09	0.0121	0.0074	0.1	0.14	0.021	0.025	0.04	0.13	3.2	0.44	60	210	0.062	0.058
BMB5893	Zircon_Sample-272.FIN2	Fe-rich	700000		-0.146	0.06	9.6	4	66.2	2.9	34.5	1	688	59	13.1	1	10.6	1.1	4.6	1.7	19.6	1.5	1.15	0.27	3.33	0.45	0.055	0.093	-0.003	0.07	0.019	0.017	0.05	0.16	-0.021	0.09	0.014	0.017	-0.05	0.34	0.052	0.07	0	0	0.027	0.022	0.19	0.17	0.009	0.0069	0.11	0.17	0.018	0.019	-0.025	0.044	2.47	0.27	80	150	0.071	0.042
BMB5893	Zircon_Sample-273.FIN2	Fe-rich	700000		-0.1	0.12	11	5.6	49	4.3	22.1	2.8	729	44	15	1.9	15.89	0.72	4.1	1.1	13	3.6	0.73	0.43	2.33	0.36	-0.062	0.072	0.008	0.043	-0.005	0.015	-0.097	0.063	0.08	0.13	0.025	0.011	-0.11	0.61	0.015	0.034	0.03	0	0.034	0.05	-0.01	0.14	0.016	0.012	0.06	0.11	0.016	0.022	0.0052	0.0016	2.12	0.53	80	170	0.16	0.15
BMB5893	Zircon_Sample-280.FIN2	Fe-rich	700000		-0.05	0.13	3.6	2.1	24.1	4.3	15.6	5.7	562	46	15.3	1.2	18.65	0.86	2.58	0.3	5.36	0.75	0.67	0.44	2.11	0.2	0.076	0.067	-0.011	0.069	0.033	0.034	-0.03	0.15	-0.007	0.075	0.018	0.019	0.16	0.26	-0.01	0.06	-0.011	0	0.011	0.023	-0.14	0.12	0	0.0037	0.05	0.11	0.008	0.018	0.001	0.075	0.88	0.37	120	110	0.017	0.028
BMB5893	Zircon_Sample-281.FIN2	Fe-rich	700000		0	0.12	8	5.9	67	16	31.4	6.3	688	36	14.06	0.65	11.78	0.62	3.5	1.4	19.1	5.1	1.39	0.89	3.84	0.79	0.012	0.06	-0.018	0.048	0.019	0.044	0.08	0.13	0.1	0.15	0.042	0.045	-0.06	0.54	-0.007	0.04	0.02	0	-0.006	0.018	0	0.32	0.0046	0.0077	0.075	0.058	0.021	0.014	0.12	0.15	2.96	0.62	90	170	0.073	0.081
BMB5893	Zircon_Sample-282.FIN2	Fe-rich	700000		0.05	0.17	15.3	7.8	70	11	33.3	4	630	41	12.1	1.2	10.39	0.99	2.47	0.69	18.8	3.1	0.86	0.5	3.23	0.46	-0.009	0.079	0.038	0.07	0.012	0.028	0.03	0.13	-0.048	0.043	0.012	0.011	0.1	0.56	0.048	0.092	-0.02	0	-0.01	0.026	-0.04	0.18	0.01	0.012	-0.055	0.042	0.011	0.011	0.02	0.09	2.3	0.34	7	77	0.03	0.031
BMB5893	Zircon_Sample-283.FIN2	Fe-rich	700000		0.07	0.14	20	14	46	5.2	28.5	4.6	1900	1200	13.18	0.72	14.4	1.3	2.93	0.81	12	2.5	0.72	0.37	3.19	0.28	-0.017	0.055	0.032	0.05	0.025	0.023	0.06	0.12	0.05	0.13	0.006	0.0086	-0.09	0.45	0.026	0.02	-0.02	0	-0.002	0.019	0.26	0.24	0.007	0.011	0.015	0.072	0.014	0.016	-0.008	0.073	1.83	0.31	90	190	0.05	0.086
BMB5893	Zircon_Sample-284.FIN2	Fe-rich	700000		-0.03	0.1	14.8	5.2	83	15	40.6	7.4	740	120	12.7	2.1	9.8	1	2.2	1.1	19.9	5.8	1.29	0.48	4.96	0.87	-0.02	0.055	0.016	0.03	-0.021	0.03	-0.1	0.14	0.19	0.18	0.039	0.051	0.01	0.52	0.007	0.049	0.19	0	0.002	0.037	0.12	0.29	0.0114	0.0079	0.01	0.13	0.001	0.012	-0.037	0.04	3	0.5	40	180	0.104	0.065
BMB5893	Zircon_Sample-285.FIN2	Fe-rich	700000		-0.03	0.18	4.2	2.4	164	52	46.4	6.5	357	35	11.96	0.97	13.2	1.3	3.1	1.3	74	31	1.37	0.23	3.58	0.46	-0.047	0.067	0.034	0.055	0.001	0.034	0.05	0.19	0.132	0.088	0.022	0.037	0.5	0.48	0.007	0.03	0.11	0	0.018	0.053	0.11	0.17	0.009	0.0081	-0.05	0.11	0.006	0.022	0.055	0.086	6.18	0.7	92	93	0.053	0.042
BMB5893	Zircon_Sample-286.FIN2	Fe-rich	700000		0.022	0.048	9.9	5.1	72.5	5.3	38.1	6	544	35	12.01	0.33	12.2	1.6	1.86	0.55	19.1	3.5	1.02	0.35	3.97	0.71	0.052	0.052	-0.039	0.022	-0.0032	0.0032	0.036	0.081	0.13	0.2	0.01	0.022	-0.36	0.42	0.027	0.046	0.14	0	0	0.016	0.04	0.17	0.0192	0.0066	0.015	0.061	0.009	0.012	0.03	0.14	2.87	0.19	74	52	0.046	0.035
BMB5893	Zircon_Sample-293.FIN2	Fe-rich	700000		0.03	0.18	13.3	8.3	75.9	8.8	38.5	7.4	549	83	10.79	0.96	10.35	0.7	3.13	0.66	19.8	7.8	1.21	0.37	6.12	0.2	0.002	0.062	-0.035	0.068	0.017	0.01	0.1	0.084	-0.007	0.079	0.01	0.013	0.14	0.37	0.009	0.072	0	0	0.02	0.034	-0.08	0.19	0.007	0.011	-0.032	0.084	0.008	0.016	0.036	0.061	2.53	0.79	40	150	0.084	0.076
BMB5893	Zircon_Sample-294.FIN2	Fe-rich	700000		0.01	0.13	34	20	37.9	4.4	28.3	5.1	900	360	13.4	2	14.31	0.64	3.5	3	9.9	0.42	1.63	0.66	4.6	1	0.08	0.11	-0.046	0.094	0.01	0.017	0.11	0.22	-0.016	0.08	-0.00115	0.00026	-0.06	0.28	-0.021	0.029	-0.04	0	0.012	0.019	0.05	0.19	0.012	0.012	-0.067	0.072	0.016	0.012	0.02	0.13	1.48	0.67	58	86	0.6	0.59
BMB5893	Zircon_Sample-295.FIN2	Fe-rich	700000		-0.04	0.11	10.5	6.7	33.4	3	21.9	3.4	657	58	14.1	1.7	16.41	0.84	5.5	4	7.9	3.1	1.2	0.34	3.59	0.7	0.04	0.1	-0.034	0.06	0.027	0.036	0.01	0.11	0.011	0.095	0.011	0.01	-0.19	0.64	-0.026	0.046	0.04	0	0.008	0.024	0.11	0.17	0.0014	0.0066	0.02	0.11	0.022	0.033	-0.04	0.1	1.8	0.74	53	85	0.082	0.084
BMB5893	Zircon_Sample-296.FIN2	Fe-rich	700000		0.06	0.15	20	11	77	21	36.2	6.8	576	67	10.9	0.39	10.4	1.4	6.6	1.2	22.4	3.3	2	1.2	6.5	1.2	0.025	0.049	-0.05	0.02	-0.008	0.032	0.01	0.16	0.05	0.19	0.0151	0.0091	-0.37	0.19	0.008	0.055	0.09	0	0.009	0.03	-0.08	0.2	0.0016	0.0066	-0.018	0.033	-0.0005	0.0078	0.05	0.19	2.76	0.81	94	29	0.19	0.32
BMB5893	Zircon_Sample-297.FIN2	Fe-rich	700000		0.03	0.17	20.9	7.6	65.6	5.8	35.1	2.9	642	59	11.96	0.91	10.7	1.5	7.9	2	20.6	3.1	1.1	0.55	7.1	1.2	0.048	0.082	0.002	0.041	-0.008	0.012	-0.12	0.14	0.13	0.082	0.014	0.025	-0.24	0.47	0.019	0.052	0.07	0	-0.006	0.024	-0.17	0.22	0.015	0.013	-0.03	0.12	0.01	0.022	0.004	0.048	2.61	0.49	100	120	0.026	0.029
BMB5893	Zircon_Sample-298.FIN2	Fe-rich	700000		0.098	0.06	18.6	8.5	59	13	32.9	3.3	674	23	11.9	1.1	11.54	0.52	11.7	1.8	13.7	3.4	1.8	1.1	6.2	1.7	0.002	0.073	0.013	0.083	-0.007	0.023	0	0.25	-0.04	0.13	0.01	0.013	0.17	0.43	-0.016	0.043	-0.05	0	-0.005	0.021	-0.09	0.18	0.0016	0.0068	0.026	0.095	0.021	0.04	-0.02	0.14	2.04	0.39	70	120	0.014	0.026
BMB5893	Zircon_Sample-299.FIN2	Fe-rich	700000		-0.088	0.085	10	3.7	42.1	2.6	24.4	2.9	696	36	13.4	1.2	13.4	1	3.46	0.9	10.8	1.7	0.77	0.4	4.54	0.52	-0.04	0.11	0.002	0.056	-0.001	0.026	0.039	0.071	0.01	0.22	0.026	0.029	-0.21	0.63	0.079	0.055	0.062	0	-0.009	0.023	-0.13	0.13	0.0097	0.0095	0.03	0.13	0.017	0.02	0.007	0.05	1.52	0.29	150	180	0.071	0.058
BMB5893	Zircon_Sample-306.FIN2	Fe-rich	700000		-0.02	0.14	13	10	58.4	7.5	29.5	1.4	630	160	11.9	1.2	10.77	0.93	8.6	6.2	15.4	3.1	1.17	0.87	10.2	2.4	-0.047	0.087	0.021	0.045	-0.006	0.01	0.12	0.26	0.14	0.16	0.023	0.031	-0.45	0.67	-0.046	0.029	0.03	0	-0.025	0.022	-0.034	0.04	0.026	0.012	-0.065	0.081	0.021	0.032	-0.05	0.065	1.64	0.37	240	170	0.071	0.077
BMB5893	Zircon_Sample-307.FIN2	Fe-rich	700000		0.015	0.061	12.5	4.1	41.3	5	24.2	5.7	668	57	13.06	0.88	13.5	2.1	3.05	0.59	10.1	1.7	1.34	0.78	7.7	1.3	0.05	0.16	0.004	0.032	0.035	0.054	-0.06	0.28	0.056	0.077	0.011	0.015	0.49	0.73	0.021	0.046	-0.03	0	0.019	0.038	0.14	0.31	0.0013	0.0061	-0.06	0.052	0.003	0.0097	-0.059	0.068	1.38	0.57	50	200	0.09	0.11
BMB5893	Zircon_Sample-308.FIN2	Fe-rich	700000		0.098	0.083	10.3	1.5	55.9	4	32.4	3.4	613	57	12.6	1.2	12.01	0.93	560	190	14.9	1.6	1.56	0.62	11.8	2.6	0.016	0.081	0.02	0.096	-0.009	0.036	0.01	0.16	-0.048	0.066	0.021	0.023	-0.07	0.42	0.011	0.031	0.07	0	-0.003	0.024	0.021	0.099	0.01	0.012	0.016	0.07	0.017	0.014	0.06	0.18	1.74	0.4	20	160	0.177	0.048
BMB5893	Zircon_Sample-309.FIN2	Fe-rich	700000		0.22	0.14	150	190	47.1	3.1	24.9	4.7	636	69	13.25	0.92	14.5	1.2	130	170	11.2	1.7	1.14	0.45	8.3	1.3	-0.064	0.054	0.049	0.067	0.027	0.015	-0.004	0.082	-0.012	0.071	0.028	0.041	-0.07	0.89	-0.042	0.054	0.27	0	0.001	0.036	0.06	0.19	0.018	0.014	-0.035	0.072	0.023	0.031	0.01	0.087	1.26	0.33	120	190	0.15	0.14
BMB5893	Zircon_Sample-310.FIN2	Fe-rich	700000		0.068	0.084	9.7	8.4	40.1	6.8	26.1	4.9	620	52	12.1	2	12.8	1.8	3.1	1.3	10.8	2.1	1.01	0.58	10.4	2.6	0.02	0.15	-0.014	0.067	-0.012	0.025	0.19	0.14	-0.045	0.094	0.023	0.031	-0.26	0.33	0.005	0.034	0.05	0	0.006	0.018	0.02	0.16	0.0066	0.0061	-0.018	0.072	0.022	0.024	-0.007	0.093	1.41	0.19	40	170	0.084	0.084
BMB5893	Zircon_Sample-311.FIN2	Fe-rich	700000		0.02	0.19	14.8	4	80	14	39	5	585	66	11.25	0.7	9.62	0.92	8.5	0.74	21.1	3.5	1.05	0.66	11.7	1.4	-0.01	0.059	-0.01	0.1	0.028	0.034	-0.07	0.16	0.112	0.052	0.023	0.024	0.36	0.2	-0.027	0.042	0.06	0	0.004	0.022	-0.12	0.24	0.008	0.019	0.02	0.12	0.0115	0.0088	0.054	0.075	2.79	0.74	96	80	0.081	0.071
BMB5893	Zircon_Sample-312.FIN2	Fe-rich	700000		-0.01	0.12	9.3	3.2	36.3	3.2	22.5	2.5	606	5.4	14.8	1.1	17.5	2.4	5.4	1.7	9.9	1.4	0.89	0.39	9.4	1	-0.028	0.07	-0.056	0.064	-0.003	0.028	-0.06	0.14	-0.017	0.097	0.014	0.011	-0.19	0.46	-0.004	0.037	0	0	-0.006	0.021	0.14	0.2	0.01	0.011	-0.027	0.067	0.009	0.011	0.06	0.21	1.3	0.21	55	99	0.18	0.22
BMB5893	Zircon_Sample-319.FIN2	Fe-rich	700000		-0.011	0.08	1500	1300	210	170	35.4	4.3	90000	14000	11.4	1.2	15.6	2.4	1.66	0.41	16.7	2.9	1.47	0.46	7.6	1.3	0.12	0.15	0.058	0.065	0.034	0.026	0.08	0.15	0.09	0.22	-0.00107	0.00033	0.08	0.53	0.02	0.032	0.14	0	-0.011	0.03	0	0.21	0.008	0.0083	0.026	0.088	0.022	0.02	0.06	0.36	2.22	0.39	80	170	0.102	0.062
BMB5893	Zircon_Sample-320.FIN2	Fe-rich	700000		-0.006	0.091	8.9	2.9	42.5	4.5	23.7	3.6	705	70	14.7	2.2	12.91	0.5	4.5	2.8	12.8	2.6	0.79	0.47	7.37	0.57	0.004	0.096	-0.041	0.028	-0.021	0.034	0.09	0.17	0.01	0.13	0.041	0.033	0.4	0.6	0.011	0.058	0.056	0	-0.033	0.013	0.06	0.27	0.016	0.01	0.07	0.13	0.032	0.03	-0.02	0.21	1.56	0.11	-50	140	0.059	0.092
BMB5893	Zircon_Sample-321.FIN2	Fe-rich	700000		0.03	0.11	12.6	5.6	63.6	5.4	34.4	4.3	628	34	12.16	0.77	11.78	0.94	3.12	0.45	16.7	3.6	1.1	0.41	8.4	1.5	0.065	0.072	-0.051	0.062	-0.024	0.024	0.14	0.12	-0.03	0.11	0.016	0.024	-0.22	0.32	0.027	0.037	0.06	0	0.023	0.029	-0.05	0.19	0.019	0.025	0.001	0.056	0.011	0.011	-0.05	0.22	2.35	0.31	-27	99	0.063	0.044
BMB5893	Zircon_Sample-322.FIN2	Fe-rich	700000		0.02	0.1	10.4	3.9	42.9	7.2	22.9	3.2	629	66	14.46	0.48	16.2	1.4	4	2	10.28	0.94	0.73	0.57	7.02	0.93	-0.007	0.082	-0.047	0.031	0.014	0.013	0.21	0.23	0.11	0.27	0.018	0.013	0.34	0.55	-0.026	0.066	0.06	0	0.029	0.036	0.2	0.34	0.0037	0.0082	-0.001	0.051	0.0022	0.008	0	0.14	1.33	0.16	20	170	0.06	0.042
BMB5893	Zircon_Sample-323.FIN2	Fe-rich	700000		0.032	0.093	9.7	4.1	34.2	1.6	20.4	1.5	661	22	16	1.6	16.45	0.85	4.3	1.4	8.5	1.6	0.97	0.63	6.5	1.2	0.047	0.061	0.011	0.08	0.015	0.021	0.012	0.087	-0.017	0.078	0.031	0.026	-0.37	0.36	0.014	0.038	-0.06	0	0.002	0.043	0.03	0.16	0.016	0.011	0.04	0.15	0.008	0.017	0.28	0.28	1.23	0.2	-40	140	0.035	0.049
BMB5893	Zircon_Sample-324.FIN2	Fe-rich	700000		-0.1	0.13	15.2	7.9	69.3	4.8	35.4	6	649	82	12.6	2	11.03	0.85	5	1.6	17.5	1.6	1.5	1.1	7.9	1.4	0.01	0.11	-0.027	0.028	0.007	0.059	-0.01	0.13	0.09	0.14	0.025	0.024	-0.32	0.51	-0.013	0.03	-0.01	0	-0.006	0.041	-0.15	0.12	0.02	0.011	0.15	0.14	0.01	0.022	0.04	0.18	2.45	0.4	-44	48	0.286	0.09
BMB5893	Zircon_Sample-325.FIN2	Fe-rich	700000		-0.02	0.1	12.6	5.2	55	10	29.8	2.7	667	70	13.19	0.63	13.6	1.1	2.47	0.97	14.5	3.2	2.22	0.71	7.5	1.3	0.01	0.1	-0.023	0.059	-0.01	0.034	-0.01	0.07	0.11	0.11	0.012	0.012	0.09	0.84	0.009	0.043	0.06	0	-0.01	0.01	-0.03	0.24	0.0087	0.0082	0	0.1	-0.0014	0.0074	0.05	0.24	1.61	0.39	57	74	0.14	0.11
BMB5893	Zircon_Sample-332.FIN2	Fe-rich	700000		0.178	0.076	15.3	4.8	331	43	84.5	5.2	129	30	8.1	1.4	6.06	0.35	2.37	0.75	85	20	3.06	0.22	10.4	2.3	0.041	0.037	0.038	0.053	0.011	0.033	-0.04	0.13	0.015	0.065	0.029	0.026	-0.27	0.35	0.032	0.079	0.12	0	-0.008	0.015	0.4	0.18	0.0015	0.0064	-0.019	0.082	0.006	0.021	0.25	0.35	7.8	1.3	-30	130	0.083	0.066
BMB5893	Zircon_Sample-333.FIN2	Fe-rich	700000		0.1	0.13	12.8	3.6	56.9	4.3	35.9	5.4	614	34	11.12	0.69	10	0.74	2.37	0.46	15.9	2.2	1.2	0.55	5.32	0.8	-0.036	0.025	0.055	0.062	0.004	0.02	0.18	0.12	0.001	0.077	0.009	0.013	-0.04	0.42	0.017	0.032	0.03	0	-0.006	0.023	0.1	0.29	0.0008	0.0044	0.029	0.075	0.0134	0.0044	0.05	0.24	1.95	0.48	74	72	0.015	0.035
BMB5893	Zircon_Sample-334.FIN2	Fe-rich	700000		0.033	0.096	127	89	97	30	44	11	18000	14000	10.06	0.55	13.3	2.3	2.13	0.47	23.6	1.9	1.74	0.79	4.89	0.75	-0.036	0.082	-0.033	0.045	0.049	0.05	0.16	0.16	-0.017	0.038	0.02	0.019	-0.16	0.43	0.013	0.027	0.05	0	0.003	0.019	0.08	0.21	0.0034	0.006	0.027	0.081	0.004	0.016	-0.07	0.24	2.33	0.49	100	140	0.134	0.043
BMB5893	Zircon_Sample-335.FIN2	Fe-rich	700000		0.12	0.16	13.2	4.8	340	100	65.9	9.7	360	270	10.74	0.99	9.36	0.61	4	1.7	105	32	2.6	1.3	6.9	1.1	-0.009	0.072	0.11	0.12	-0.021	0.027	-0.019	0.047	-0.02	0.16	0.022	0.025	-0.34	0.9	-0.014	0.027	0.08	0	-0.026	0.027	-0.12	0.17	0.009	0.012	0.059	0.077	0.011	0.015	0.09	0.17	9.2	1.9	138	94	0.031	0.045
BMB5893	Zircon_Sample-336.FIN2	Fe-rich	700000		0.061	0.06	16.2	2.2	100.9	6.6	41.6	2.4	532	18	12.6	0.7	10.4	1.1	2.6	1.1	23.2	3.1	1.47	0.65	5.42	0.73	-0.033	0.085	0.003	0.069	-0.005	0.028	-0.11	0.22	0.08	0.14	0.029	0.025	0.22	0.35	0.001	0.042	-0.06	0	0.026	0.03	-0.03	0.17	0.024	0.027	-0.049	0.056	0.014	0.021	0	0.23	3.43	0.57	150	220	0.041	0.054
BMB5893	Zircon_Sample-337.FIN2	Fe-rich	700000		0.03	0.17	14.3	5.9	37.8	2.3	24.9	2	640	21	13.7	1.2	16.1	1.4	1.79	0.7	10.5	2.5	1.26	0.51	3.94	0.43	0.024	0.07	-0.013	0.068	0.008	0.048	0.13	0.16	0.11	0.19	0.008	0.011	0.15	0.35	0.0121	0.008	0.01	0	0.033	0.06	0.01	0.22	0.008	0.013	-0.021	0.058	0.018	0.03	-0.07	0.15	1.12	0.12	10	120	0.033	0.047
BMB5893	Zircon_Sample-338.FIN2	Fe-rich	700000		-0.02	0.1	16.6	8.3	35.2	2.5	24.3	2.3	605	36	13.6	1.1	16	1.3	5.5	4.4	11.1	2.9	0.94	0.54	3.86	0.63	0.014	0.081	0.009	0.036	-0.002	0.028	0.09	0.16	0.06	0.2	0.018	0.018	-0.27	0.18	0.008	0.022	-0.002	0	0.015	0.017	-0.16	0.2	-0.00159	0.00036	-0.075	0.036	0.017	0.02	-0.02	0.18	1.47	0.34	39	62	0.079	0.088

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe_2O_3 x 0.89981.

BMB 5894 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5894	Zircon_sample-007.FIN2	Fe-rich	700000		0.092	0.052	12.4	2.1	21.1	6.2	20.7	2.5	12600	3000	27.1	6	35.3	7	0.86	0.36	2.57	0.73	1.45	0.49	42.7	8.7	0.006	0.023	0.003	0.037	-0.014	0.016	0.035	0.061	0.06	0.054	-0.00086	0.00028	-0.24	0.27	0.008	0.025	-0.01	0	0.0048	0.0095	-0.001	0.093	0.0023	0.0049	0.029	0.023	0.0046	0.0061	-0.03	0.021	4.6	1.4	70	190	0.32	0.19
BMB5894	Zircon_sample-008.FIN2	Fe-rich	700000		0.028	0.075	20.6	8	26.8	4.7	23.8	5.1	10000	1500	55	25	47	19	0.69	0.11	6.2	2.6	2.8	1.1	51	20	0.033	0.059	0.012	0.025	-0.0015	0.0079	-0.02	0.11	0	0.034	0.0049	0.0058	-0.04	0.22	-0.006	0.013	0.027	0	0.0012	0.0059	-0.0092	0.009	-0.000154	0.000045	0.005	0.053	-0.000109	0.000032	0.006	0.041	5.2	1.1	60	130	0.28	0.21
BMB5894	Zircon_sample-009.FIN2	Fe-rich	700000		-0.0037	0.0064	11.7	8.9	18	12	22	13	9400	4500	26	25	27	18	0.57	0.13	1.85	0.43	1.5	1.8	22	26	0.026	0.075	-0.012	0.011	0.0064	0.002	0.008	0.03	0.039	0.031	-0.0005	0.00016	-0.0102	0.0032	-0.003	0.012	-0.01	0	-0.0031	0.0044	-0.01	0.019	0.0016	0.0034	0.004	0.044	0.0029	0.006	-0.0195	0.0061	2.6	1.8	210	400	0.1	0.17
BMB5894	Zircon_sample-010.FIN2	Fe-rich	700000		0.05	0.21	7.7	2.4	20.6	5	19.5	3	13600	1300	22.3	9.5	26.6	5.2	1.3	0.64	2.05	0.42	0.96	0.45	19.9	5.1	-0.026	0.046	-0.002	0.0049	0.002	0.023	0.11	0.11	0.043	0.067	0.0089	0.0092	-0.14	0.2	-0.002	0.028	0.049	0	0.015	0.023	-0.07	0.038	0.0009	0.0024	-0.006	0.013	0.0058	0.0086	-0.006	0.012	1.6	0.29	-120	180	0.245	0.087
BMB5894	Zircon_sample-011.FIN2	Fe-rich	700000		0.103	0.059	8.2	1.7	27.5	5	19.7	3.8	12300	1100	12.2	2.5	26	11	2.12	0.44	2.15	0.54	0.45	0.34	8.7	4.1	0.001	0.061	-0.005	0.084	0.007	0.024	-0.04	0.11	0.111	0.073	0.013	0.018	-0.13	0.51	-0.001	0.02	0.03	0	-0.001	0.017	0.06	0.11	0.0028	0.0065	-0.057	0.066	-0.00028	0.00012	-0.018	0.086	1.43	0.33	200	230	0.107	0.092
BMB5894	Zircon_sample-012.FIN2	Fe-rich	700000		0.017	0.059	8.1	3.9	23.1	8.6	26	11	11380	710	9.5	2.9	30	19	1.21	0.3	2.4	1	1.3	1.2	18	15	0.001	0.029	-0.005	0.016	0	0.014	-0.017	0.057	0.017	0.034	0.009	0.015	-0.03	0.19	0.015	0.019	-0.017	0	0.0006	0.0056	-0.02	0.062	0.0022	0.003	-0.031	0.018	0.0096	0.0067	0.019	0.028	2.8	1.3	50	170	0.23	0.13
BMB5894	Zircon_sample-013.FIN2	Fe-rich	700000		0.064	0.044	8.4	7.3	32	23	28	16	9600	1600	15.8	6	28	15	0.67	0.21	2.16	0.84	1.07	0.68	14.5	6.8	0.007	0.051	-0.006	0.033	0.0031	0.0098	-0.024	0.02	0.023	0.06	-0.000723	0.000084	0.09	0.14	0.001	0.02	0.016	0	-0.0012	0.004	-0.003	0.034	0.0061	0.0055	0.01	0.03	0.0068	0.0081	0.007	0.027	2.4	1	110	150	0.155	0.088
BMB5894	Zircon_sample-020.FIN2	Fe-rich	700000		0.03	0.1	13.1	7.7	43	30	35	23	11000	2500	11.9	4.9	41	31	2	1.4	1.61	0.89	0.66	0.31	12.3	9	0.015	0.061	0.023	0.025	0.0015	0.0069	0.018	0.034	0.008	0.033	0.0015	0.0044	-0.07	0.23	-0.0078	0.0091	-0.035	0	0.007	0.01	0.02	0.055	0.0059	0.0082	0.007	0.013	0.0075	0.0022	0.004	0.027	2.4	1.4	-100	290	0.083	0.03
BMB5894	Zircon_sample-021.FIN2	Fe-rich	700000		0.048	0.071	10.09	0.87	24	2.6	20.9	3.5	13700	1300	16	13	33	29	0.88	0.16	1.56	0.74	0.61	0.55	15	14	0.06	0.11	0.001	0.022	0.004	0.017	0.07	0.16	0.011	0.05	0.0019	0.0061	-0.02	0.56	0.002	0.045	0.02	0	0.01	0.015	0.011	0.087	0.0043	0.0053	-0.038	0.028	0.007	0.01	0.032	0.042	2.14	0.49	-200	140	0.13	0.11
BMB5894	Zircon_sample-022.FIN2	Fe-rich	700000		0.13	0.13	8.5	2.6	21.3	3.4	16	3.4	12700	1200	13.8	9.3	22	22	1.39	0.57	1.45	0.3	0.67	0.89	11	11	-0.005	0.024	-0.01	0.011	0.013	0.016	-0.023	0.088	0.01	0.051	0.0016	0.0057	-0.11	0.28	0.026	0.013	0.065	0	-0.0012	0.0072	-0.026	0.033	0.0121	0.0084	-0.018	0.037	0.0067	0.0083	0.018	0.067	1.5	1	10	140	0.17	0.13
BMB5894	Zircon_sample-023.FIN2	Fe-rich	700000		-0.03	0.27	8.3	2.6	23.4	6.7	25.2	5.5	10100	1600	21.9	7.7	57	30	0.85	0.59	1.75	0.83	1.4	0.56	23.9	8.9	0.008	0.045	-0.01	0.045	0.003	0.012	-0.002	0.047	-0.016	0.036	0.0036	0.0062	0.09	0.34	0.002	0.015	-0.015	0	0.0129	0.0077	-0.021	0.039	0.0037	0.0078	0.034	0.07	-0.00022	0.000093	0.017	0.027	2.1	0.87	-50	180	0.099	0.073
BMB5894	Zircon_sample-024.FIN2	Fe-rich	700000		-0.04	0.12	10.6	2	26.9	2.9	22.7	2.6	11390	450	9.1	1.1	15.3	1.4	3.56	0.97	2.22	0.32	0.32	0.1	8.5	2.1	0.012	0.063	-0.013	0.027	-0.002	0.017	0.08	0.1	0.11	0.044	0.011	0.017	-0.36	0.35	-0.033	0.027	0.02	0	0.003	0.017	-0.015	0.05	0.008	0.011	-0.004	0.066	0.035	0.04	-0.006	0.074	1.45	0.38	-88	46	0.055	0.037
BMB5894	Zircon_sample-025.FIN2	Fe-rich	700000		-0.01	0.21	10.1	3.9	57	17	28.6	5.2	13800	1700	9	1.1	16.1	2.9	2.6	1.3	5.8	2	1.16	0.27	16.4	1.9	0.042	0.079	0.016	0.029	0.006	0.031	0	0.14	0.034	0.048	0.013	0.02	-0.03	0.17	0.004	0.035	-0.015	0	-0.003	0.012	0.16	0.24	0.0034	0.0076	-0.008	0.019	0.0036	0.0079	0.042	0.093	4.37	0.88	125	83	0.25	0.17
BMB5894	Zircon_sample-026.FIN2	Fe-rich	700000		-0.071	0.074	9.6	4	18.3	3.8	14.9	3.2	13600	1600	12.3	1.3	21.1	3.8	5.2	2.1	2.99	0.59	1.08	0.61	22.1	3.6	-0.059	0.072	-0.024	0.033	0.025	0.031	-0.05	0.13	0.061	0.062	0.008	0.02	-0.06	0.26	0.001	0.056	0.1	0	-0.002	0.018	0.09	0.11	0.014	0.024	0.12	0.15	0.021	0.019	-0.028	0.06	2.98	0.77	0	160	0.25	0.23
BMB5894	Zircon_sample-033.FIN2	Fe-rich	700000		0.06	0.065	18.2	3.1	32.7	4.5	36.9	6.5	11500	1300	26	20	39	34	1.15	0.57	3	1.2	1.7	1.7	27	23	0.027	0.048	0.0061	0.0056	0.003	0.016	0	0.029	0.0093	0.0019	0.008	0.0017	0.25	0.2	0.016	0.034	0.008	0	0.009	0.015	0.017	0.064	0.006	0.012	0.011	0.022	0.0022	0.0048	0.035	0.058	4.2	0.88	110	100	0.143	0.077
BMB5894	Zircon_sample-034.FIN2	Fe-rich	700000		0.032	0.071	8.2	4.8	17.7	7.6	16.8	7.3	11000	2100	11.7	7.3	31	27	1.8	1.6	1.21	0.45	0.56	0.64	15	17	0.01	0.028	0.008	0.016	0.004	0.012	0.005	0.036	0.045	0.041	0.0076	0.0056	-0.04	0.15	-0.001	0.017	-0.014	0	0.0032	0.0053	0.005	0.041	0.0043	0.0043	0	0.018	0.0023	0.0031	-0.018	0.025	2	1	-30	170	0.09	0.11
BMB5894	Zircon_sample-035.FIN2	Fe-rich	700000		0.01	0.1	14.5	4.4	46	12	30.8	5.3	15500	1800	18.2	3.2	43	20	1.33	0.77	2.68	0.73	1.24	0.61	20.5	8.3	0.071	0.078	-0.01	0.037	0.007	0.023	-0.01	0.13	0.004	0.044	0.0007	0.0051	-0.23	0.42	0.015	0.028	0.08	0	0.009	0.01	-0.054	0.068	0.01	0.014	-0.033	0.065	0.0058	0.0085	-0.005	0.034	2.33	0.19	90	120	0.37	0.19
BMB5894	Zircon_sample-036.FIN2	Fe-rich	700000		0.091	0.099	11.1	3.4	32.5	4	34	6.4	12200	1200	17.5	2.8	37	15	1.48	0.88	2.53	0.67	1.04	0.41	16.9	4.9	-0.003	0.057	-0.013	0.012	-0.0005	0.0077	-0.03	0.11	0.0263	0.0069	0.0023	0.0091	0.4	0.51	-0.024	0.049	0.17	0	0.001	0.018	0.01	0.12	0.0012	0.0034	0.03	0.14	0.02	0.019	0.05	0.12	2.19	0.84	70	180	0.081	0.058
BMB5894	Zircon_sample-037.FIN2	Fe-rich	700000		0.05	0.13	11.9	3.7	32.1	5.8	26.5	2.9	14100	1300	17.1	4.9	32	15	2.38	0.91	1.98	0.87	0.8	0.13	14	5.8	-0.015	0.086	0.024	0.031	0.013	0.021	0.08	0.19	0.047	0.055	0.0063	0.0099	-0.08	0.64	-0.009	0.034	0	0	0.013	0.01	-0.007	0.057	0.0064	0.0096	-0.002	0.09	0.014	0.019	-0.004	0.051	2.41	0.57	-20	220	0.095	0.088
BMB5894	Zircon_sample-038.FIN2	Fe-rich	700000		0.03	0.12	15.4	4.3	45	10	34.3	7.9	14700	1700	24	6.6	42	12	0.54	0.27	3.4	1.3	2.18	0.51	22.7	9.3	0.026	0.063	0.029	0.058	0.016	0.009	-0.016	0.043	0.062	0.074	0.0047	0.0073	0.01	0.47	0.0101	0.0093	0.038	0	0.0077	0.007	0.022	0.06	0.0045	0.0058	0.026	0.059	0.0031	0.0065	-0.007	0.076	3.47	0.48	80	110	0.222	0.06
BMB5894	Zircon_sample-039.FIN2	Fe-rich	700000		-0.06	0.1	10.5	1.4	35	12	28	6.7	13400	1700	17.6	2.7	36.4	3.9	2.03	0.84	3.13	0.93	1.98	0.69	38	10	0.023	0.028	0.008	0.029	-0.0075	0.0042	0.038	0.085	0.01	0.032	0.0011	0.0047	-0.13	0.18	0.005	0.019	0.037	0	-0.001	0.011	-0.028	0.079	0.011	0.01	0.017	0.076	0.023	0.012	0	0.049	5.2	1.8	100	230	0.17	0.12
BMB5894	Zircon_sample-046.FIN2	Fe-rich	700000		0.025	0.023	0.09	0.72	0.045	0.02	1.08	0.35	1970	980	2	1.6	0.0955	0.0074	0.23	0.15	0.046	0.064	-0.008	0.045	0.0027	0.0074	0.006	0.017	0.0128	0.0083	-0.0026	0.0013	0.007	0.023	0.019	0.017	0.0015	0.004	0.036	0.041	0.011	0.016	0.02	0	0.0003	0.0032	0.019	0.014	-0.000086	0.000036	0.012	0.048	0.0015	0.0032	0.004	0.014	0.00045	0.00019	180	310	0.013	0.021
BMB5894	Zircon_sample-047.FIN2	Fe-rich	700000		0.005	0.028	0.3	0.29	0.028	0.033	1.1	0.47	17000	11000	4.7	2.3	0.64	0.83	0.72	0.57	0.51	0.43	0.07	0.1	0.022	0.025	0.0092	0.007	0.0019	0.0067	0.002	0.0024	0.001	0.013	0.01	0.03	0.0009	0.0024	0.07	0.12	0.0103	0.0063	0.007	0	0.0038	0.0065	0.005	0.029	0.0004	0.0011	0.001	0.026	-0.00008	0.000023	0.0012	0.0073	0.0116	0.0064	200	280	0.23	0.16
BMB5894	Zircon_Sample-048.FIN2	Fe-rich	700000		0	0.027	-0.26	0.53	0.0197	0.0078	0.39	0.31	7300	1100	3.05	0.82	2.3	0.21	0.53	0.14	0.17	0.17	0.071	0.064	0.0093	0.0094	0	0.0086	0.0078	0.0079	0.0055	0.0042	0.015	0.026	0.0091	0.0091	0.0016	0.0042	0.019	0.056	0.008	0.013	-0.006	0	0.0016	0.0029	0.012	0.017	-0.000094	0.000029	-0.001	0.019	0.0029	0.0034	0.018	0.02	0.016	0.017	-40	210	0.019	0.018
BMB5894	Zircon_Sample-049.FIN2	Fe-rich	700000		0.032	0.035	11	11	23	23	18	16	9000	2500	8.4	7	6.8	5	0.309	0.085	1.7	1.2	0.27	0.36	7.7	8.1	-0.0034	0.0069	0	0.013	-0.0012	0.0027	0.011	0.013	0.009	0.014	0.0047	0.0032	0.034	0.057	0.0043	0.0038	0.002	0	0.0028	0.0038	-0.003	0.016	0.0004	0.00098	0.013	0.011	0.0011	0.0014	0.006	0.015	0.71	0.66	70	100	0.087	0.067
BMB5894	Zircon_Sample-050.FIN2	Fe-rich	700000		0.015	0.03	1.03	0.84	0.046	0.085	0.32	0.37	6300	1400	2.74	0.48	4.8	2.6	0.36	0.16	0.138	0.083	0.088	0.072	0.1	0.2	0.0013	0.0066	0.0052	0.0068	0.0007	0.0019	0.013	0.027	0.009	0.014	0.0031	0.0055	-0.05	0.11	0.0044	0.0081	0.005	0	0.0028	0.0022	-0.003	0.024	0.0021	0.002	0.0049	0.0077	0.0054	0.0094	0.005	0.029	0.09	0.12	60	120	0.025	0.018
BMB5894	Zircon_Sample-051.FIN2	Fe-rich	700000		0.04	0.035	0.35	0.43	0.019	0.015	0.36	0.35	3930	270	1.24	0.96	1.4	1.2	0.43	0.28	0.14	0.11	0.1	0.1	0.013	0.017	0.004	0.022	0.014	0.01	0.0006	0.0088	0.004	0.014	0.0081	0.0082	-0.000378	0.000017	0.01	0.12	-0.0072	0.0097	0.014	0	-0.0011	0.0029	0.002	0.02	0.0045	0.0049	0.008	0.024	0.006	0.0033	0.0176	0.007	0.021	0.022	-63	29	0.045	0.017
BMB5894	Zircon_Sample-052.FIN2	Fe-rich	700000		0	0.022	0.55	0.35	0.0102	0.0091	0.42	0.48	10200	2400	0.97	0.46	1.45	0.68	0.67	0.33	0.36	0.11	0.026	0.05	0.011	0.01	0.003	0.015	0.005	0.011	0.0036	0.004	0.012	0.045	0.0094	0.0049	0.0021	0.0031	0.04	0.13	-0.002	0.013	0.019	0	0.0007	0.0024	0.015	0.022	0.0005	0.0011	-0.007	0.0065	-0.000083	0.000037	0.0026	0.0047	0.0081	0.0051	70	180	0.0092	0.0037
BMB5894	Zircon_Sample-059.FIN2	Fe-rich	700000		0.033	0.019	0.65	0.6	0.0079	0.0099	0.51	0.33	4970	980	1.97	0.45	2.4	1.9	1.62	0.87	0.03	0.14	0.004	0.05	0.013	0.028	-0.011	0.027	0.0111	0.0041	-0.00158	0.00085	0.014	0.03	0.002	0.016	0.0101	0.0086	-0.04	0.15	-0.001	0.0071	0.017	0	0.0013	0.002	0.0069	0.0078	0.0018	0.0024	-0.011	0.016	0.0028	0.0058	0.0289	0.0074	0.008	0.017	170	260	0.053	0.049
BMB5894	Zircon_Sample-060.FIN2	Fe-rich	700000		0.027	0.026	0.33	0.88	-0.003	0.02	0.57	0.62	3900	620	1.91	0.41	0.47	0.24	1.81	0.53	0.087	0.07	0.077	0.081	0.031	0.018	-0.01	0.024	-0.0032	0.0042	-0.002	0.0013	0.029	0.035	0.014	0.02	0.0031	0.0037	0.021	0.096	-0.0005	0.0046	-0.011	0	0.0022	0.0055	0.005	0.02	0.0039	0.0035	-0.017	0.013	0.004	0.007	-0.001	0.011	0.024	0.018	150	250	0.064	0.022
BMB5894	Zircon_Sample-061.FIN2	Fe-rich	700000		0.07	0.022	5.36	0.92	16.4	3.2	27.3	3.4	13000	1900	21.5	9	64	24	1.35	0.61	2.7	1.6	2.2	1.3	35	24	0.012	0.025	0.005	0.02	0.0021	0.0042	0.009	0.023	-0.001	0.02	0.005	0.0095	0.18	0.25	0.005	0.011	0.003	0	-0.0006	0.0018	-0.031	0.048	0.0011	0.0015	0.018	0.019	0.004	0.0082	0.006	0.011	3.4	2.3	80	220	0.115	0.037
BMB5894	Zircon_Sample-062.FIN2	Fe-rich	700000		0.061	0.067	8.6	1.5	29.1	1.7	33.1	4.7	16200	3100	37.4	2.8	90.8	3.5	2.31	0.79	3.09	0.48	1.82	0.33	39.5	6.2	-0.002	0.014	-0.005	0.016	-0.001	0.0031	-0.001	0.026	0.035	0.025	0.0075	0.008	-0.01	0.17	-0.011	0.017	0.027	0	0.0006	0.0084	0.013	0.042	0.0033	0.0033	0.007	0.061	-0.000165	0.000062	0.018	0.018	3.86	0.86	69	96	0.239	0.033
BMB5894	Zircon_Sample-063.FIN2	Fe-rich	700000		-0.011	0.047	-0.4	1.5	0.036	0.028	0.98	0.54	2600	1300	0.67	0.47	0.28	0.11	0.41	0.28	0.19	0.21	0.009	0.063	0.0031	0.0092	-0.0028	0.009	-0.0057	0.007	0.001	0.0086	-0.023	0.015	0.019	0.03	0.0078	0.0082	0.019	0.067	0.0051	0.0083	-0.00216	0	0.001	0.0033	0.0187	0.0061	-0.000089	0.000039	-0.0048	0.0071	-0.000092	0.00004	0.005	0.033	0.0074	0.0075	70	220	0.014	0.015
BMB5894	Zircon_Sample-064.FIN2	Fe-rich	700000		0.023	0.016	-0.58	0.28	0.022	0.038	0.51	0.48	1790	220	1.01	0.81	0.22	0.17	0.36	0.15	-0.06	0.36	0	0.13	0.033	0.023	-0.004	0.01	-0.002	0.013	0.007	0.015	0.036	0.061	0.053	0.064	0.01	0.016	-0.06	0.23	0.02	0.045	0.014	0	-0.0005	0.0023	-0.007	0.023	-0.00015	0.00016	-0.011	0.043	0.0072	0.0072	0.004	0.03	0.017	0.035	103	67	0.025	0.03
BMB5894	Zircon_Sample-065.FIN2	Fe-rich	700000		0.047	0.032	-0.03	0.97	0.037	0.02	0.79	0.36	4010	970	0.98	0.57	0.29	0.33	0.27	0.25	0.083	0.082	0.08	0.12	0.013	0.014	-0.0063	0.0057	-0.002	0.016	0.0043	0.0048	-0.003	0.022	0.005	0.017	0.0024	0.0038	0.02	0.086	-0.009	0.014	0.005	0	0.0024	0.0025	0.012	0.023	0.0054	0.0086	-0.011	0.015	0.0005	0.0012	0.008	0.01	0.02	0.028	120	170	0.046	0.057
BMB5894	Zircon_Sample-072.FIN2	Fe-rich	700000		0.035	0.019	-0.3	0.26	0.37	0.56	0.96	0.55	5100	1300	1.75	0.31	1.9	1.4	0.33	0.2	0.27	0.25	0.035	0.01	0.23	0.24	0.0125	0.0064	-0.0025	0.0076	0.0019	0.0027	-0.0013	0.0069	-0.0069	0.001	0.0016	0.0039	-0.02	0.19	0.0045	0.0084	0.021	0	0.0009	0.0042	-0.003	0.014	0.0007	0.0015	0.017	0.028	0.0009	0.002	-0.001	0.019	0.027	0.029	180	300	0.029	0.033
BMB5894	Zircon_Sample-073.FIN2	Fe-rich	700000		0.05	0.018	24	26	45	42	46	41	10200	2600	11.2	7.4	44	37	2.7	4.1	2.9	2.3	0.7	0.66	11	10	0.011	0.019	0.0054	0.0046	0.0036	0.0064	0.011	0.023	0.008	0.016	0.0028	0.0026	-0.037	0.075	-0.0058	0.0019	0.015	0	0.0004	0.0023	0.006	0.016	0.0037	0.0064	0.007	0.018	0.0019	0.0029	-0.006	0.012	2.6	2.3	60	250	0.11	0.06
BMB5894	Zircon_Sample-074.FIN2	Fe-rich	700000		0.042	0.039	48	17	96	29	91	29	11500	1100	17.3	3.8	49.6	8.9	0.69	0.21	5.58	0.42	1.76	0.68	23.7	8	-0.0032	0.0065	-0.0045	0.0016	-0.0012	0.0016	0.008	0.019	0.012	0.017	0.0023	0.0053	-0.006	0.033	0.004	0.011	0.005	0	-0.0008	0.0036	0.008	0.021	0.0018	0.0012	-0.003	0.012	0.0013	0.0016	-0.004	0.013	6.1	0.99	240	120	0.09	0.049
BMB5894	Zircon_Sample-075.FIN2	Fe-rich	700000		0.047	0.066	44	21	108	54	87	41	15900	1500	11.5	2.8	32	12	0.71	0.48	5	2.9	1.28	0.75	22	12	0.014	0.041	-0.0053	0.0092	0.003	0.0053	-0.023	0.024	0.02	0.023	0.001	0.0032	0.01	0.061	0.0067	0.0072	-0.011	0	0.0009	0.0039	0.024	0.066	0.0024	0.0029	-0.007	0.017	0.001	0.0014	0.016	0.033	4.9	2.8	40	140	0.17	0.16
BMB5894	Zircon_Sample-076.FIN2	Fe-rich	700000		0.029	0.016	0.73	0.9	0.15	0.12	0.13	0.37	1420	830	0.78	0.28	1.3	1.3	0.13	0.11	0.06	0.1	0.0198	0.009	0.15	0.2	-0.0083	0.0098	0.007	0.013	0.0032	0.0053	-0.018	0.012	-0.0022	0.0079	0.0026	0.0034	0.05	0.049	-0.0001	0.0091	-0.002	0	0.0028	0.0016	0.027	0.013	-0.0000668	0.0000025	-0.0069	0.007	0.0015	0.0032	0.012	0.0061	0.023	0.035	20	190	0.0092	0.0081
BMB5894	Zircon_Sample-077.FIN2	Fe-rich	700000		0.024	0.06	35	13	72	33	80	40	6900	1100	14.8	1.6	88	36	1.3	2.1	6.1	1.9	1.42	0.36	29.2	2.6	0.006	0.017	-0.0007	0.0052	0.0011	0.0046	0.006	0.032	0.0139	0.0035	0.0005	0.0021	-0.037	0.076	0.005	0.0097	0.002	0	0.0019	0.0035	-0.005	0.027	0.0011	0.0015	-0.007	0.016	0.0029	0.0038	0.003	0.032	4.4	2.1	310	210	0.107	0.062
BMB5894	Zircon_Sample-078.FIN2	Fe-rich	700000		0.045	0.032	56	17	59	13	58	15	7090	870	18.9	3.5	44	7.5	1.68	0.65	4.46	0.61	1.33	0.4	29.2	5.6	-0.0053	0.0067	-0.004	0.011	0.001	0.004	0.011	0.02	-0.002	0.015	0.0057	0.0083	-0.051	0.065	-0.0027	0.0094	-0.011	0	0.0033	0.0039	0.022	0.06	-0.000098	0.000075	-0.0044	0.0058	0.001	0.0014	-0.019	0.018	5.7	3.2	50	180	0.217	0.077

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe_2O_3 x 0.89981.

BMB 5895 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5895	Zircon_Sample-072.FIN2	Fe-rich	700000		0.069	0.051	436	86	97	27	95	20	4880	680	230	72	56	32	2.59	0.54	13.7	4.1	4	3.4	2.1	1.7	-0.032	0.038	-0.003	0.03	-0.001	0.018	0.007	0.067	0.008	0.071	0.007	0.017	-0.25	0.23	0.037	0.048	0.027	0	0.002	0.026	0	0.1	0.006	0.013	0.07	0.11	0.017	0.025	-0.039	0.065	1.48	0.53	130	210	0.1	0.067
BMB5895	Zircon_Sample-073.FIN2	Fe-rich	700000		0.043	0.051	400	170	86	28	90	18	4460	580	183	48	50	30	3.05	0.71	9.8	2.1	2.3	1.5	1.24	0.63	-0.014	0.026	-0.001	0.025	0.0053	0.0052	-0.019	0.039	0.036	0.072	0.0115	0.0082	0.26	0.3	0.002	0.033	0.012	0	0	0.011	0.06	0.18	0.0099	0.0095	0.037	0.065	0.0017	0.006	-0.018	0.092	1.01	0.17	70	160	0.042	0.033
BMB5895	Zircon_Sample-074.FIN2	Fe-rich	700000		0.081	0.097	590	130	91	20	86	14	4030	320	230	68	58	31	2.47	0.85	12.7	2	2.6	1.2	1.14	0.47	-0.022	0.032	0.001	0.03	0.014	0.023	0.001	0.092	0.013	0.031	0.0081	0.0081	0.04	0.31	0.002	0.026	-0.011	0	-0.0002	0.0033	-0.01	0.039	0.006	0.0077	0.001	0.036	0.0086	0.0088	0.027	0.076	1.46	0.25	210	150	0.052	0.039
BMB5895	Zircon_Sample-075.FIN2	Fe-rich	700000		0.08	0.073	770	260	148	75	126	59	4210	450	239	59	56	19	2.17	0.46	17.5	5.5	4.1	2.6	2	1.2	0.016	0.056	-0.021	0.032	-0.004	0.012	0.045	0.054	0.049	0.071	0.0051	0.0099	-0.12	0.41	0.042	0.039	0.065	0	0.015	0.012	-0.089	0.084	0.0017	0.0037	0.042	0.084	0.0138	0.0039	0.008	0.075	1.99	0.67	122	91	0.083	0.057
BMB5895	Zircon_Sample-076.FIN2	Fe-rich	700000		0.002	0.063	380	110	51	11	57	17	4640	610	233	63	57	36	3.2	1.3	10.8	4.8	3.2	2.1	1.3	1	0.002	0.02	0.021	0.041	-0.0046	0.0056	-0.044	0.027	-0.02	0.043	0.0033	0.0093	0.05	0.3	-0.003	0.02	0.011	0	0.0005	0.0059	-0.067	0.025	0.0058	0.0048	0.011	0.018	0.02	0.014	-0.027	0.065	1.1	0.62	90	190	0.086	0.065
BMB5895	Zircon_Sample-077.FIN2	Fe-rich	700000		-0.04	0.042	520	110	99	23	93	21	3370	250	201	48	47	17	1.25	0.29	11.4	3.2	2.56	0.85	1.26	0.54	-0.006	0.05	-0.008	0.012	0.0052	0.0082	0.001	0.043	0.001	0.064	0.006	0.0089	0	0.21	0.005	0.007	-0.02	0	0.0028	0.0087	0.083	0.051	0.006	0.0057	0.045	0.051	0.0043	0.0072	-0.052	0.04	1.58	0.28	-80	190	0.03	0.025
BMB5895	Zircon_Sample-078.FIN2	Fe-rich	700000		0.038	0.094	640	160	69	8.9	71.9	6.5	4810	390	350	96	90	49	0.82	0.25	14	6.8	4.4	1.8	2.4	1.2	0.009	0.021	0.017	0.023	0.013	0.013	-0.051	0.033	-0.047	0.034	-0.00143	0.00062	0.108	0.083	-0.006	0.025	0.045	0	-0.0005	0.002	-0.067	0.049	-0.000102	0.000044	0.034	0.078	0.0034	0.0091	0.001	0.045	2.02	0.97	60	100	0.075	0.049
BMB5895	Zircon_Sample-085.FIN2	Fe-rich	700000		0.042	0.071	380	110	84	33	82	21	4840	630	166	57	51	29	1.89	0.55	11.8	1.4	2.6	1.8	0.95	0.62	0.026	0.032	0.017	0.013	0.02	0.025	0.041	0.09	-0.032	0.052	0.0051	0.0086	-0.06	0.24	-0.005	0.028	0.048	0	0	0.015	0.08	0.13	0.0071	0.0088	0.064	0.043	0.006	0.01	0.003	0.073	1.15	0.2	-25	68	0.09	0.1
BMB5895	Zircon_Sample-086.FIN2	Fe-rich	700000		0.216	0.05	700	340	106	14	111	22	4230	530	164	47	44	17	2.15	0.66	13.5	3.3	2.6	1.2	0.93	0.47	-0.009	0.031	0.027	0.018	0.026	0.041	0.041	0.023	0.02	0.11	-0.00195	0.0005	0.11	0.7	0.011	0.035	0.03	0	-0.0067	0.0098	0.03	0.22	-0.000144	0.000037	0.04	0.075	0.011	0.025	-0.073	0.088	1.46	0.14	200	200	0.026	0.047
BMB5895	Zircon_Sample-087.FIN2	Fe-rich	700000		0.133	0.066	530	160	97	26	84	12	6500	1400	192	66	74	45	2.88	0.85	17.4	8.2	4.1	3.4	1.5	1.1	0.049	0.02	0.007	0.023	-0.0042	0.0075	0.05	0.1	0.05	0.061	0.012	0.016	0.08	0.26	-0.019	0.018	-0.011	0	-0.0034	0.0088	-0.08	0.13	0.0026	0.0055	0.027	0.097	0.007	0.012	0.005	0.075	2.11	0.66	-56	83	0.061	0.058
BMB5895	Zircon_Sample-088.FIN2	Fe-rich	700000		0.056	0.068	430	140	91	39	80	30	4550	590	132	33	55	25	0.93	0.16	9.5	2.2	2.5	0.79	0.98	0.35	0.017	0.066	0.004	0.017	0.003	0.011	-0.038	0.068	0.021	0.029	0.013	0.015	0	0.23	0.01	0.01	-0.023	0	0.006	0.012	-0.077	0.078	0.0029	0.006	0.004	0.051	0.0039	0.0066	0.003	0.022	1.05	0.18	21	43	0.043	0.022
BMB5895	Zircon_Sample-089.FIN2	Fe-rich	700000		-0.001	0.086	3100	3500	121	28	91.3	6.8	5650	560	176	50	51	25	4	1.3	11.4	1.9	2.6	1.4	0.94	0.43	0.023	0.019	0.002	0.012	0.019	0.016	-0.05	0.057	0.02	0.094	0.009	0.017	-0.05	0.1	0.008	0.024	0	0	-0.0091	0.0068	0.07	0.2	0.0017	0.0036	0.061	0.072	0.011	0.013	0.012	0.051	1.65	0.35	50	110	0.099	0.071
BMB5895	Zircon_Sample-090.FIN2	Fe-rich	700000		-0.098	0.066	610	320	125	48	103	24	4660	700	290	120	38	13	0.71	0.18	12.1	2.8	2.95	0.94	0.98	0.46	0.017	0.042	-0.001	0.037	0.004	0.016	-0.008	0.082	0.017	0.059	0.0001	0.0037	0.03	0.52	0.006	0.02	0.003	0	-0.001	0.0091	-0.163	0.067	-0.000117	0.00004	-0.01	0.025	0.0066	0.0071	-0.019	0.044	1.65	0.54	-80	120	0.054	0.025
BMB5895	Zircon_Sample-091.FIN2	Fe-rich	700000		-0.072	0.052	470	110	77	23	66	15	4160	180	140	32	53	26	1.29	0.73	13.5	4.7	3.2	2.4	1.12	0.79	-0.017	0.026	0.017	0.029	-0.0098	0.0048	-0.013	0.093	0.029	0.079	0.0055	0.0088	-0.3	0.13	0.001	0.038	0.06	0	0.01	0.013	-0.001	0.055	0.013	0.016	0.012	0.076	0.0023	0.0068	0.14	0.15	1.44	0.27	-48	64	0.094	0.072
BMB5895	Zircon_Sample-098.FIN2	Fe-rich	700000		0.05	0.064	710	250	150	45	124	31	5540	570	156	29	52	30	3.78	0.41	14.1	5	3.8	2.6	1.32	0.81	-0.01	0.018	-0.017	0.017	-0.001	0.017	0.009	0.036	-0.035	0.062	0.0073	0.0087	-0.22	0.35	-0.006	0.022	0.14	0	0.006	0.012	-0.04	0.13	0.0071	0.0089	0.006	0.035	0.011	0.016	0.06	0.11	1.8	1.2	10	130	0.105	0.039
BMB5895	Zircon_Sample-099.FIN2	Fe-rich	700000		0.12	0.08	900	330	119	39	82	15	6650	630	228	71	69	34	1.32	0.6	15.9	4.8	3.4	1.4	1.4	0.66	-0.02	0.044	0.047	0.075	-0.009	0.016	0.029	0.035	0.03	0.1	0.022	0.024	0.14	0.54	0.052	0.037	-0.01	0	0.004	0.015	-0.03	0.14	0.007	0.0092	0.007	0.037	0.009	0.02	0.04	0.12	1.84	0.67	190	260	0.161	0.059
BMB5895	Zircon_Sample-100.FIN2	Fe-rich	700000		0.102	0.041	445	90	144	37	117	31	4180	470	140	30	38	30	2.58	0.85	12.8	4.8	2.6	1.6	0.98	0.64	-0.042	0.025	0.028	0.027	0.002	0.018	0.08	0.094	-0.009	0.063	0.013	0.021	-0.04	0.24	0.019	0.03	0.05	0	0.004	0.014	-0.007	0.056	0.009	0.011	0.039	0.062	0.0047	0.0069	-0.028	0.047	1.35	0.27	50	140	0.097	0.072
BMB5895	Zircon_Sample-101.FIN2	Fe-rich	700000		0.108	0.059	570	100	96.2	6.9	79	17	4680	960	137	31	43	26	1.95	0.44	12.9	3	2.4	1.3	0.95	0.43	-0.024	0.066	0.031	0.084	0.014	0.019	0.146	0.077	0.051	0.04	0.0031	0.0096	0.02	0.13	0.003	0.057	0.2	0	-0.001	0.015	-0.06	0.15	0.0037	0.0077	0.029	0.058	0.007	0.01	-0.064	0.05	1.23	0.15	2	21	0.042	0.042
BMB5895	Zircon_Sample-102.FIN2	Fe-rich	700000		0.114	0.058	365	76	89	15	71.8	5.5	5760	310	181	33	49	15	2.01	0.23	10.7	2.1	3.1	2	1.13	0.61	-0.017	0.013	0.01	0.022	0.001	0.013	0.012	0.029	0.015	0.067	0.02	0.02	-0.13	0.22	0.002	0.015	0.028	0	-0.0018	0.006	-0.026	0.081	0.001	0.0022	0.04	0.1	0.0029	0.0053	-0.021	0.045	1.16	0.54	20	170	0.101	0.081

BMB5895	Zircon_Sample-103.FIN2	Fe-rich	700000		0.06	0.055	460	100	106	33	74	19	6070	420	165	23	81	49	1.02	0.3	13.4	3.4	3.3	1.2	1.22	0.26	-0.044	0.056	0.005	0.028	0.004	0.017	-0.005	0.071	-0.024	0.032	0.011	0.014	-0.05	0.3	-0.004	0.018	-0.041	0	-0.007	0.014	-0.035	0.053	0.012	0.016	0.033	0.072	0.011	0.0079	0	0.063	1.13	0.25	80	140	0.016	0.023
BMB5895	Zircon_Sample-104.FIN2	Fe-rich	700000		-0.003	0.06	470	140	119	39	102	29	4650	760	149	14	64	13	3.66	0.54	15.1	2.9	3.56	0.78	1.29	0.34	0.017	0.037	0.031	0.035	0.005	0.011	0.013	0.035	0.03	0.12	0.0035	0.0062	-0.11	0.34	0.017	0.027	0.057	0	0.01	0.014	-0.025	0.091	-0.000111	0.000029	0.022	0.046	0.0066	0.0064	0.009	0.056	1.99	0.74	120	210	0.036	0.027
BMB5895	Zircon_Sample-111.FIN2	Fe-rich	700000		0.021	0.021	0.1	2.1	0.16	0.22	0.45	0.64	3020	320	78	20	0.76	0.33	1.35	0.35	-0.14	0.6	-0.005	0.036	0.012	0.016	0.016	0.017	0.05	0.022	0.013	0.012	0.033	0.051	0.033	0.025	0.003	0.0033	-0.09	0.2	0.0019	0.0026	0.003	0	0.009	0.013	0.027	0.05	0.0029	0.0047	0.017	0.019	0.0029	0.0021	0.02	0.019	0.0088	0.0078	100	170	2.61	0.51
BMB5895	Zircon_Sample-112.FIN2	Fe-rich	700000		1.2	2.2	170	250	4.6	7.2	1.46	0.94	3900	1300	81	33	6.4	8.6	2.4	2.3	0.42	0.46	0.7	0.93	0.01	0.012	0.53	0.74	1	1.3	0.12	0.16	0.58	0.84	0.06	0.11	0.07	0.12	-0.16	0.21	0.03	0.06	0.07	0	0.0001	0.0039	0.071	0.078	0.011	0.02	0.012	0.051	0.011	0.023	0.057	0.064	0.051	0.07	180	190	51	69
BMB5895	Zircon_Sample-113.FIN2	Fe-rich	700000		0.053	0.031	-0.52	0.27	0.04	0.023	0.21	0.34	1290	610	41	21	0.026	0.073	0.24	0.11	0.14	0.1	0.091	0.055	0.0074	0.0083	0.013	0.022	0.033	0.045	-0.00149	0.00074	0.011	0.041	0.019	0.033	0.0034	0.0074	-0.11	0.15	-0.005	0.011	-0.002	0	0.001	0.003	0.003	0.028	0.0018	0.0026	0.003	0.012	-0.00029	0.00014	-0.008	0.018	0.01	0.0073	-49	95	0.13	0.14
BMB5895	Zircon_Sample-114.FIN2	Fe-rich	700000		0.0378	0.0094	3.3	7.4	0.7	1.4	0.48	0.49	5500	5000	121	99	1.2	2	1.04	0.88	0.45	0.93	0.038	0.021	0.015	0.019	0.026	0.023	0.033	0.037	0.017	0.013	0.033	0.065	0	0.017	0.0045	0.0049	0.02	0.18	-0.0017	0.0044	-0.009	0	0.001	0.0038	0.004	0.023	0.0047	0.0021	0.033	0.032	0.002	0.0022	0.008	0.025	0.021	0.033	-20	110	0.26	0.23
BMB5895	Zircon_Sample-115.FIN2	Fe-rich	700000		0.041	0.029	39	31	4.8	5.2	0.36	0.57	5400	1800	70	13	0.61	0.31	1.04	0.7	0.74	0.51	0.06	0.082	0.026	0.014	0.078	0.072	0.11	0.12	0.021	0.021	0.104	0.086	0.017	0.02	0.0017	0.0024	0.004	0.084	0.0022	0.0012	0.022	0	0.0058	0.0063	0.029	0.042	0.0032	0.0027	0.0047	0.0069	0.0015	0.002	0.025	0.031	0.046	0.03	115	55	0.04	0.049
BMB5895	Zircon_Sample-116.FIN2	Fe-rich	700000		0.028	0.025	48	64	9.2	9.5	0.9	1.2	7500	3700	82	16	0.63	0.39	1.1	0.37	1.09	0.9	0.076	0.04	0.045	0.03	0.007	0.036	0.0029	0.0073	0.001	0.0042	0.0076	0.0079	0.009	0.036	-0.000317	0.000032	-0.082	0.053	0.0054	0.0051	-0.003	0	-0.002	0.0019	-0.009	0.014	-0.0000274	0.0000028	0.011	0.022	-0.000216	0.000022	-0.002	0.031	0.066	0.053	29	67	0.0115	0.0069
BMB5895	Zircon_Sample-117.FIN2	Fe-rich	700000		0.028	0.022	65	14	21	11	1.02	0.82	7800	3400	84.1	3.8	1.9	1	2.21	0.59	3.88	0.75	0.068	0.056	0.098	0.052	0.012	0.025	0.053	0.016	0.0042	0.0046	0.072	0.05	0.023	0.032	0.008	0.011	0.005	0.051	-0.0025	0.0026	0.017	0	0.0019	0.0074	0.002	0.017	0.0019	0.004	0.0014	0.0094	0.005	0.0039	0.032	0.025	0.236	0.093	61	98	0.064	0.037
BMB5895	Zircon_Sample-124.FIN2	Fe-rich	700000		0.013	0.019	15.2	5.4	2.38	0.51	1.6	1.3	3500	1200	79.2	9.4	3.04	0.31	1.25	0.61	1.96	0.94	0.045	0.049	0.051	0.017	0.016	0.024	0.011	0.01	0.011	0.016	0	0.041	0.017	0.035	0.008	0.0022	0.05	0.16	0.0047	0.0061	0.016	0	0.0054	0.0069	-0.014	0.028	0.0012	0.0015	0.009	0.016	0.0014	0.0033	0.011	0.02	0.057	0.028	10	130	0.01	0.014
BMB5895	Zircon_Sample-125.FIN2	Fe-rich	700000		0.046	0.01	34.7	4.6	9.97	0.4	1.3	0.24	4420	560	93.4	5.4	8.38	0.99	1.36	0.29	1.4	0.23	0.16	0.14	0.05	0.043	0.016	0.015	0.015	0.011	0.0022	0.0011	0.002	0.016	0.015	0.026	0.0071	0.0084	-0.048	0.076	0.0038	0.0052	-0.02	0	0.0023	0.0053	0.01	0.035	0.0012	0.0015	0.029	0.038	0.001	0.0027	0.024	0.029	0.067	0.032	-36	95	0.167	0.027
BMB5895	Zircon_Sample-126.FIN2	Fe-rich	700000		0.021	0.02	14.5	7.1	1.95	0.87	0.81	0.29	1804	89	87	24	1.12	0.49	2.59	0.82	1.96	0.59	0.056	0.062	0.034	0.013	0.02	0.016	0.014	0.014	0.0045	0.0061	-0.028	0.043	0.003	0.045	0.0026	0.0041	-0.036	0.097	0.003	0.011	-0.023	0	-0.0019	0.0033	0.005	0.027	0.0007	0.0014	-0.0014	0.0096	0.0026	0.0042	-0.012	0.011	0.08	0.034	-120	110	0.016	0.02
BMB5895	Zircon_Sample-127.FIN2	Fe-rich	700000		0.046	0.043	21	12	1.83	0.89	2.7	1.9	1680	250	81	18	2.23	0.35	1.77	0.69	2.5	1.7	0.109	0.095	0.055	0.034	0.018	0.023	0.0043	0.005	-0.0018	0.0072	0.015	0.041	0.03	0.042	0.0027	0.0044	0.16	0.16	0.009	0.013	-0.012	0	0.009	0.011	0.024	0.024	0.0026	0.0037	0.006	0.012	0.0012	0.003	0.021	0.024	0.105	0.036	-140	130	0.016	0.016
BMB5895	Zircon_Sample-128.FIN2	Fe-rich	700000		0.062	0.058	179	97	23	12	2.3	1	4160	990	137	23	7.9	4.7	1.64	0.15	5	1.9	0.062	0.077	0.169	0.032	-0.001	0.011	0.025	0.015	-0.0008	0.0052	0.008	0.032	0.026	0.061	0.0021	0.0023	0.14	0.29	-0.0016	0.007	-0.013	0	0.0017	0.0028	-0.007	0.047	-0.000042	0.00002	0.02	0.024	0.0021	0.0049	0.011	0.018	0.42	0.12	20	110	0.092	0.031
BMB5895	Zircon_Sample-129.FIN2	Fe-rich	700000		0.043	0.054	32	11	10.2	7.3	5.7	5.8	2720	340	107	25	3.81	0.59	1.65	0.32	3.22	0.88	0.21	0.25	0.151	0.027	0.027	0.022	0.0065	0.005	0.0017	0.0062	-0.001	0.047	-0.001	0.031	-0.00049	0.00021	-0.02	0.15	0.005	0.015	-0.012	0	0.0019	0.0056	0.032	0.034	0.0006	0.0013	0.0166	0.0067	0.0021	0.0034	0.032	0.032	0.236	0.096	20	150	0.33	0.46
BMB5895	Zircon_Sample-130.FIN2	Fe-rich	700000		0.049	0.019	18	11	6.5	3.1	1.3	1.6	3283	96	139	19	6.5	1.8	7.9	1.5	2.8	0.49	0.042	0.089	0.093	0.04	-0.0001	0.0075	-0.0002	0.0039	0.0045	0.0066	0.006	0.048	-0.005	0.042	0.0035	0.0055	0.29	0.46	0.0048	0.0053	-0.008	0	0.0032	0.0065	0.004	0.044	0.004	0.005	0.032	0.052	0.0013	0.0034	-0.026	0.018	1.15	0.58	-80	120	0.008	0.014

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5897			CONCENTRATIONS																																																											
Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5897	Zircon_sample-007.FIN2	Fe-rich	700000		0.039	0.065	42	15	52	13	24.3	5.9	8700	1400	185	79	18.1	7	0.94	0.55	12.1	5.4	1.64	0.85	0.3	0.093	0.046	0.039	0.004	0.02	0.007	0.015	-0.013	0.03	-0.009	0.036	-0.00153	0.00084	0.08	0.16	-0.007	0.012	0.004	0	0.0064	0.0079	-0.034	0.058	0.0029	0.0045	0.019	0.014	0.014	0.015	0.0123	0.0059	1.55	0.84	91	77	0.67	0.39
BMB5897	Zircon_sample-008.FIN2	Fe-rich	700000		0.2	0.12	82	12	213	73	69	21	11420	810	186	55	14.4	7.2	0.64	0.62	21	9.6	1.18	0.82	0.25	0.22	0.025	0.067	0.002	0.034	-0.001	0.016	0.04	0.1	0.035	0.073	0.01	0.015	-0.25	0.32	0.008	0.014	0.007	0	0.0085	0.0055	-0.052	0.062	0.005	0.011	0.059	0.095	0.009	0.013	0.053	0.083	3.7	2.8	180	170	0.109	0.072
BMB5897	Zircon_sample-009.FIN2	Fe-rich	700000		0.091	0.022	47	12	84	24	29.3	8.6	10300	1300	89	31	11	3.7	0.48	0.29	10.8	2.9	1.04	0.71	0.189	0.086	0.003	0.024	-0.016	0.013	0	0.01	-0.005	0.04	-0.001	0.033	0.01	0.011	0.19	0.19	-0.002	0.02	-0.007	0	0.0005	0.0045	0.013	0.05	0.006	0.0087	0.028	0.035	0.001	0.0042	-0.005	0.027	1.92	0.58	70	140	0.049	0.019
BMB5897	Zircon_sample-010.FIN2	Fe-rich	700000		0.063	0.049	310	420	166	27	52	11	10400	1600	183	26	32	12	0.74	0.52	49	29	3.9	2.4	0.83	0.57	-0.006	0.015	0.012	0.042	0	0.0098	0.03	0.14	-0.029	0.057	0.0001	0.0042	-0.05	0.16	-0.015	0.01	0.082	0	0.0021	0.007	-0.018	0.078	0.0026	0.0053	0.011	0.031	0.004	0.0045	0.039	0.026	5.8	1.6	175	80	0.13	0.15
BMB5897	Zircon_sample-011.FIN2	Fe-rich	700000		0.053	0.043	34	14	56	18	27	9.1	8300	1100	170	39	19.6	7.9	0.27	0.2	13.3	5.4	1.29	0.55	0.213	0.088	0.003	0.014	-0.005	0.014	0.0003	0.0075	0.03	0.021	-0.005	0.028	0.0002	0.0026	-0.02	0.11	0.0007	0.006	0.061	0	0.0064	0.0044	0	0.037	0.0023	0.0031	0.017	0.021	0.0064	0.0097	-0.001	0.021	2.08	0.51	32	61	0.05	0.033
BMB5897	Zircon_sample-012.FIN2	Fe-rich	700000		-0.014	0.09	113	31	260	120	76	26	8640	700	136	13	22.4	4.2	0.24	0.24	19.2	3.8	1.74	0.77	0.279	0.088	0.033	0.081	0.001	0.014	-0.009	0.016	0.07	0.052	-0.019	0.026	0.0086	0.0086	0.033	0.09	-0.004	0.022	0.026	0	0.0032	0.0053	-0.051	0.045	0.0046	0.0062	0.013	0.021	-0.00121	0.00058	-0.01	0.029	4.9	4.8	330	270	0.86	0.76
BMB5897	Zircon_sample-013.FIN2	Fe-rich	700000		-0.082	0.073	40	5.6	58.3	8.1	36.1	8.5	9160	630	223	84	16.9	8.3	0.57	0.4	13.8	7.3	1.4	1	0.21	0.12	-0.009	0.019	-0.006	0.01	-0.0004	0.0096	0.029	0.037	0.002	0.013	-0.00136	0.00031	0	0.18	0.001	0.018	0.02	0	0.0061	0.008	0.017	0.055	0.0055	0.0063	0.006	0.014	0.0069	0.0095	0.033	0.036	2.4	1.6	78	90	0.047	0.034
BMB5897	Zircon_sample-020.FIN2	Fe-rich	700000		0.083	0.013	24	11	35	21	16	11	7300	1400	167	54	15.6	6.7	0.254	0.019	7.3	3.3	0.92	0.86	0.22	0.17	-0.0043	0.0055	-0.0029	0.0062	0.008	0.014	-0.003	0.038	-0.016	0.016	-0.00091	0.00019	0.05	0.22	-0.0003	0.0062	-0.012	0	0.0019	0.0022	0.022	0.058	0.0028	0.0037	0.0078	0.0092	0.0011	0.0034	0.007	0.034	1.01	0.39	-20	230	0.047	0.023
BMB5897	Zircon_sample-021.FIN2	Fe-rich	700000		0.169	0.052	35.2	8.4	55.3	6.1	31.2	4	8560	630	145	21	15.3	2.9	0.3	0.13	8.99	0.68	0.97	0.31	0.195	0.048	-0.01	0.026	-0.0001	0.0096	0.0074	0.0089	-0.006	0.043	0.026	0.038	0.0052	0.0082	0.018	0.09	-0.009	0.015	0.032	0	0.0022	0.006	0.03	0.044	0.011	0.012	0.048	0.043	0.0019	0.0038	0.035	0.046	1.65	0.37	40	130	0.046	0.021
BMB5897	Zircon_sample-022.FIN2	Fe-rich	700000		0.162	0.078	29.2	6.2	43	11	21.1	3.5	7500	1200	74.9	7.7	9.5	1.9	0.37	0.29	5.9	1.1	0.63	0.19	0.081	0.036	-0.042	0.04	-0.012	0.027	0.001	0.01	0.07	0.056	-0.026	0.025	0.011	0.019	0.15	0.35	-0.002	0.012	0.066	0	0.012	0.014	0.009	0.039	0.0043	0.0054	0.012	0.041	0.008	0.012	0.002	0.034	1.07	0.49	51	66	0.054	0.046
BMB5897	Zircon_sample-023.FIN2	Fe-rich	700000		0.095	0.046	15.3	8	31	10	19.1	4.8	6760	790	90	12	16.4	4.9	0.61	0.34	7.2	1.6	0.76	0.36	0.232	0.067	0.017	0.029	0.002	0.016	-0.005	0.0091	0.09	0.16	0.03	0.13	-0.0002	0.0042	-0.07	0.21	0.008	0.023	0.014	0	0.012	0.015	0.06	0.12	0.008	0.011	0.027	0.049	0.004	0.011	0.026	0.038	1.29	0.45	10	150	0.061	0.05
BMB5897	Zircon_sample-024.FIN2	Fe-rich	700000		0.063	0.023	34	13	70	16	30.5	3.6	8300	1600	175	29	22.5	1.5	0.24	0.28	15.1	4.1	1.91	0.21	0.356	0.084	-0.009	0.022	0.007	0.011	-0.001	0.012	0.01	0.047	0.014	0.03	0.0075	0.0071	-0.065	0.081	0.005	0.011	0.053	0	0.0054	0.0071	0.063	0.024	0.0049	0.0045	0.003	0.012	0.011	0.014	0.012	0.028	2.55	0.29	107	63	0.054	0.028
BMB5897	Zircon_sample-025.FIN2	Fe-rich	700000		0.033	0.047	27.4	6.8	51.5	8.9	28.8	4.9	7600	1800	109	17	14.3	4	0.28	0.26	8.32	0.9	1.06	0.43	0.25	0.11	0.003	0.023	-0.006	0.013	0.0042	0.0096	-0.003	0.035	-0.002	0.055	0.0047	0.0078	-0.056	0.086	0.002	0.023	0.016	0	0.0017	0.0079	0.018	0.059	-0.000074	0.000042	-0.001	0.017	0.0038	0.0096	0.003	0.018	1.81	0.85	-40	140	0.08	0.14
BMB5897	Zircon_sample-026.FIN2	Fe-rich	700000		0.024	0.038	9.9	6.4	26	11	24	13	5610	710	106	27	14.8	3.7	1.1	1.3	6.6	1.9	1.13	0.73	0.203	0.051	0.0015	0.0077	-0.0001	0.003	0.0024	0.0057	0.013	0.023	-0.007	0.015	0.0023	0.002	-0.027	0.081	0.0011	0.003	0.0079	0	0.0019	0.0025	0	0.026	0.0008	0.0016	0.009	0.011	0.0014	0.0021	-0.001	0.013	1.8	1.2	42	74	1.5	1.4
BMB5897	Zircon_sample-033.FIN2	Fe-rich	700000		0.2	0.11	92.6	8.2	166	29	69.7	5.4	10030	920	284	56	28.6	2.7	1.44	0.21	37.6	8.2	2.15	0.42	0.37	0.11	0.003	0.019	0.014	0.015	-0.004	0.015	-0.038	0.048	-0.006	0.042	0.0065	0.0068	0.08	0.26	0.006	0.017	0.017	0	0.0025	0.0042	-0.012	0.05	0.0071	0.009	0.014	0.031	0.0066	0.0081	-0.031	0.017	5.14	0.57	-78	72	0.094	0.063
BMB5897	Zircon_sample-034.FIN2	Fe-rich	700000		0.03	0.11	151	50	194	69	84	12	9290	800	263	20	26.5	1.1	0.94	0.18	52	10	3.5	1.2	0.62	0.12	0.035	0.049	-0.01	0.025	0.006	0.017	0.017	0.048	0.018	0.032	0.009	0.016	-0.05	0.17	0.012	0.013	0.036	0	0.02	0.015	0.036	0.042	0.0007	0.0016	0.011	0.026	0.0049	0.0067	-0.021	0.023	8.7	2.6	70	120	0.22	0.27
BMB5897	Zircon_sample-035.FIN2	Fe-rich	700000		0.07	0.074	19.3	2.8	67.1	6.8	42.1	6.3	5030	680	369	10	52.1	1.3	1.09	0.46	40.6	6.9	3.1	1.2	0.72	0.18	0.002	0.014	0.002	0.015	-0.0015	0.0086	-0.019	0.043	-0.016	0.014	-0.00076	0.00019	0.115	0.055	0.012	0.023	-0.004	0	0.0013	0.0078	0.0155	0.0094	-0.000044	0.000011	0.023	0.024	0.0038	0.0046	0.015	0.032	5	1.2	194	87	0.24	0.11
BMB5897	Zircon_sample-036.FIN2	Fe-rich	700000		0.085	0.027	53	14	115	30	58	14	8500	1200	228	67	30	11	1.02	0.25	25.1	9.4	2.3	1.3	0.51	0.25	-0.001	0.016	0.002	0.016	-0.002	0.01	-0.006	0.028	0.033	0.031	0.0036	0.005	0.01	0.11	0.0043	0.0074	0.021	0	0.0007	0.0066	0.025	0.04	0.0008	0.0018	0.002	0.013	0.0027	0.0047	0.005	0.0097	5.2	2.2	-40	250	0.14	0.1
BMB5897	Zircon_sample-037.FIN2	Fe-rich	700000		0.03	0.086	30.3	7.5	101	20	63.9	3.5	7110	580	374	32	46.5	3.7	27	33	32.8	3.1	2.7	1.1	0.98	0.56	0.07	0.12	0.061	0.059	0	0.0033	0.12	0.21	0.005	0.011	0.0031	0.0074	0.19	0.4	-0.007	0.02	-0.0017	0	0.0044	0.0058	0.028	0.058	0.0005	0.0011	0.013	0.023	0.01	0.013	-0.004	0.039	5.5	2.8	10	130	34	58
BMB5897	Zircon_sample-038.FIN2	Fe-rich	700000		0.051	0.05	77	42	154	61	77	22	8400	1100	362	21	43	6.7	1.6	1.3	42	24	3.8	2.5	0.66	0.27	-0.018	0.029	0.011	0.029	0.0022	0.0034	-0.011	0.034	0.013	0.051	0.0057	0.0095	0.13	0.42	0.017	0.026	0.005	0	-0.0032	0.0065	-0.038	0.056	0.0052	0.0073	-0.011	0.017	0.011	0.023	0.009	0.04	6.5	3.1	130	130	0.15	0.14
BMB5897	Zircon_sample-039.FIN2	Fe-rich	700000		0.018	0.033	73	11	200	37	83	14	10200	1000	397	90	39.9	7	1.27	0.45	39	17	2.75	0.68	0.51	0.28	0.001	0.013	0.0013	0.0078	-0.0012	0.0052	0.016	0.061	0.014	0.035	0.0031	0.0036	0.019	0.076	0.01	0.01	0.024	0	0.0035	0.0065	0.019	0.028	0.004	0.0047	0.018	0.015	0.0012	0.0036	0.025	0.022	8.3	3.4	98	86	0.092	0.06
BMB5897	Zircon_sample-046.FIN2	Fe-rich	700000		0.16	0.13	260	110	307	62	129	22	13750	910	372	73	72	17	3.7	2	24.5	2.5	4.54	0.9	1.14	0.4	0.021	0.035	0.043	0.022	0.022	0.035	-0.057	0.077	-0.03	0.064	0.015	0.021	0.3	0.43	0.024	0.033	0.056	0	-0.006	0.011	-0.064	0.054	-0.000128	0.000081	-0.003	0.046	0.014	0.023	-0.021	0.042	7.7	2	310	300	2.1	1.1
BMB5897	Zircon_Sample-047.FIN2	Fe-rich	700000		0.143	0.07	97	41	142	23	65.9	8	11930	720	257	33	25	3.5	0.72	0.38	16.7	3.3	3	1.3	0.57	0.18	-0.02	0.038	0.0189	0.0061	0.005	0.011	0.06	0.11	0.16	0.12	0.014	0.014	-0.11	0.26	0.017	0.019	0.037	0	0.004	0.011	0.041	0.075	-0.000103	0.000024	0.007	0.021	0.0103	0.008	-0.001	0.053	4.21	0.38	-30	120	0.168	0.07
BMB5897	Zircon_Sample-048.FIN2	Fe-rich	700000		0.128	0.031	59.3	9.4	129	18	58.9	7.2	8210	340	360	31	37.1	2.3	1.04	0.28	32.1	5.1	2.13	0.33	0.6	0.14	0.012	0.011	-0.0011	0.0028	0.004	0.0089	0.026	0.051	-0.003	0.035	0.0023	0.0044	0.09	0.26	0.0121	0.0061	0.042	0	0.0001	0.0036	0.016	0.017	0.0025	0.0032	0.001	0.02	0.0013	0.0041	-0.0185	0.0073	4.86	0.45	40	150	0.049	0.039
BMB5897	Zircon_Sample-049.FIN2	Fe-rich	700000		0.136	0.022	61	22	110	33	57	13	8700	1100	218	62	19.9	8	0.82	0.75	28	18	3.1	1.1	0.59	0.37	-0.004	0.023	-0.005	0.027	0.0096	0.0091	-0.041	0.033	0.06	0.11	0.009	0.016	-0.19	0.23	0.001	0.019	-0.029	0	0.003	0.0052	0.018	0.065	0.002	0.0042	-0.007	0.029	0.006	0.014	0.08	0.14	4.1	2	110	110	0.215	0.07
BMB5897	Zircon_Sample-050.FIN2	Fe-rich	700000		0.1	0.12	83	23	242	85	98	34	9990	760	251	38	23.3	3.4	0.44	0.35	32.3	4.8	1.58	0.34	0.395	0.081	0.036	0.03	0.003	0.014	0.002	0.014	0.021	0.08	-0.02	0.048	0.0029	0.0054	0.09	0.41	-0.004	0.021	-0.038	0	0.001	0.01	-0.035	0.056	0.008	0.013	-0.011	0.015	0.0032	0.0053	0.05	0.15	4.32	0.57	-10	60	0.059	0.042
BMB5897	Zircon_Sample-051.FIN2	Fe-rich	700000		0.142	0.068	116	23	261	36	99.4	5.8	9680	470	225	33	30.6	7.2	0.656	0.077	33.1	6.9	3	1.2	0.81	0.52	0.01	0.031	-0.005	0.015	-0.003	0.015	0.005	0.044	-0.018	0.05	0.003	0.0063	-0.04	0.39	-0.011	0.016	0.06	0	-0.0005	0.0066	-0.012	0.065	0.0032	0.0048	0.013	0.059	0.008	0.015	-0.018	0.034	6.8	1.1	-10	140	0.07	0.021
BMB5897	Zircon_Sample-052.FIN2	Fe-rich	700000		0.072	0.078	98	20	194	20	75	5.6	11110	550	191	29	22	5.1	0.86	0.78	23.4	6	2.7	1.4	0.66	0.22	0.006	0.054	0.021	0.024	0.0062	0.0082	-0.003	0.042	0.017	0.073	0.0012	0.0055	0.15	0.52	0.005	0.022	0.018	0	-0.0037	0.0065	0.027	0.018	0.0023	0.0049	0.081	0.058	0.02	0.017	-0.007	0.048	5.1	0.84	240	140	0.26	0.12
BMB5897	Zircon_Sample-059.FIN2	Fe-rich	700000		0.073	0.036	17	19	45	18	45	13	7100	830	294	41	29.9	4.5	1.01	0.15	14.3	2	1.89	0.38	0.524	0.097	0.0108	0.0089	-0.01	0.019	0.002	0.014	-0.014	0.023	0.005	0.024	0.0025	0.0042	-0.031	0.096	-0.001	0.012	0.012	0	0.0031	0.0029	-0.006	0.015	-0.000045	0.000022	-0.001	0.01	0.01	0.012	0.005	0.026	4.8	1.1	116	51	0.055	0.011
BMB5897	Zircon_Sample-060.FIN2	Fe-rich	700000		0.163	0.031	3.9	2.4	35.2	3.6	33.4	3	6490	750	286	58	44.9	6.9	1.08	0.2	18.6	3.1	1.3	0.24	0.51	0.17	0.005	0.019	0.0017	0.0067	-0.0017	0.0045	-0.009	0.028	0.024	0.038	0.0042	0.0069	-0.024	0.074	0.006	0.011	-0.003	0	0.001	0.0038	0.007	0.033	0.0027	0.0055	0.015	0.029	0.0021	0.003	0.016	0.052	3.57	0.42	390	400	0.158	0.078
BMB5897	Zircon_Sample-061.FIN2	Fe-rich	700000		0.114	0.042	7.4	6.5	48	14	40.1	4.8	10100	1400	348	44	55.7	4.7	1.7	1.2	25.8	2.6	2.15	0.71	0.62	0.14	0.011	0.014	0.007	0.011	-0.0032	0.0044	0.014	0.014	0.008	0.067	0.0026	0.0044	-0.19	0.26	-0.002	0.016	0.005	0	-0.001	0.0027	0.011	0.038	0.004	0.005	0.025	0.021	0.0038	0.0083	0.011	0.041	5.21	0.54	290	150	0.147	0.075
BMB5897	Zircon_Sample-062.FIN2	Fe-rich	700000		0.146	0.05	21	15	43.1	9.3	37.7	6.4	10840	750	428	28	58.7	3.2	1.5	1.2	25.5	5.5	1.7	0.14	0.59	0.14	0.01	0.017	-0.013	0.028	-0.0016	0.0071	0.036	0.084	0	0.035	0.0005	0.0031	-0.21	0.14	0.009	0.013	0.022	0	0.0008	0.0084	0.016	0.046	0.0057	0.0095	0.016	0.018	0.0068	0.0094	-0.014	0.016	3.45	0.58	570	450	0.188	0.088
BMB5897	Zircon_Sample-063.FIN2	Fe-rich	700000		0.059	0.021	46	46	130	150	74	51	7700	1100	470	120	75	14	7.8	4.1	29	11	2.57	0.36	0.96	0.25	-0.014	0.021	0.006	0.011	0.002	0.01	0.028	0.043	0.007	0.022	0.0001	0.0024	-0.18	0.19	-0.0051	0.0086	-0.015	0	0.002	0.0069	0.018	0.032	-0.000061	0.000039	0.003	0.017	0.015	0.017	-0.023	0.028	6.1	2.2	460	300	0.29	0.15
BMB5897	Zircon_Sample-064.FIN2	Fe-rich	700000		0.002	0.05	11.3	6	75	31	36.3	7.3	8190	510	620	120	77	14	2.67	0.73	44.6	5.6	2.17	0.52	0.89	0.25	-0.012	0.026	0.027	0.014	0.012	0.015	0.02	0.06	-0.012	0.035	0.007	0.01	-0.46	0.54	0.017	0.023	0.13	0	-0.0063	0.0032	0.007	0.066	-0.00011	0.000053	0.004	0.041	0.019	0.026	-0.004	0.063	6.4	2.7	159	82	0.64	0.78
BMB5897	Zircon_Sample-065.FIN2	Fe-rich	700000		0.025	0.043	58	15	173	19	78	10	6430	820	345	32	45.2	8.8	0.57	0.15	32	7.5	2.26	0.18	0.649	0.049	0.0062	0.003	-0.002	0.013	-0.0001	0.0055	0.013	0.046	0.016	0.035	0.0008	0.0026	0.046	0.043	0.007	0.021	0	0	0.0035	0.0063	0.022	0.042	-0.0000321	0.0000026	0.007	0.016	-0.000334	0.000027	0.004	0.035	5.83	0.92	190	130	0.115	0.077

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5898			CONCENTRATIONS																																																											
Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5898	Zircon_Sample-189.FIN2	Fe-rich	700000		0.065	0.065	16.3	6.8	43	20	23.7	9.1	1270	160	26.4	2.6	18.03	0.53	25	36	19.7	2.8	0.54	0.11	3.49	0.84	0.062	0.063	0.089	0.042	0.0063	0.0097	0.022	0.027	0.028	0.064	0.018	0.017	0.185	0.093	0.018	0.025	-0.006	0	0.001	0.013	-0.014	0.038	0.0017	0.004	-0.016	0.02	0.0064	0.0017	-0.01	0.016	1.269	0.087	100	180	2.1	2
BMB5898	Zircon_Sample-190.FIN2	Fe-rich	700000		0.07	0.013	35	20	274	55	126	16	1250	190	42.9	2.4	34.3	7.5	1.9	1.5	76	10	1.85	0.29	16.2	1.1	0.015	0.04	0.018	0.039	0.0047	0.0068	0.005	0.032	0.007	0.017	0.0064	0.0097	0.14	0.26	0.011	0.016	-0.013	0	-0.0007	0.0025	0.02	0.063	-0.00068	0.00029	0.036	0.046	-0.0013	0.00069	-0.007	0.032	5.4	1.4	203	90	0.39	0.36
BMB5898	Zircon_Sample-191.FIN2	Fe-rich	700000		0.077	0.05	33	12	301	56	130	24	1660	190	13.61	0.71	35.9	8	62	28	115	32	2	0.35	20.8	3.3	0.006	0.036	0.037	0.017	-0.0004	0.0068	0	0.064	-0.016	0.025	0.017	0.014	0	0.24	-0.005	0.015	-0.01	0	-0.002	0.018	0.045	0.031	0.012	0.015	-0.009	0.048	0.015	0.013	0.002	0.035	6.8	1.7	80	190	0.56	0.49
BMB5898	Zircon_Sample-192.FIN2	Fe-rich	700000		0.068	0.042	18.3	2.6	227	33	97	10	1001	73	34.2	3	26	3.3	60	90	72.6	8.4	1.4	0.17	12	1.2	0.025	0.021	-0.006	0.016	-0.0031	0.0058	-0.015	0.019	0.032	0.04	0.0035	0.0056	-0.019	0.086	0	0.012	0.003	0	0.003	0.01	0.016	0.039	0.0003	0.0017	-0.011	0.01	0.0039	0.003	0.007	0.019	3.86	0.39	58	56	0.33	0.18
BMB5898	Zircon_Sample-193.FIN2	Fe-rich	700000		1.33	0.28	382	62	35.2	7.9	9.6	5	3590	870	45.7	9.1	92	38	750	210	12.79	0.19	30	50	37	18	5.7	1.2	9.9	1.8	1.13	0.34	4.5	1.1	0.82	0.32	0.194	0.059	0.76	0.34	0.105	0.023	0.76	0	0.133	0.028	0.29	0.16	0.056	0.033	0.26	0.032	0.028	0.017	0.137	0.023	0.33	0.13	460	310	1170	460
BMB5898	Zircon_Sample-194.FIN2	Fe-rich	700000		0.015	0.037	23.7	5	301	94	102	21	1860	240	43.4	2.3	24.3	1.4	3.12	0.71	64	16	1.157	0.065	10.6	1.1	0	0.017	0.028	0.028	0.0107	0.009	0.031	0.027	0.031	0.052	0.008	0.0077	0.02	0.1	0.012	0.013	-0.039	0	-0.0047	0.005	0.055	0.054	0.0006	0.0014	0.016	0.018	0.0041	0.0053	0.0056	0.0041	5.15	0.52	50	130	0.62	0.23
BMB5898	Zircon_Sample-195.FIN2	Fe-rich	700000		0.001	0.04	5.5	2.3	57	16	28.5	5.6	1484	30	26.1	3.3	100	130	235	98	18.4	2.4	0.45	0.13	3.75	0.86	0.013	0.027	-0.0088	0.0089	-0.0014	0.0072	0.014	0.058	0.02	0.07	0.003	0.003	0.01	0.11	0.001	0.018	-0.027	0	0.0041	0.0092	0	0.041	0.0011	0.0036	-0.002	0.019	0.0031	0.0022	0.002	0.022	1.15	0.32	51	88	1.1	1.8
BMB5898	Zircon_Sample-202.FIN2	Fe-rich	700000		0.088	0.066	4.5	3.7	3.7	2	19	18	510	300	6.1	1.7	41	13	63	25	8.6	3.8	0.99	0.76	0.85	0.26	0.4	0.13	0.57	0.17	0.072	0.038	0.36	0.12	0.128	0.092	0.016	0.013	0.05	0.046	0.011	0.0026	0.12	0	0.016	0.012	0.086	0.055	0.0074	0.0077	0.026	0.048	0.0032	0.0039	0.014	0.029	0.409	0.095	260	140	55	25
BMB5898	Zircon_Sample-203.FIN2	Fe-rich	700000		1.6	2	1000	1200	13	14	10.3	8.9	560	270	8.9	3.6	23.6	6.2	127	37	5.7	2	3.5	1.3	23	45	2.7	2.7	6.1	5.9	0.67	0.6	2.7	2.5	0.68	0.62	0.077	0.073	0.4	0.67	0.075	0.073	0.53	0	0.095	0.077	0.35	0.23	0.032	0.038	0.25	0.21	0.045	0.059	0.2	0.26	0.132	0.065	160	180	138	55
BMB5898	Zircon_Sample-204.FIN2	Fe-rich	700000		0	0.034	11.8	4.1	80	10	39.8	4.1	872	35	31.2	3.3	25.6	4.3	44	12	28.9	4.9	0.596	0.076	4.66	0.64	0.195	0.039	0.302	0.088	0.03	0.01	0.095	0.066	0.069	0.079	0.0113	0.0084	0.032	0.013	0.007	0.017	0.014	0	0.0039	0.0072	0.02	0.057	0.0067	0.0037	0.01	0.024	0.0037	0.0042	-0.014	0.01	2.05	0.43	50	130	57	21
BMB5898	Zircon_Sample-205.FIN2	Fe-rich	700000		0.223	0.044	68	36	65.8	9.8	42.5	6.8	1030	120	31.1	4.5	90	17	234	53	23.3	8.6	4.5	3.3	5.8	1.5	0.69	0.15	1.31	0.31	0.159	0.033	0.66	0.13	0.102	0.03	0.0232	0.0053	0.128	0.08	0.016	0.0092	0.124	0	0.0162	0.0036	0.071	0.019	0.0051	0.0033	0.038	0.026	0.0059	0.0046	0.024	0.032	1.41	0.24	80	140	186	51
BMB5898	Zircon_Sample-206.FIN2	Fe-rich	700000		0.139	0.04	31.5	9.6	247	79	120	38	940	150	22.4	1.5	32.3	6.7	187	16	33.7	3.2	1.69	0.23	9.3	2.7	0.826	0.092	1.26	0.28	0.134	0.036	0.57	0.22	0.085	0.055	0.029	0.017	0.04	0.19	0.017	0.021	0.087	0	0.024	0.015	0.086	0.058	0.0119	0.0086	0.037	0.031	0.009	0.013	0.068	0.042	4.9	1.5	60	120	74	13
BMB5898	Zircon_Sample-207.FIN2	Fe-rich	700000		0.35	0.16	86.8	8.5	8.4	6.1	6.3	3.3	800	110	11.7	1.4	87	33	461	51	3.8	2.5	5.5	5.2	1	0.55	1.324	0.077	2.45	0.3	0.277	0.07	0.7684	0.0096	0.2	0.14	0.047	0.015	0.048	0.053	0.013	0.015	0.172	0	0.038	0.025	0.096	0.054	0.0135	0.0022	0.138	0.064	0.0066	0.0083	0.0524	0.003	0.2	0.18	1070	610	530	160
BMB5898	Zircon_Sample-208.FIN2	Fe-rich	700000		0.018	0.022	170	280	269	29	116	12	829	70	16.2	2.6	29	17	75	59	57.6	5.5	1.6	0.38	11.2	1.6	0.08	0.11	0.18	0.29	0.026	0.042	0.22	0.39	-0.005	0.014	-0.000342	0.000075	0.08	0.13	0.0075	0.0053	0	0	0.0015	0.0053	0.006	0.048	0	0.0011	-0.006	0.018	0.0031	0.0026	0.018	0.022	5.02	0.51	110	150	9	13
BMB5898	Zircon_Sample-215.FIN2	Fe-rich	700000		-0.024	0.094	9.7	5.7	40.9	7.5	20.7	4.5	754	88	18.6	2.1	18	1.3	7.7	8.3	11.2	1.2	0.14	0.1	3.02	0.84	-0.05	0.082	0.036	0.051	-0.016	0.015	-0.02	0.16	0.045	0.046	0.019	0.02	-0.04	0.46	-0.004	0.095	-0.1	0	0.011	0.025	0.03	0.13	0.0023	0.0063	-0.031	0.062	0.015	0.019	0.06	0.11	0.96	0.13	100	130	0.093	0.06
BMB5898	Zircon_Sample-216.FIN2	Fe-rich	700000		-0.053	0.095	8.3	3	27.8	2.3	20.6	3.5	710	120	16.87	0.61	21.71	0.89	13.8	5.5	7.2	1.5	0.23	0.16	2.52	0.71	-0.02	0.1	-0.01	0.019	0.001	0.012	0.04	0.22	0.07	0.16	0.019	0.041	-0.2	0.39	0.01	0.033	-0.05	0	0.027	0.035	0.05	0.13	0.0089	0.0071	0.12	0.13	0.025	0.025	-0.003	0.043	0.648	0.085	130	350	0.156	0.093
BMB5898	Zircon_Sample-217.FIN2	Fe-rich	700000		-0.06	0.11	5.4	6.2	34.6	6.7	25.5	3.9	610	130	12.5	2.1	17.2	2.8	180	100	7.2	1.4	0.34	0.14	3.14	0.43	-0.09	0.12	-0.014	0.049	-0.001	0.031	0.09	0.15	0.1	0.15	0.027	0.044	0.33	0.6	0.003	0.031	0.104	0	-0.013	0.01	0.11	0.13	0.0072	0.0073	-0.016	0.078	0.0104	0.0092	-0.036	0.074	0.6	0.22	30	110	0.57	0.33
BMB5898	Zircon_Sample-218.FIN2	Fe-rich	700000		-0.111	0.075	9.8	4.7	36.7	2.6	21.79	0.98	674	30	16.87	0.41	16.22	0.4	2.43	0.33	9.5	1.3	0.47	0.25	3.214	0.051	-0.075	0.055	-0.033	0.069	0.02	0.027	-0.13	0.2	-0.017	0.087	0.01	0.013	0.1	0.66	0.047	0.072	0.07	0	0.041	0.019	-0.04	0.17	0.017	0.014	0.09	0.11	0.0076	0.0088	0.03	0.2	0.972	0.093	-58	56	0.044	0.064
BMB5898	Zircon_Sample-219.FIN2	Fe-rich	700000		-0.07	0.14	47	75	63	26	31.8	4.1	640	15	14.823	0.094	12.3	2.6	4.27	0.65	17.3	3.1	0.401	0.075	4.2	1.2	-0.017	0.041	-0.046	0.044	-0.014	0.024	-0.09	0.15	-0.02	0.11	0.008	0.01	-0.35	0.6	0.01	0.11	0.06	0	-0.017	0.017	-0.05	0.13	-0.00166	0.00079	-0.02	0.13	0.003	0.011	-0.038	0.082	1.55	0.84	-34	89	0.076	0.056
BMB5898	Zircon_Sample-220.FIN2	Fe-rich	700000		-0.134	0.094	9.5	6.3	39.9	4.8	18.4	2.8	532	68	13	1.7	18.5	1.9	1.65	0.28	9.2	3	0.32	0.23	2.48	0.41	-0.093	0.069	0.005	0.04	-0.008	0.015	-0.08	0.11	-0.024	0.077	0.025	0.018	-0.11	0.18	0.01	0.055	0.029	0	0.004	0.023	0	0.21	0.0042	0.0096	-0.025	0.084	0.0199	0.0084	0.04	0.12	0.457	0.069	40	130	0.074	0.083
BMB5898	Zircon_Sample-221.FIN2	Fe-rich	700000		-0.13	0.18	280	170	79	12	38.3	1.9	732	96	15.5	1.6	13.6	1.1	7.8	1	12.2	4.3	0.6	0.19	5.67	0.69	-0.016	0.083	-0.023	0.072	-0.007	0.027	0.05	0.16	0.04	0.14	0.018	0.026	-0.09	0.63	0	0.037	0.02	0	0.012	0.028	0.21	0.16	0.022	0.028	-0.117	0.055	0.016	0.02	0.007	0.062	1.46	0.4	50	200	0.25	0.19
BMB5898	Zircon_Sample-228.FIN2	Fe-rich	700000		0.01	0.13	5.4	3.6	32.7	6.9	19	4.3	640	110	19.8	3.9	19.3	3.7	2.11	0.76	10.4	3	0.3	0.28	2.88	0.46	-0.04	0.034	0.026	0.058	-0.004	0.018	-0.05	0.17	0.124	0.083	0.032	0.026	-0.15	0.3	0.026	0.04	0.04	0	-0.037	0.023	-0.06	0.18	0.023	0.022	-0.044	0.087	0.015	0.01	0.077	0.04	1.15	0.29	-40	160	0.101	0.087
BMB5898	Zircon_Sample-229.FIN2	Fe-rich	700000		-0.07	0.18	8.2	3.8	46.3	5.3	27	3.8	733	53	14.8	1.2	13.8	1.3	1.97	0.3	11.5	1.8	0.49	0.33	3.51	0.31	0.03	0.054	-0.032	0.022	-0.002	0.044	0	0.13	0.1	0.19	0.013	0.011	-0.02	0.59	0	0.018	-0.09	0	-0.034	0.024	0.19	0.2	0.0052	0.009	-0.018	0.095	0.012	0.01	0.042	0.055	1.35	0.3	-57	44	0.045	0.034
BMB5898	Zircon_Sample-230.FIN2	Fe-rich	700000		-0.107	0.082	7.6	5.5	53	14	26.9	4.6	644	78	14.2	1.4	14.2	2.2	1.9	1.3	13.9	1.9	0.35	0.17	3.56	0.58	-0.064	0.059	0.026	0.028	-0.014	0.024	-0.04	0.15	-0.033	0.016	0.02	0.017	0.01	0.11	0.013	0.026	0.09	0	0.018	0.026	0.149	0.088	0.0083	0.0072	-0.017	0.089	0.004	0.011	-0.021	0.035	1.51	0.27	50	130	0.06	0.046
BMB5898	Zircon_Sample-231.FIN2	Fe-rich	700000		-0.074	0.055	5	3.6	64.9	8	31.2	5	580	120	11.5	0.91	11.1	1.2	2.5	1.6	21.4	4.3	0.58	0.1	3.8	0.55	-0.026	0.089	-0.003	0.038	0.013	0.028	0.06	0.16	0.05	0.13	0.028	0.025	-0.08	0.33	-0.011	0.043	-0.03	0	-0.006	0.016	0.06	0.23	0.012	0.012	0.006	0.08	0.0002	0.0087	0.059	0.087	2.06	0.45	-40	140	0.144	0.069
BMB5898	Zircon_Sample-232.FIN2	Fe-rich	700000		-0.09	0.13	3500	3200	580	430	56	7.5	276	42	11.2	1.3	8.6	1	0.67	0.86	72	39	0.91	0.24	5.31	0.77	0.004	0.049	-0.036	0.024	0.023	0.017	0.06	0.11	-0.003	0.077	0.005	0.0078	-0.042	0.058	0.03	0.059	-0.003	0	0.008	0.025	0.06	0.13	0.006	0.015	0.062	0.063	0.0041	0.0076	0.035	0.08	7.9	4.1	10	200	0.044	0.042
BMB5898	Zircon_Sample-233.FIN2	Fe-rich	700000		-0.09	0.12	8	4	27.2	4.5	21.7	2.1	518	44	15	1.7	21.3	3.2	1.58	0.37	9.9	2.9	0.45	0.31	3.3	1.3	0.024	0.028	0.008	0.059	-0.009	0.022	0.1	0.13	0.03	0.15	0.01	0.013	0.14	0.51	-0.007	0.03	0.05	0	-0.001	0.019	0.22	0.15	0.014	0.013	0.033	0.069	0.0028	0.0098	0.077	0.074	0.99	0.41	-70	110	0.011	0.031
BMB5898	Zircon_Sample-234.FIN2	Fe-rich	700000		-0.06	0.1	11.9	4.7	60.5	7.3	29.3	2.7	523	56	13.6	1	16.8	1.5	2.02	0.92	18.4	5.3	0.75	0.17	3.83	0.76	0.1	0.12	0.023	0.069	0	0.018	0.06	0.13	-0.011	0.091	0.01	0.01	0.12	0.37	-0.008	0.051	0.042	0	0.011	0.038	0.23	0.26	0.012	0.012	-0.017	0.083	0.023	0.013	0.027	0.083	1.84	0.61	0	130	0.072	0.049
BMB5898	Zircon_Sample-241.FIN2	Fe-rich	700000		-0.16	0.13	18.9	6.5	73	12	33.4	7.7	649	45	14.2	1.2	13.1	1.1	3.6	2.8	22.3	5.5	0.37	0.23	4.5	1.1	-0.092	0.046	0.051	0.075	-0.015	0.031	-0.16	0.16	0.039	0.084	0.059	0.055	0.14	0.44	0.018	0.076	-0.04	0	-0.018	0.032	0.05	0.37	0.0081	0.0075	0.02	0.13	0.012	0.022	0.053	0.083	2.62	0.86	18	66	0.17	0.2
BMB5898	Zircon_Sample-242.FIN2	Fe-rich	700000		0.07	0.1	18.2	9	47.5	7.6	21.2	5.7	623	82	16.8	4.1	18.3	5.2	5	5.7	16.1	3.2	0.56	0.56	3.5	1.5	0.04	0.13	0.053	0.074	-0.007	0.013	-0.01	0.18	0.09	0.2	0.025	0.026	-0.21	0.5	-0.037	0.062	-0.12	0	-0.01	0.016	-0.17	0.19	0.005	0.015	0.018	0.092	0.0125	0.0045	-0.009	0.06	1.63	0.26	30	190	0.1	0.13
BMB5898	Zircon_Sample-243.FIN2	Fe-rich	700000		-0.01	0.12	14.8	5.3	69.1	8.1	35.8	2.7	606	42	15.1	1.6	12	2	2.9	1.6	20.5	2.5	0.78	0.35	4.6	0.57	0.009	0.078	0.014	0.074	0.025	0.054	0.05	0.11	0.06	0.19	0.014	0.013	-0.29	0.56	0.038	0.044	0	0	0.005	0.026	-0.03	0.18	-0.00232	0.00058	0.007	0.069	0.0009	0.0077	-0.048	0.063	2.87	0.62	100	110	0.065	0.069
BMB5898	Zircon_Sample-244.FIN2	Fe-rich	700000		0.055	0.055	25.6	9.8	74.9	3.5	40.5	5.8	860	470	11.5	2.3	11.82	0.99	3.6	2.7	24.4	7.1	0.63	0.3	4.12	0.57	0.059	0.091	0.015	0.048	-0.014	0.024	-0.019	0.071	0.03	0.1	0.025	0.033	-0.2	0.3	0.01	0.061	-0.03	0	0.01	0.016	0.09	0.19	0.0016	0.0076	-0.016	0.076	0.017	0.014	0.09	0.18	2.54	0.3	-40	77	0.074	0.053
BMB5898	Zircon_Sample-245.FIN2	Fe-rich	700000		-0.088	0.037	11.9	7.1	50.1	5	28.7	3.5	920	120	14.5	1.5	13.3	1.5	1.41	0.73	11.8	2.1	0.72	0.37	3.34	0.51	-0.03	0.067	-0.047	0.096	0.004	0.069	-0.01	0.18	-0.036	0.094	0.008	0.019	0.22	0.46	-0.005	0.045	-0.08	0	-0.0034	0.0091	-0.08	0.12	0.011	0.018	0.051	0.093	0.014	0.025	0.082	0.095	1.42	0.19	-150	150	0.136	0.075
BMB5898	Zircon_Sample-246.FIN2	Fe-rich	700000		-0.039	0.091	7.8	5.2	45.1	2.7	30.6	4.4	634	65	12.99	0.97	13.57	0.78	2.7	1.5	15.1	1.8	0.46	0.19	3.57	0.37	-0.041	0.081	0.013	0.06	-0.014	0.019	0.032	0.085	0.002	0.076	0.018	0.015	-0.18	0.74	0.006	0.035	0.026	0	0.02	0.018	-0.23	0.15	0.01	0.011	0.08	0.15	0.026	0.035	-0.032	0.092	1.59	0.27	10	150	0.13	0.07
BMB5898	Zircon_Sample-247.FIN2	Fe-rich	700000		-0.16	0.13	9	5	38.7	5.7	27.2	6.1	799	93	14.07	0.8	17.6	1.4	1.52	0.86	10.37	0.74	1	0.2	3.6	1.1	-0.039	0.081	-0.002	0.067	0.022	0.014	-0.06	0.24	0	0.14	0.031	0.025	0.31	0.32	0.051	0.043	0.08	0	0.036	0.017	0.03	0.23	0.0009	0.0062	0.006	0.032	0.022	0.03	0.12	0.16	1.39	0.36	120	270	0.25	0.25
BMB5898	Zircon_Sample-254.FIN2	Fe-rich	700000		-0.005	0.093	6.5	2.7	47.9	2.8	26.8	4.7	527	30	12.19	0.47	13.7	0.69	0.88	0.44	10.5	2.8	0.58	0.26	2.67	0.3	0.057	0.027	-0.01	0.075	0.01	0.036	-0.03	0.15	0.077	0.078	0.0053	0.0082	-0.1	0.56	-0.01	0.049	0.009	0	0	0.013	0.24	0.21	0.012	0.027	-0.008	0.061	0.015	0.015	-0.018	0.036	1.25	0.31	80	130	0.072	0.047
BMB5898	Zircon_Sample-255.FIN2	Fe-rich	700000		0.058	0.092	15.9	2.7	124	34	47.7	9.6	358	75	11.6	1.2	9.73	0.92	2.1	1.2	37.8	9.4	0.88	0.14	4.6	1.1	0.008	0.043	0.026	0.071	0.004	0.019	-0.013	0.078	0.08	0.12	0.023	0.017	0.18	0.13	0.013	0.039	0.02	0	-0.011	0.03	0.1	0.17	0.015	0.014	0.1	0.1	0.014	0.022	0.01	0.15	4.6	1.5	60	150	0.14	0.19
BMB5898	Zircon_Sample-256.FIN2	Fe-rich	700000		-0.081	0.039	40	36	220	180	56	22	740	350	12.1	2.2	12.7	4.7	3.7	4	72	62	1.07	0.41	5.2	1.4	0.04	0.11	0.008	0.03	0.014	0.035	0.15	0.19	-0.058	0.085	0.015	0.033	0.05	0.61	0.053	0.063	0.07	0	-0.001	0.024	-0.034	0.088	0.021	0.022	0.061	0.065	0.032	0.031	-0.05	0.12	6	2.9	91	69	0.118	0.062
BMB5898	Zircon_Sample-257.FIN2	Fe-rich	700000		-0.035	0.094	13.7	2.7	83	16	38.3	6.2	449	65	11.48	0.54	10.02	0.72	2.7	1.5	27.7	5.4	1.06	0.23	3.96	0.5	-0.004	0.048	-0.042	0.057	0.011	0.011	0.02	0.21	0.002	0.084	0.019	0.018	0	0.37	-0.021	0.053	0.08	0	-0.002	0.023	0.09	0.2	0.0049	0.0088	0.08	0.1	0.009	0.012	-0.049	0.058	2.94	0.69	150	120	0.066	0.046
BMB5898	Zircon_Sample-258.FIN2	Fe-rich	700000		-0.024	0.054	12.7	4	70.1	1.9	38	6.9	542	17	11	1.3	9.9	0.44	2.08	0.72	20.9	3.2	0.65	0.26	4.11	0.52	-0.009	0.056	0.037	0.053	0.003	0.016	0.02	0.13	-0.027	0.083	0.027	0.028	0.52	0.46	0.009	0.011	-0.109	0	0	0.028	-0.17	0.12	0.012	0.013	0.17	0.22	0.012	0.014	-0.012	0.076	2.28	0.3	47	84	0.032	0.032
BMB5898	Zircon_Sample-259.FIN2	Fe-rich	700000		-0.086	0.066	24	22	68	6.7	36.7	3.4	3000	3700	13.3	1.1	14.52	0.98	2.59	0.53	16.5	2	0.62	0.15	3.59	0.34	-0.014	0.023	0.013	0.061	0.008	0.025	0.11	0.17	0.135	0.095	0.008	0.012	0.49	0.5	-0.004	0.034	-0.019	0	-0.001	0.016	0	0.12	0.011	0.02	0.07	0.1	0.022	0.017	-0.063	0.041	2.24	0.24	40	180	0.036	0.023
BMB5898	Zircon_Sample-260.FIN2	Fe-rich	700000		-0.137	0.051	8.7	5	33.5	3.6	21.6	5.7	699	17	16	1.2	15.7	1	2.04	0.61	8.3	1.7	0.39	0.33	2.47	0.58	0.03	0.14	0.01	0.12	0.004	0.028	-0.09	0.11	0.021	0.097	0.0017	0.0062	-0.06	0.28	-0.016	0.065	-0.037	0	-0.008	0.015	0.01	0.34	0.0073	0.0081	0.13	0.16	0.009	0.013	-0.029	0.043	1.16	0.13	110	130	0.058	0.063

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5899			CONCENTRATIONS																																																											
Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5899	Zircon_Sample-228.FIN2	Fe-rich	700000		-0.001	0.027	-3.1	3.6	3.1	0.32	4.9	2	54	4.4	198	13	97.8	7.1	12.5	2.3	17.5	2.6	1.94	0.99	2.98	0.47	0.09	0.11	-0.037	0.048	-0.016	0.03	0.08	0.18	0.09	0.18	0.008	0.016	-0.06	0.73	0.015	0.07	0.19	0	0.006	0.02	0.07	0.19	0.01	0.023	0.05	0.14	0.036	0.052	0.05	0.16	0.48	0.12	-79	98	0.09	0.1
BMB5899	Zircon_Sample-229.FIN2	Fe-rich	700000		-0.1	0.15	3.6	6.9	2.42	0.25	1.9	3	58.3	5.7	212.6	6.5	103.6	8.6	300	360	15.3	1.6	2.34	0.27	3.97	0.88	-0.024	0.061	0.08	0.12	0.02	0.04	0.14	0.26	0.12	0.15	0.038	0.048	-0.14	0.79	-0.004	0.065	0.114	0	-0.003	0.017	0.13	0.16	0.009	0.012	-0.033	0.053	0.009	0.011	0.06	0.16	0.322	0.067	146	67	0.15	0.16
BMB5899	Zircon_Sample-230.FIN2	Fe-rich	700000		-0.06	0.15	-1.4	2.5	2.27	0.36	5	2.3	54.4	3.8	214	18	108	11	2.9	2.5	18.7	2.6	3.24	0.12	4.2	1.3	0.016	0.065	0.048	0.069	-0.001	0.043	-0.11	0.15	0.07	0.17	0.038	0.036	-1	0.38	0.012	0.051	0.05	0	0.052	0.034	0.1	0.22	-0.0004	0.0085	0.08	0.19	0.009	0.012	0.12	0.24	0.41	0.12	110	120	0.065	0.068
BMB5899	Zircon_Sample-231.FIN2	Fe-rich	700000		0.05	0.13	3.8	2.7	2.32	0.2	3.2	2.9	48.4	3.5	193	11	110	18	5.1	7	21.4	5.8	3.5	1.3	4.6	1.9	-0.054	0.057	0.004	0.062	0.045	0.043	0.07	0.25	-0.15	0.13	0.018	0.029	0.5	2.6	0.028	0.089	0.07	0	-0.005	0.034	0.03	0.1	0.006	0.011	0.05	0.17	0.052	0.075	0.08	0.11	0.58	0.16	-110	75	0.052	0.055
BMB5899	Zircon_Sample-232.FIN2	Fe-rich	700000		0.02	0.1	2.3	5.7	1.55	0.24	4.4	1.8	36.4	2.3	216	17	102.7	6.2	3.4	1.7	23.7	4	3.14	0.77	4.19	0.81	0.036	0.089	-0.023	0.094	-0.022	0.014	0	0.24	0.12	0.15	0.03	0.039	0.9	2.1	0.022	0.083	0.25	0	0.015	0.023	0.04	0.12	0.027	0.028	-0.081	0.078	0.011	0.019	-0.004	0.094	0.46	0.11	22	71	0.015	0.037
BMB5899	Zircon_Sample-233.FIN2	Fe-rich	700000		1.3	2.2	7	12	3.23	0.2	44	51	56.7	8.3	158	31	103.6	9.3	2400	4600	42	37	2.72	0.89	3.8	1.4	0.06	0.24	-0.21	0.25	0.14	0.26	-1	1.8	0.25	0.57	0.017	0.05	2	4.8	-0.06	0.17	-0.9	1	0.008	0.024	0.12	0.33	0.09	0.15	0.04	0.3	0.003	0.027	0.17	0.25	0.35	0.1	40	100	23	20
BMB5899	Zircon_Sample-234.FIN2	Fe-rich	700000		-0.03	0.14	-4.8	2.5	2.98	0.17	3.7	2.2	53.7	4.2	193	17	101	14	2.5	1.2	19.3	3	3.16	0.52	3.68	0.89	0.04	0.13	-0.03	0.1	0.002	0.058	0.05	0.23	0.09	0.23	0.022	0.024	-2.54	0.88	0.054	0.057	0.08	0	0.002	0.027	0.04	0.16	0.028	0.014	0.21	0.23	0.017	0.02	0.02	0.12	0.34	0.1	-33	72	-0.00307	0.00038
BMB5899	Zircon_Sample-241.FIN2	Fe-rich	700000		-0.037	0.057	3.8	6.7	4.27	0.46	4.5	2.6	63.3	9.6	192	10	106.7	8.3	3.9	2.1	21.2	7.8	3.9	1.2	4.9	1.6	-0.05	0.16	0.03	0.1	0.033	0.06	0	0.32	-0.07	0.15	0.02	0.025	1.1	3.5	-0.004	0.096	-0.14	0	0.027	0.057	0.14	0.21	0.007	0.012	-0.02	0.11	0.006	0.021	-0.039	0.059	0.49	0.28	150	110	0.12	0.2
BMB5899	Zircon_Sample-242.FIN2	Fe-rich	700000		0.013	0.059	-1.1	1.6	0.33	0.084	2.3	1.1	14.43	0.55	137	18	96.1	3.6	2	1.1	27.8	4.7	270	530	6.6	2.7	0.052	0.061	-0.046	0.089	-0.017	0.03	0.27	0.2	0.04	0.3	0.062	0.019	0	1.4	-0.024	0.09	0.05	0	-0.011	0.012	-0.07	0.15	0.01	0.015	0	0.13	0.036	0.023	0.15	0.15	0.344	0.051	93	54	-0.0037	0.001
BMB5899	Zircon_Sample-243.FIN2	Fe-rich	700000		-0.12	0.26	-1.8	7.2	1.35	0.16	3.6	2.8	44.7	1.6	173	12	98.8	8.3	2.09	0.78	20.6	2.6	3.91	0.64	6	1.4	-0.03	0.12	-0.093	0.049	0.015	0.041	-0.02	0.18	-0.1	0.18	0.029	0.029	0.1	2.1	0.05	0.1	-0.14	0	-0.012	0.025	0.21	0.36	0.033	0.036	0.33	0.56	0.033	0.041	0.07	0.15	0.45	0.22	80	200	0.13	0.19
BMB5899	Zircon_Sample-244.FIN2	Fe-rich	700000		0.03	0.14	1.6	6.4	1.854	0.096	6	2.1	47.4	3.2	160	12	111	24	4.6	7.2	25.2	7.6	3.9	1.8	6.1	2.7	-0.01	0.1	-0.039	0.046	-0.003	0.055	-0.06	0.32	-0.08	0.13	0.028	0.026	-0.6	1.4	-0.041	0.031	-0.15	0	0.0052	0.0096	-0.01	0.17	0.02	0.027	0.143	0.098	0.011	0.014	0.14	0.19	0.61	0.26	130	180	0.037	0.063
BMB5899	Zircon_Sample-245.FIN2	Fe-rich	700000		0.02	0.15	2.5	4.4	0.623	0.087	0.2	1.5	13.1	1.9	63.9	5.9	85.4	8.8	2.3	2.6	7.8	3.1	2.31	0.32	2.87	0.71	0.038	0.038	-0.012	0.054	-0.009	0.024	0	0.13	0.012	0.072	0.047	0.036	0.12	0.64	0.038	0.096	-0.01	0	0.009	0.027	-0.092	0.087	0.026	0.022	0	0.12	0.042	0.017	-0.008	0.049	0.19	0.12	-10	130	0.04	0.068
BMB5899	Zircon_Sample-246.FIN2	Fe-rich	700000		-0.005	0.091	4.9	6.1	1.43	0.12	3	2.3	36.5	2.5	174.1	8.7	113	16	2.9	3.4	24.5	8.7	3.03	0.88	5.4	2.1	-0.023	0.092	0.041	0.094	-0.013	0.059	0.16	0.32	-0.06	0.12	0.018	0.038	0.57	0.77	-0.006	0.086	0.29	1	0.018	0.059	0.15	0.16	0.034	0.024	0.12	0.16	0.022	0.025	0.28	0.28	0.42	0.21	-1	62	0.052	0.05
BMB5899	Zircon_Sample-247.FIN2	Fe-rich	700000		0.007	0.053	2.5	3.5	2.92	0.44	4.3	1.1	72.1	4.2	154	12	102.9	6.3	1.53	0.84	22.9	1.7	3.6	0.66	4.96	0.67	0.02	0.16	0.006	0.078	0.006	0.034	-0.07	0.26	-0.117	0.078	0.009	0.02	-0.66	0.64	0.04	0.12	0.21	0	0.001	0.015	0.07	0.19	0.026	0.024	-0.02	0.15	0.022	0.023	0.047	0.071	0.44	0.2	-24	75	0.067	0.086
BMB5899	Zircon_Sample-254.FIN2	Fe-rich	700000		0.11	0.11	-1.4	3.1	1.18	0.33	1.5	4	22.2	2.1	151	11	116	13	2.7	1.8	26.1	4	3.96	0.85	6.1	1.3	-0.055	0.098	-0.026	0.086	-0.028	0.024	0.19	0.1	0.02	0.19	0.049	0.025	0.04	0.55	-0.002	0.071	-0.04	0	-0.007	0.026	0.21	0.19	0.036	0.032	0.02	0.14	-0.0047	0.0012	-0.063	0.079	0.39	0.13	7	87	0.039	0.052

BMB5899	Zircon_Sample-255.FIN2	Fe-rich	700000		0.11	0.11	2.1	8.4	3.65	0.31	5.1	5.7	140	14	77.4	7.1	83	18	7.1	6.6	25.1	7.1	4.2	1.7	5.7	1.7	0.07	0.1	0.029	0.094	0.01	0.03	0.03	0.16	0.09	0.24	0.018	0.041	-0.22	0.67	0.032	0.034	-0.024	0	-0.005	0.02	-0.04	0.11	0.003	0.013	-0.03	0.11	0.025	0.021	0.16	0.18	0.316	0.074	24	70	0.09	0.17
BMB5899	Zircon_Sample-256.FIN2	Fe-rich	700000		-0.057	0.095	2	7.1	4.2	0.39	2.41	0.87	162	11	60.3	3.8	74	6.4	2	1	16.2	2.4	2.63	0.57	4.11	0.59	0.08	0.14	0.023	0.086	0.017	0.051	-0.03	0.091	0.13	0.17	0.047	0.05	0.15	0.32	-0.029	0.055	-0.03	0	-0.016	0.011	0.085	0.065	0.007	0.013	0.02	0.12	0.005	0.012	0.133	0.06	0.286	0.076	54	76	0.07	0.14
BMB5899	Zircon_Sample-257.FIN2	Fe-rich	700000		-0.04	0.22	-4.8	1.5	0.82	0.13	2.8	2.2	48.8	6.7	128	13	96	14	3.8	2.9	31.9	6.8	5.34	0.84	8.9	1.7	-0.07	0.07	0.054	0.091	-0.033	0.02	0.04	0.28	-0.056	0.098	0.013	0.018	0.15	0.41	-0.05	0.054	-0.11	0	-0.0088	0.0097	0.01	0.14	0.011	0.018	0.045	0.087	0.021	0.031	0.16	0.13	0.183	0.037	-22	69	0.009	0.026
BMB5899	Zircon_Sample-258.FIN2	Fe-rich	700000		-0.067	0.096	-1.4	4.6	0.95	0.23	4.3	3.5	34.9	5.6	131	13	102	11	5.1	2.6	27.8	5.1	5.4	1.1	9.2	1.8	0	0.12	0.006	0.099	-0.001	0.035	0.13	0.15	-0.07	0.083	-0.0066	0.0018	0.04	0.53	-0.027	0.024	0.08	0	0.012	0.022	0.01	0.14	0.007	0.014	-0.05	0.067	0.012	0.015	0.14	0.2	0.31	0.1	-71	54	0.062	0.067
BMB5899	Zircon_Sample-259.FIN2	Fe-rich	700000		-0.07	0.24	2	3	1.87	0.069	7.5	1.9	53.5	2.7	134.5	8.2	101	8.1	3.11	0.91	19.6	1.8	3.16	0.56	5.37	0.77	0.032	0.096	0.09	0.14	-0.016	0.034	-0.16	0.13	-0.13	0.13	0.029	0.021	0.29	0.5	-0.06	0.16	-0.13	0	0	0.025	0.02	0.22	0.011	0.014	-0.03	0.14	0.008	0.017	0.04	0.17	0.46	0.21	-30	110	0.36	0.66
BMB5899	Zircon_Sample-260.FIN2	Fe-rich	700000		0.071	0.06	-2.9	4.4	0.96	0.22	0.7	3.7	34.6	2.4	116.9	6.1	93.2	5	3.5	2.4	22.1	2.4	3.47	0.74	4.34	0.83	-0.001	0.071	0.062	0.055	0.006	0.031	0.1	0.14	0.04	0.17	0.024	0.037	-0.22	0.37	0.03	0.036	0.09	0	0.022	0.028	-0.02	0.12	0.002	0.012	0.02	0.16	0.022	0.033	0.01	0.13	0.23	0.13	45	30	0.024	0.034
BMB5899	Zircon_Sample-267.FIN2	Fe-rich	700000		0.05	0.084	1.5	3.5	2.31	0.13	2.9	1.4	57.3	5.1	150	10	103.5	4.8	9.2	7.1	13.8	2.7	2.98	0.53	2.76	0.18	0.006	0.012	0.004	0.038	-0.006	0.031	0.02	0.19	-0.068	0.058	0.005	0.022	-0.2	0.14	0.013	0.072	0.09	0	0.012	0.021	0.01	0.14	-0.0004	0.0083	0.031	0.073	0.01	0.018	-0.096	0.034	0.299	0.099	70	120	0.053	0.028
BMB5899	Zircon_Sample-268.FIN2	Fe-rich	700000		0.29	0.29	0.4	7.2	2.74	0.31	2.7	2.6	64.7	2.7	143.7	6.2	100	7.1	6	4.3	20.3	6.9	2.8	1.2	4.8	2	-0.016	0.09	0	0.15	0.004	0.075	0.15	0.55	0.14	0.19	0.027	0.029	0.05	0.29	-0.046	0.055	-0.05	0	-0.013	0.03	0.11	0.15	0.014	0.014	0	0.19	0.021	0.024	-0.002	0.055	0.46	0.35	-10	110	0.09	0.13
BMB5899	Zircon_Sample-269.FIN2	Fe-rich	700000		0.03	0.23	-3.4	7	2.27	0.28	0.5	2.4	89.2	1.6	56.4	3.4	70	4.6	2.9	1	11.5	3	2.9	1.1	4.26	0.97	0.044	0.094	0.012	0.061	-0.002	0.044	-0.01	0.19	0.01	0.1	0.033	0.054	0.28	0.28	-0.009	0.038	0.04	0	-0.006	0.012	0.06	0.1	0.002	0.013	-0.066	0.093	0.004	0.019	0.141	0.03	0.19	0.15	10	120	0.21	0.4
BMB5899	Zircon_Sample-270.FIN2	Fe-rich	700000		0.1	0.11	-0.2	5.8	3.16	0.44	5.5	2.1	98.9	6.5	140.1	7.9	97	12	1.38	0.61	26.9	3.6	4.19	0.66	5.76	0.8	0.04	0.16	0.02	0.17	-0.015	0.028	0.38	0.22	-0.01	0.1	0.029	0.022	-0.06	0.35	0.05	0.063	-0.09	0	-0.003	0.026	0.02	0.26	0.013	0.022	-0.04	0.11	0.007	0.017	0.197	0.098	0.52	0.19	18	63	0.13	0.26
BMB5899	Zircon_Sample-271.FIN2	Fe-rich	700000		0.077	0.04	-0.4	5	2.9	0.36	1.9	1.6	120	9.4	134.6	8.3	104.8	4.6	64	73	23.6	5.7	4.98	0.52	6.05	0.56	0.087	0.048	0.01	0.036	0.013	0.046	-0.11	0.11	-0.095	0.076	0.006	0.016	0.04	0.41	0.04	0.11	-0.092	0	0.003	0.029	0.03	0.17	0.005	0.026	-0.03	0.14	0.012	0.02	0.05	0.12	0.284	0.077	25	47	0.032	0.071
BMB5899	Zircon_Sample-272.FIN2	Fe-rich	700000		0	0.17	3.7	2.7	3.67	0.39	-0.7	2.4	231	16	62.8	3.8	79.9	3.5	2.42	0.75	15.9	1.2	2.21	0.44	3.28	0.36	0.007	0.061	0.05	0.12	0.071	0.063	0.08	0.37	-0.04	0.19	0.033	0.031	0.24	0.33	-0.027	0.055	-0.12	0	-0.026	0.026	0	0.3	-0.003	0.011	0.01	0.14	0.018	0.019	0.086	0.061	0.202	0.086	-10	130	0.14	0.21
BMB5899	Zircon_Sample-273.FIN2	Fe-rich	700000		0.23	0.27	5.1	7.7	2.7	0.65	7.3	7.7	147	12	72	15	410	160	21500	9900	20	11	3.09	0.89	4.7	2.1	0.1	0.1	0.05	0.1	0.016	0.065	-0.04	0.28	-0.136	0.073	0.025	0.04	0.07	0.13	0.05	0.11	0	0	-0.033	0.025	0.19	0.13	0.009	0.019	-0.03	0.19	0.015	0.026	0.21	0.3	0.123	0.066	270	240	4.4	2.2
BMB5899	Zircon_Sample-280.FIN2	Fe-rich	700000		0.1	0.16	-3	10	0.666	0.089	3.2	4.1	38.8	1.6	143.9	5.4	94.7	8.5	7.2	3.1	34.5	7.1	4.29	0.65	7.17	0.6	-0.03	0.16	-0.058	0.095	-0.019	0.043	-0.17	0.24	-0.08	0.17	0.021	0.025	0.37	0.59	-0.002	0.066	-0.08	0	0.005	0.023	-0.039	0.05	0.002	0.024	0	0.13	-0.0022	0.008	-0.06	0.14	0.301	0.084	130	130	0.07	0.14
BMB5899	Zircon_Sample-281.FIN2	Fe-rich	700000		-0.01	0.17	20	27	2.29	0.22	1.6	1.6	130	100	87	12	76	13	36	34	28.5	5.9	3.73	0.67	5	1.4	0.15	0.24	0.34	0.6	0.029	0.089	0.26	0.19	0.06	0.22	0.014	0.031	0.05	0.4	0.007	0.086	-0.057	0	-0.016	0.024	0.092	0.096	-0.0064	0.0078	0.12	0.11	0.012	0.023	0.102	0.073	0.31	0.14	130	87	0.52	0.45
BMB5899	Zircon_Sample-282.FIN2	Fe-rich	700000		0.34	0.18	10	12	1.56	0.57	11.5	6.4	210	310	185	47	157	83	540	470	15.7	1.5	3.27	0.19	4.3	1.2	0.1	0.11	0.15	0.28	0.02	0.053	-0.053	0.088	-0.07	0.3	-0.0085	0.0043	-0.24	0.63	0.03	0.12	0.21	0	0.01	0.039	-0.09	0.29	-0.007	0.015	0.24	0.34	0.034	0.044	0.19	0.23	0.46	0.25	50	63	3.3	4.5
BMB5899	Zircon_Sample-283.FIN2	Fe-rich	700000		0.15	0.11	1	10	1.11	0.13	9.4	4.1	35	9.6	146	14	106	18	430	650	17.7	4.1	2.99	0.25	3.22	0.55	0.14	0.24	0	0.12	0.026	0.055	-0.01	0.31	0.04	0.13	0.016	0.04	0.09	0.22	-0.006	0.079	0.01	0	0.029	0.026	0.07	0.12	0.007	0.021	0.05	0.14	0.0245	0.0094	-0.05	0.12	0.21	0.061	-39	84	0.57	0.26
BMB5899	Zircon_Sample-284.FIN2	Fe-rich	700000		-0.04	0.12	-2.2	5.1	3.27	0.49	4.5	1.9	55.2	7.1	160	20	117	16	13	14	30.1	6.9	5.2	1.3	6.6	1	-0.004	0.099	0.022	0.045	0.01	0.023	0.07	0.24	0.07	0.23	0	0.014	0.18	0.35	-0.001	0.066	-0.01	0	-0.016	0.02	-0.07	0.11	0.006	0.013	0.002	0.059	0.005	0.012	0.01	0.087	0.56	0.21	81	49	0.018	0.041
BMB5899	Zircon_Sample-285.FIN2	Fe-rich	700000		0.09	0.12	-0.8	5	2.62	0.49	3.9	2.3	53.9	3.5	147.6	5.6	101	10	2.24	0.49	18.4	1.7	3.74	0.86	3.98	0.18	0.007	0.027	-0.119	0.064	-0.023	0.031	-0.06	0.13	0.04	0.12	-0.0062	0.0017	0.01	0.11	-0.035	0.045	-0.05	0	0.015	0.026	-0.03	0.11	0.0005	0.0098	-0.052	0.095	0.032	0.044	0.003	0.046	0.39	0.13	35	55	0.02	0.044
BMB5899	Zircon_Sample-286.FIN2	Fe-rich	700000		0.45	0.23	235	96	4.62	0.75	3.2	1.6	550	200	158	26	107	21	6.1	3.7	21.8	9.8	4.2	1.1	5.2	1.2	2.5	1.5	6	4.2	0.46	0.21	2.6	2.3	0.33	0.19	0.094	0.096	-0.04	0.2	0.14	0.081	0.05	0	0.068	0.048	0.168	0.088	0.028	0.027	0.02	0.12	0.077	0.029	0.174	0.098	0.4	0.13	19	52	0.046	0.041
BMB5899	Zircon_Sample-293.FIN2	Fe-rich	700000		0.05	0.18	13	10	3.6	1	3.7	2.3	95	40	153	12	100.7	7.8	2.7	1.4	20.3	2.6	3.9	1.2	4.86	0.95	0.037	0.078	0.14	0.13	0.011	0.06	0.1	0.21	0.059	0.093	0.005	0.015	0.41	0.22	0.04	0.058	-0.15	0	0.008	0.028	0.068	0.091	-0.002	0.013	0.005	0.089	0.012	0.015	0.18	0.2	0.335	0.066	13	74	0.04	0.064
BMB5899	Zircon_Sample-294.FIN2	Fe-rich	700000		0.13	0.11	-0.9	4.3	3.11	0.44	4.6	2.9	59.3	1.8	162.7	9.9	97.8	5.6	1.02	0.81	18	3.3	4.71	0.24	4.76	0.23	0.059	0.076	0.01	0.15	-0.012	0.043	-0.21	0.13	-0.02	0.1	0.047	0.074	0.01	0.36	0.019	0.076	0.35	0	-0.013	0.022	-0.01	0.24	0.003	0.019	-0.04	0.062	0.014	0.021	0.05	0.15	0.3	0.11	-10	130	-0.00253	0.00086
BMB5899	Zircon_Sample-295.FIN2	Fe-rich	700000		0.148	0.051	3	2.5	4.01	0.51	4.2	2.5	62.3	5.3	156.8	5.9	95.6	2.3	1.46	0.64	21.1	1.9	3.35	0.49	4.9	0.9	0.02	0.11	0.051	0.076	0	0.038	0.11	0.4	0.02	0.11	0.004	0.018	-0.24	0.29	0.005	0.056	0.29	0	0.008	0.021	-0.04	0.23	-0.0048	0.0098	-0.03	0.1	0.041	0.072	0.08	0.16	0.35	0.13	-67	98	0.011	0.027
BMB5899	Zircon_Sample-296.FIN2	Fe-rich	700000		0.061	0.091	0.5	2.4	2.11	0.22	2.2	1.9	69.1	7.3	74	3.3	77.2	2.9	2.37	0.95	14.7	1.8	2.06	0.27	3.07	0.13	0.024	0.054	-0.029	0.082	0.009	0.032	0.1	0.23	-0.05	0.12	0.02	0.039	-0.26	0.35	0.034	0.023	-0.01	0	-0.008	0.021	-0.02	0.27	0.009	0.019	0.03	0.1	0.028	0.012	0.016	0.071	0.085	0.039	-48	91	-0.00236	0.0005
BMB5899	Zircon_Sample-297.FIN2	Fe-rich	700000		0.094	0.097	9.6	7.8	3.65	0.58	3.3	3.1	60	4	174	11	95.2	3	2.1	1.2	18	2.9	2.59	0.67	2.86	0.39	-0.02	0.1	0.011	0.041	-0.007	0.012	0.1	0.15	-0.01	0.15	0.019	0.023	-0.4	0.98	-0.036	0.023	0.17	0	-0.001	0.028	0.22	0.5	-0.003	0.012	0.041	0.047	0.005	0.013	0.19	0.24	0.37	0.19	60	170	0.039	0.06
BMB5899	Zircon_Sample-298.FIN2	Fe-rich	700000		-0.02	0.12	7	7.2	0.31	0.11	2.8	1.3	15.4	1.4	151.4	4.6	82.3	6.9	3.4	1.7	24.7	2.1	3.37	0.73	5.63	0.74	-0.081	0.02	0.028	0.081	-0.027	0.066	0.088	0.068	-0.05	0.1	0.007	0.03	0.96	0.88	-0.017	0.047	0	0	0	0.023	0.05	0.13	-0.004	0.018	-0.05	0.13	0.06	0.077	0.067	0.08	0.091	0.03	100	110	0.09	0.11
BMB5899	Zircon_Sample-299.FIN2	Fe-rich	700000		-0.071	0.079	3.7	4	2.45	0.27	2.6	2	69.6	2	178.6	5.2	97	8.3	2.5	1.1	24	1.7	4.61	0.74	5.5	1.1	-0.07	0.14	0.024	0.063	0.008	0.039	0.08	0.48	-0.11	0.1	0.011	0.021	0.2	0.86	0.045	0.085	0.127	0	0.009	0.055	0.07	0.3	-0.007	0.01	-0.09	0.12	0.033	0.022	0.19	0.19	0.274	0.078	-12	89	0.18	0.19
BMB5899	Zircon_Sample-306.FIN2	Fe-rich	700000		0.06	0.13	-3.7	6	1.098	0.099	2.1	1.5	29.1	1.3	195	15	113.1	5.1	2.4	0.87	22.9	3.1	5	1.8	6	1.2	0.018	0.035	-0.014	0.088	0.021	0.062	-0.06	0.12	-0.02	0.11	0.037	0.057	-0.25	0.81	-0.036	0.078	-0.01	0	-0.012	0.021	-0.11	0.16	0.005	0.014	-0.02	0.16	0.03	0.033	-0.03	0.18	0.4	0.33	-27	76	0.12	0.13
BMB5899	Zircon_Sample-307.FIN2	Fe-rich	700000		0.022	0.089	1	6.5	2.36	0.34	1.6	1.1	55.2	4.6	205	24	109	21	3.2	2.1	20.8	2.5	4.7	0.73	5.49	0.53	0.02	0.13	-0.055	0.074	-0.005	0.029	0.06	0.18	-0.005	0.08	0.01	0.016	0.45	0.88	0.011	0.052	-0.041	0	0.013	0.037	0.17	0.22	-0.003	0.013	0.17	0.17	0.017	0.028	0.02	0.12	0.275	0.094	-30	120	0.038	0.051
BMB5899	Zircon_Sample-308.FIN2	Fe-rich	700000		0.091	0.08	-2.6	3.9	2.42	0.1	3.2	2.4	42	3.5	197	15	119	24	3.5	2.3	24.4	7.5	4.09	0.49	4.7	1.4	0.009	0.078	-0.006	0.071	-0.017	0.027	0.32	0.18	0.006	0.089	0.056	0.072	-0.5	1.1	0.054	0.084	0.072	0	-0.027	0.054	0.07	0.14	-0.004	0.012	0.06	0.17	0.024	0.042	0.2	0.3	0.348	0.098	30	120	0.05	0.071
BMB5899	Zircon_Sample-309.FIN2	Fe-rich	700000		0.05	0.15	-0.6	5.3	3.12	0.55	1.7	2.1	55.3	3.8	212.4	6.8	105.5	5.3	1.96	0.84	18.5	1.9	3.14	0.6	4.09	0.9	0.033	0.083	0.05	0.13	0.003	0.023	-0.05	0.29	0.03	0.13	0.035	0.024	0.46	0.35	0.048	0.084	-0.14	0	-0.0222	0.0091	0.05	0.24	0.026	0.056	-0.03	0.1	0.011	0.023	0.04	0.16	0.389	0.098	-27	65	0.021	0.046
BMB5899	Zircon_Sample-310.FIN2	Fe-rich	700000		0.13	0.2	0.1	6.9	1.091	0.099	0.8	1.4	46.1	5.5	162.5	9.8	88	7	1.03	0.6	28.4	3.1	5.42	0.53	9.06	0.54	-0.061	0.074	-0.034	0.041	0.059	0.043	0.09	0.43	-0.01	0.1	0.021	0.033	-0.1	1.3	0.02	0.12	0.02	0	-0.007	0.015	0.43	0.24	0.013	0.018	0.045	0.012	0.028	0.017	0.15	0.19	0.171	0.08	30	140	0.014	0.032
BMB5899	Zircon_Sample-311.FIN2	Fe-rich	700000		-0.026	0.073	8	8.9	5.9	1.6	4.6	1.5	184	48	199	24	370	130	400	180	13.1	3.2	4.4	1.1	4.8	1.3	0	0.11	0.22	0.35	0.018	0.029	0.03	0.12	0.05	0.15	0.027	0.026	0.61	0.76	-0.026	0.023	0.01	0	-0.016	0.013	0.1	0.21	-0.0059	0.0083	-0.023	0.085	0.022	0.021	0.01	0.051	0.222	0.071	60	130	41	12
BMB5899	Zircon_Sample-312.FIN2	Fe-rich	700000		0.1	0.16	8.1	4.7	3.88	0.46	2.5	1.2	64.9	3.5	179.8	7.9	94	8.4	28	48	23.4	4.5	4.8	1.2	5.1	1.1	0.09	0.28	0.27	0.46	-0.011	0.076	0.13	0.69	-0.11	0.17	0.039	0.047	-0.2	1.5	0.043	0.067	0.18	0	0.043	0.072	0.1	0.16	0.023	0.031	0.1	0.2	0.049	0.037	0.26	0.12	0.41	0.15	110	130	0.46	0.7

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5903 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5903	Zircon_Sample-085.FIN2	Fe-rich	700000		0.075	0.054	320	390	302	26	1548	63	4010	200	763	27	165	15	6.5	1.8	45.9	1	1.57	0.13	1	0.11	0.9	0.12	1.53	0.24	0.189	0.039	0.83	0.21	0.198	0.072	0.0114	0.0077	0.132	0.064	0.0361	0.0075	0.228	0	0.0413	0.0074	0.137	0.037	0.0149	0.0053	0.053	0.035	0.0123	0.0048	0.002	0.016	2.83	0.3	590	270	0.258	0.058
BMB5903	Zircon_Sample-086.FIN2	Fe-rich	700000		0.075	0.054	270	200	529	34	2530	140	5170	390	867	30	180	14	10.54	0.8	73	14	2.3	0.14	1.62	0.2	0.89	0.28	1.5	0.46	0.175	0.043	1.014	0.099	0.161	0.046	0.019	0.011	0.19	0.12	0.0221	0.0079	0.178	0	0.034	0.012	0.1	0.058	0.0176	0.0056	0.08	0.11	0.017	0.015	-0.013	0.022	5.8	2.3	310	260	0.38	0.38
BMB5903	Zircon_Sample-087.FIN2	Fe-rich	700000		0.073	0.032	35.4	8.2	591	91	2540	190	4280	210	871	64	177.5	5.9	6.8	1.1	89	21	2.32	0.13	1.84	0.15	0.81	0.11	1.12	0.16	0.109	0.019	0.555	0.083	0.1	0.03	0.0119	0.0065	0.137	0.097	0.019	0.011	0.096	0	0.024	0.0088	0.065	0.032	0.01	0.0055	0.047	0.019	0.007	0.0073	-0.005	0.019	5.85	0.66	330	290	0.59	0.29
BMB5903	Zircon_Sample-088.FIN2	Fe-rich	700000		0.126	0.086	1500	1800	1330	870	3100	1100	7100	2600	783	71	200	25	9.1	5.8	140	45	3.95	0.83	2.47	0.56	0.5	0.14	0.87	0.28	0.12	0.035	0.47	0.18	0.129	0.07	0.026	0.019	0.171	0.071	0.0186	0.0094	0.044	0	0.0142	0.0088	0.05	0.064	0.006	0.0055	0.029	0.024	0.0098	0.0039	-0.002	0.024	5.8	1.5	770	500	7.5	1.8
BMB5903	Zircon_Sample-089.FIN2	Fe-rich	700000		0.28	0.27	560	490	1090	640	2700	1600	4930	560	679	71	348	86	4.38	0.52	133	21	4.8	2.3	3.42	0.87	0.74	0.55	1.36	0.97	0.15	0.12	0.59	0.55	0.17	0.13	0.011	0.018	0.07	0.12	0.0233	0.0067	0.074	0	0.02	0.019	0.057	0.049	0.0114	0.0081	0.057	0.058	0.0097	0.0063	0.048	0.04	5.1	1.5	640	400	5.7	3
BMB5903	Zircon_Sample-090.FIN2	Fe-rich	700000		0.207	0.032	390	270	540	330	2650	380	3137	57	506	44	207	20	3.98	0.38	170	31	3.8	1.2	2.28	0.46	0.6	0.21	1.58	0.72	0.2	0.1	0.9	0.48	0.221	0.094	0.018	0.011	0.13	0.15	0.0173	0.0074	0.099	0	0.029	0.014	0.056	0.027	0.0088	0.0072	0.039	0.025	0.0089	0.006	0.008	0.011	4.8	2.5	650	160	1.22	0.41
BMB5903	Zircon_Sample-091.FIN2	Fe-rich	700000		0.207	0.065	1100	1100	2490	890	4300	1400	6400	2100	744	83	180	37	6.78	0.64	330	110	7.5	2.2	4.21	0.54	0.87	0.19	1.77	0.25	0.178	0.035	0.73	0.16	0.209	0.068	0.0348	0.0068	0.173	0.092	0.0222	0.0062	0.079	0	0.024	0.012	0.076	0.033	0.0084	0.0071	0.086	0.038	0.0067	0.0034	0.007	0.026	10.2	3.3	500	230	1.37	0.46
BMB5903	Zircon_Sample-098.FIN2	Fe-rich	700000		0.31	0.21	200	180	750	640	2370	900	3890	380	716	54	279	88	5.2	1	139	42	3.06	0.91	2.31	0.69	1.82	0.58	4.6	1.2	0.5	0.17	2.13	0.95	0.39	0.23	0.035	0.017	0.37	0.25	0.031	0.02	0.269	0	0.043	0.01	0.107	0.075	0.022	0.02	0.092	0.05	0.0153	0.0073	0.032	0.031	4.4	1.6	373	86	1.07	0.25
BMB5903	Zircon_Sample-099.FIN2	Fe-rich	700000		1.9	1.4	1040	540	1260	310	5700	1500	4730	630	880	200	360	140	6.4	1.6	169	56	13.6	7.5	6.6	2.5	4.9	2	10.2	4.5	1.03	0.38	5.1	3	1.37	0.53	0.21	0.14	0.73	0.88	0.124	0.066	0.52	0	0.132	0.045	0.46	0.2	0.046	0.039	0.34	0.3	0.046	0.027	0.16	0.11	5.4	1.2	3600	2000	2.9	1.5
BMB5903	Zircon_Sample-100.FIN2	Fe-rich	700000		0.25	0.11	165	85	1330	610	3100	1000	6000	1000	835	32	215	27	5.9	0.52	196	32	4.7	1.4	2.9	0.47	1.3	0.29	3.01	0.44	0.305	0.039	1.22	0.21	0.227	0.085	0.038	0.016	0.29	0.13	0.021	0.014	0.188	0	0.0351	0.0047	0.096	0.055	0.0105	0.0026	0.116	0.09	0.0091	0.0022	0.005	0.019	5.7	2.3	240	200	0.88	0.23
BMB5903	Zircon_Sample-101.FIN2	Fe-rich	700000		0.31	0.13	1800	1300	4730	640	12500	4900	12600	4400	1460	480	370	180	10.2	2.8	400	100	14.6	6.2	7.1	2.2	1.41	0.48	2.17	0.7	0.243	0.064	1.39	0.47	0.379	0.078	0.024	0.01	0.32	0.17	0.026	0.04	0.156	0	0.053	0.046	0.212	0.062	0.0199	0.0069	0.092	0.046	0.026	0.018	0.014	0.02	11.9	3.1	1070	380	4.17	0.94
BMB5903	Zircon_Sample-102.FIN2	Fe-rich	700000		0.339	0.059	610	350	710	190	3430	610	3710	190	740	130	221	16	6.7	1.2	149	41	3.83	0.74	2.95	0.36	1.1	0.24	2.59	0.76	0.338	0.047	1.66	0.26	0.33	0.11	0.043	0.024	0.202	0.081	0.0184	0.009	0.237	0	0.049	0.011	0.104	0.055	0.021	0.013	0.063	0.046	0.0105	0.0087	0.012	0.025	7.3	1.7	300	150	0.79	0.26
BMB5903	Zircon_Sample-103.FIN2	Fe-rich	700000		0.205	0.051	640	580	552	58	2710	150	3550	500	654	63	215.8	7.7	5.1	1.4	122.7	6.5	3.55	0.97	2.45	0.48	1.09	0.51	2.6	1	0.34	0.13	1.44	0.78	0.32	0.24	0.026	0.0091	0.24	0.18	0.018	0.016	0.23	0	0.038	0.017	0.144	0.058	0.0076	0.0011	0.094	0.075	0.0088	0.0045	0.0131	0.0072	6.2	2.7	91	82	0.55	0.23
BMB5903	Zircon_Sample-104.FIN2	Fe-rich	700000		0.108	0.018	70	92	473	29	2330	150	3330	280	716	32	190	16	4.7	3.3	103	8.1	2.28	0.27	1.88	0.25	0.63	0.1	1.22	0.1	0.161	0.018	0.67	0.12	0.082	0.031	0.0087	0.0056	0.085	0.013	0.0146	0.0084	0.087	0	0.019	0.012	0.068	0.066	0.0016	0.0012	0.035	0.012	0.0052	0.0045	-0.007	0.015	4.21	0.49	280	240	0.225	0.074
BMB5903	Zircon_Sample-111.FIN2	Fe-rich	700000		0.117	0.023	300	260	355	31	2110	170	4050	130	586	19	136.6	6.6	3.5	1.4	69	12	2.79	0.76	1.67	0.22	1.6	1.1	3.1	2.5	0.37	0.26	1.6	1.1	0.32	0.27	0.032	0.024	0.33	0.32	0.049	0.048	0.147	0	0.056	0.035	0.14	0.049	0.016	0.012	0.115	0.072	0.0166	0.0094	-0.018	0.01	5.7	2.4	290	200	0.17	0.18
BMB5903	Zircon_Sample-112.FIN2	Fe-rich	700000		0.34	0.13	640	590	430	65	2249	57	3300	380	525	48	153	11	3	1	81.3	7.7	2.63	0.22	1.47	0.16	1.45	0.46	3.41	0.86	0.42	0.11	1.72	0.52	0.33	0.13	0.0253	0.0061	0.159	0.095	0.039	0.016	0.269	0	0.048	0.016	0.101	0.036	0.0094	0.0057	0.062	0.019	0.0102	0.0047	0.008	0.02	3.41	0.37	250	250	0.36	0.27
BMB5903	Zircon_Sample-113.FIN2	Fe-rich	700000		0.96	0.12	190	280	351	87	2020	350	3350	470	670	62	185	22	3.3	1.8	89	18	2.53	0.35	1.93	0.63	2.16	0.37	5.57	0.61	0.7	0.11	2.87	0.67	0.5	0.12	0.051	0.016	0.26	0.1	0.052	0.01	0.299	0	0.072	0.02	0.15	0.071	0.023	0.015	0.12	0.029	0.0111	0.0067	0.014	0.023	3.27	0.68	530	280	2.5	1.2
BMB5903	Zircon_Sample-114.FIN2	Fe-rich	700000		0.433	0.076	320	230	271	70	1590	220	5660	580	812	68	231	56	4.2	1.2	88	17	2.68	0.81	1.8	0.64	0.77	0.18	1.68	0.46	0.189	0.088	0.79	0.34	0.16	0.1	0.0169	0.0078	0.08	0.089	0.0168	0.0075	0.131	0	0.036	0.018	0.059	0.022	0.009	0.0047	0.073	0.048	0.0091	0.0054	0.065	0.07	3.32	0.83	470	220	0.94	0.36
BMB5903	Zircon_Sample-115.FIN2	Fe-rich	700000		0.242	0.087	210	160	840	630	3100	1100	4400	1600	690	200	171	30	3.7	2	145	82	3.51	0.89	2.03	0.97	0.58	0.14	1.27	0.36	0.139	0.035	0.8	0.31	0.171	0.097	0.0183	0.0055	0.108	0.05	0.0074	0.0078	0.113	0	0.026	0.017	0.08	0.047	0.0083	0.0066	0.079	0.049	0.0126	0.0088	-0.003	0.035	5.7	2.5	780	400	0.254	0.027
BMB5903	Zircon_Sample-116.FIN2	Fe-rich	700000		0.44	0.13	87	45	890	560	2970	970	4580	470	774	59	190	40	4.1	1.5	139	40	3.77	0.86	2.82	0.44	1.2	0.18	2.58	0.71	0.295	0.092	1.14	0.2	0.37	0.17	0.04	0.013	0.27	0.11	0.033	0.021	0.139	0	0.049	0.021	0.121	0.055	0.0099	0.0032	0.089	0.036	0.013	0.0028	0.009	0.021	6.7	1.7	230	120	0.85	0.49
BMB5903	Zircon_Sample-117.FIN2	Fe-rich	700000		0.147	0.051	40.8	9.4	420	120	2620	690	3560	640	590	110	202	31	4.4	3.3	103	28	2.7	0.29	1.98	0.52	0.32	0.11	0.54	0.27	0.063	0.039	0.271	0.069	0.063	0.043	0.0023	0.0035	-0.01	0.14	0.0031	0.004	0.066	0	0.0193	0.0056	0.025	0.025	0.0042	0.0028	0.05	0.036	0.0061	0.0023	0.044	0.066	5.7	1.9	220	240	0.103	0.05
BMB5903	Zircon_Sample-124.FIN2	Fe-rich	700000		0.21	0.1	163	70	457	62	2730	180	3800	550	680	98	256	11	8.5	2.8	82.6	2.6	3.17	0.88	2.159	0.069	0.409	0.085	0.83	0.14	0.142	0.037	0.83	0.23	0.127	0.074	0.019	0.006	-0.06	0.29	0.01	0.018	0.14	0	0.006	0.013	-0.008	0.091	0.011	0.011	0.043	0.038	0.0074	0.0052	-0.01	0.095	4.15	0.55	260	180	6.5	2.7
BMB5903	Zircon_Sample-125.FIN2	Fe-rich	700000		0.288	0.096	81	16	575	48	3080	150	5950	690	1700	220	334	30	15	2.5	101	27	5.2	3.4	1.47	0.34	1.199	0.089	2.68	0.31	0.321	0.043	1.28	0.36	0.237	0.046	0.039	0.019	0.13	0.17	0.026	0.035	0.24	0	0.024	0.023	0.08	0.1	0.021	0.022	0.13	0.15	0.0117	0.007	-0.006	0.066	4.9	1.3	340	250	16	14
BMB5903	Zircon_Sample-126.FIN2	Fe-rich	700000		0.06	0.1	110	26	548	64	2830	150	4660	370	819	71	255	11	16.2	8.8	79	7.2	2.97	0.37	1.66	0.2	0.788	0.081	1.72	0.13	0.2	0.049	0.97	0.08	0.201	0.078	0.026	0.02	0.13	0.17	0.0171	0.0069	0.123	0	0.0219	0.0063	0.023	0.064	0.0055	0.0042	0.05	0.017	0.0043	0.0062	0.021	0.046	4.43	0.68	200	130	5.7	1.8
BMB5903	Zircon_Sample-127.FIN2	Fe-rich	700000		0.127	0.073	150	140	456	49	2840	130	6050	260	812	29	283	39	28	28	75	23	3.05	0.78	1.69	0.53	0.76	0.4	1.47	0.82	0.21	0.14	0.98	0.44	0.22	0.11	0.035	0.025	0.27	0.38	0.012	0.02	0.1	0	0.012	0.025	0.019	0.061	0.0086	0.0095	0.091	0.052	0.0036	0.0058	-0.005	0.031	6.2	3	260	260	3.3	1.7
BMB5903	Zircon_Sample-128.FIN2	Fe-rich	700000		0.1	0.078	66	28	551	56	2710	120	5480	800	840	120	219.8	6.8	14.8	7.6	65	14	2.7	1	1.38	0.27	0.056	0.051	0.118	0.078	0.025	0.024	0.05	0.11	0.037	0.014	0.0031	0.0035	-0.005	0.053	0.0002	0.0062	0.018	0	0.0023	0.006	0.036	0.077	0.0029	0.0025	0.052	0.049	0.0032	0.0043	0.036	0.082	5.1	1.2	220	180	3.9	1.5
BMB5903	Zircon_Sample-129.FIN2	Fe-rich	700000		0.062	0.08	190	170	445	34	3130	100	4850	530	672	67	241	22	14.7	9.4	56	11	2.65	0.5	1.92	0.35	0.022	0.013	0.054	0.035	0.0101	0.0043	0.03	0.031	0.058	0.069	0.014	0.01	0.03	0.11	-0.01	0.013	0.009	0	-0.0011	0.0029	-0.001	0.029	0.0021	0.003	0.0055	0.0075	0.0068	0.0081	0.005	0.018	5.83	0.46	310	190	3.31	0.66
BMB5903	Zircon_Sample-130.FIN2	Fe-rich	700000		0.049	0.047	58	35	529	89	2650	200	4060	750	730	110	212.6	7.5	18	18	68	15	2.77	0.67	1.8	0.61	-0.0161	0.0063	0.02	0.014	-0.0003	0.004	-0.026	0.046	0.043	0.021	0.008	0.013	-0.07	0.23	0.006	0.011	0.005	0	0.0003	0.0046	-0.012	0.028	0.0061	0.0092	0.019	0.031	0.0047	0.0078	0.035	0.039	5.3	1.2	170	270	3.83	0.73
BMB5903	Zircon_Sample-137.FIN2	Fe-rich	700000		0.11	0.26	220	190	800	190	4560	370	3760	280	815	55	312	24	50	74	166	96	5.3	1.2	4.3	1.8	0.031	0.028	0.112	0.035	0.01	0.017	0.19	0.28	0.079	0.037	0.008	0.01	-0.05	0.28	0.038	0.066	-0.07	0	0.0081	0.0044	0.061	0.074	0.015	0.02	0.11	0.073	0.014	0.011	-0.045	0.087	8.2	2.8	190	150	3.3	2.1
BMB5903	Zircon_Sample-138.FIN2	Fe-rich	700000		0.21	0.16	69	18	520	23	2950	170	3800	530	884	40	329	23	16	7.2	71	16	4	1.2	1.79	0.49	0.06	0.034	0.19	0.12	0.053	0.059	0.07	0.11	0.19	0.24	0.017	0.025	0.32	0.73	-0.019	0.051	-0.04	0	0.01	0.013	-0.02	0.12	0.0053	0.0048	0.12	0.21	0.028	0.03	0.012	0.042	3.9	0.51	410	220	1.84	0.42
BMB5903	Zircon_Sample-139.FIN2	Fe-rich	700000		0.167	0.034	140	140	490	100	3400	720	6750	680	1880	340	300	34	25	18	72	20	3.36	0.7	1.87	0.23	0.183	0.094	0.39	0.16	0.074	0.045	0.3	0.12	0.07	0.049	0.0102	0.004	0.2	0.3	0.0054	0.0077	0.008	0	0.009	0.01	0.007	0.067	0.0082	0.0057	0.115	0.061	0.0109	0.0057	-0.007	0.04	4.5	1.1	360	280	2.85	0.64
BMB5903	Zircon_Sample-140.FIN2	Fe-rich	700000		0.071	0.054	120	120	524	70	3280	300	5860	770	1780	230	268	22	18.5	9.6	97	14	3.44	0.47	1.5	0.27	0.148	0.038	0.361	0.036	0.0582	0.0096	0.32	0.12	0.127	0.08	0.0163	0.0081	0.054	0.061	0.014	0.018	0.026	0	0.0099	0.0051	0.037	0.084	0.0016	0.0023	0.028	0.032	0.0048	0.0027	0.012	0.055	4.12	0.72	140	210	1.27	0.3
BMB5903	Zircon_Sample-141.FIN2	Fe-rich	700000		0.07	0.13	58	24	579	86	2890	300	3910	210	1020	150	340	110	80	130	73	31	3.7	2.1	2.1	1.5	0.2	0.13	0.5	0.24	0.055	0.038	0.42	0.18	0.122	0.066	0.0038	0.0077	0.28	0.56	0.019	0.015	0.066	0	0.013	0.011	0.18	0.21	0.0091	0.0067	0.06	0.063	0.007	0.011	-0.0413	0.0068	4.6	1.3	220	280	2.3	1.4
BMB5903	Zircon_Sample-142.FIN2	Fe-rich	700000		0.124	0.076	240	190	980	370	2970	150	5920	710	1080	130	236	14	20.2	3.7	119	66	4.1	2.1	2.14	0.85	0.39	0.27	0.84	0.54	0.101	0.056	0.39	0.26	0.108	0.057	0.021	0.015	0.08	0.3	0.019	0.017	0.1	0	0.027	0.024	-0.035	0.091	0.012	0.011	0.092	0.055	0.004	0.0053	0.022	0.04	8.2	2.9	180	150	7.1	2.3
BMB5903	Zircon_Sample-143.FIN2	Fe-rich	700000		0.033	0.073	120	130	504	83	3210	520	3740	380	878	63	273	11	23	20	118	57	3.8	1.2	2.3	0.55	0.063	0.064	0.097	0.058	0.0078	0.0057	0.085	0.056	0.025	0.044	0.0068	0.0038	0.05	0.18	0.007	0.0076	-0.018	0	0.0042	0.0077	0.002	0.032	0.0035	0.0046	0.011	0.018	0.0041	0.0056	0.019	0.023	6.7	2.5	330	260	3.3	1.9

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5904 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5904	Zircon_Sample-150.FIN2	Fe-rich	700000		0.013	0.048	8.3	7	166	21	15.8	2.2	1450	130	161.7	7.4	139	12	3.61	0.41	3.7	2	3.14	0.46	0.49	0.23	0.011	0.039	0.07	0.14	0.018	0.031	0.019	0.093	-0.01	0.16	0.015	0.014	0.03	0.29	0.01	0.034	-0.05	0	0.01	0.039	0.05	0.25	-0.009	0.011	0.01	0.17	0.024	0.039	-0.012	0.077	0.65	0.12	-10	130	0.059	0.055
BMB5904	Zircon_Sample-151.FIN2	Fe-rich	700000		0.008	0.043	14.1	4.8	193	30	18.8	3.5	1360	120	148	12	119.6	8.7	2.4	1	7	1.2	2.96	0.45	0.46	0.22	-0.03	0.13	0.011	0.049	-0.001	0.019	-0.066	0.066	-0.061	0.08	0.029	0.016	-0.23	0.29	-0.009	0.067	0.01	0	-0.0073	0.0088	0.03	0.15	-0.004	0.016	-0.067	0.056	0.019	0.022	0.026	0.086	1.04	0.17	50	110	0.108	0.098
BMB5904	Zircon_Sample-152.FIN2	Fe-rich	700000		0.036	0.063	8.8	5.4	104.9	5.8	10.3	2.3	1277	50	187	12	217	22	7.58	0.35	3	1.5	2.5	0.37	0.52	0.19	-0.02	0.13	0.017	0.064	-0.001	0.0076	-0.129	0.074	0.017	0.088	0.004	0.017	0.79	0.61	-0.01	0.072	0.11	0	0.002	0.026	-0.06	0.11	0.022	0.032	-0.04	0.14	0.005	0.011	0.23	0.36	0.578	0.048	120	140	0.059	0.08
BMB5904	Zircon_Sample-153.FIN2	Fe-rich	700000		0.11	0.17	15.9	8.6	242	28	20.6	3	1436	90	134.2	6.9	99.9	3.7	2.1	1.1	6.8	1.2	2.9	1.3	0.55	0.36	-0.057	0.087	0.024	0.055	-0.013	0.027	0.08	0.14	0.2	0.17	0.015	0.023	-0.15	0.45	0.01	0.11	0.04	0	-0.019	0.024	0	0.19	0.002	0.0093	0.03	0.17	0.007	0.012	0.03	0.12	1.2	0.2	30	180	0.15	0.12
BMB5904	Zircon_Sample-154.FIN2	Fe-rich	700000		0	0.23	7.8	8.4	89.2	5	8.9	2.5	1210	110	205	41	267	68	5.3	1.2	3.5	1.2	3.9	1.5	0.58	0.2	0.036	0.098	-0.05	0.13	0.025	0.053	0.15	0.26	0.1	0.23	0.029	0.032	0.26	0.37	0.001	0.048	0.03	0	0.006	0.049	0.09	0.24	-0.002	0.026	0.07	0.28	0.037	0.035	0.22	0.2	0.5	0.22	10	97	0.1	0.11
BMB5904	Zircon_Sample-155.FIN2	Fe-rich	700000		-0.05	0.13	10.4	3.1	185	6.8	17.7	2.9	1503	37	149.1	4.4	124.9	7.3	2.26	0.91	5	1.3	2.85	0.62	0.62	0.14	-0.05	0.034	-0.016	0.086	-0.012	0.053	-0.13	0.15	0.09	0.33	0.049	0.033	-0.38	0.34	0.04	0.026	-0.1	0	0.012	0.028	0.03	0.22	-0.004	0.022	0	0.1	0.028	0.033	0.14	0.17	0.7	0.23	-38	81	0.067	0.052
BMB5904	Zircon_Sample-156.FIN2	Fe-rich	700000		0.02	0.24	13.4	6.8	208	24	14.1	2.8	1520	140	155	20	131	29	2.5	1.1	5.2	2.2	3.31	0.8	0.5	0.19	0.009	0.065	-0.047	0.028	-0.013	0.03	0.01	0.13	0.005	0.093	0.016	0.026	-0.13	0.23	-0.008	0.08	-0.097	0	0.043	0.062	0.04	0.23	0.025	0.056	0.06	0.11	0.015	0.025	-0.008	0.096	1.02	0.25	92	85	0.006	0.024
BMB5904	Zircon_Sample-163.FIN2	Fe-rich	700000		0.01	0.16	13.1	3.8	287	48	20.4	4.8	1350	200	141.1	9.9	115	11	3.33	0.74	4.5	1.6	3.78	0.5	0.53	0.3	0.014	0.069	-0.004	0.08	0.004	0.039	0.11	0.28	0.03	0.15	0.036	0.029	0.22	0.47	-0.005	0.049	0	0	0.012	0.025	-0.05	0.24	-0.011	0.016	-0.04	0.14	0.017	0.028	0.16	0.14	1.44	0.32	-17	85	0.117	0.076
BMB5904	Zircon_Sample-164.FIN2	Fe-rich	700000		-0.07	0.15	3	6	63.5	3.4	7.9	2.8	1200	75	174.2	5.2	216.4	8.2	4.4	1.3	1.4	1.5	2.06	0.75	0.23	0.17	-0.1	0.11	0.01	0.034	0.005	0.02	-0.07	0.27	0.12	0.29	0.022	0.042	-0.09	0.23	0.033	0.053	-0.03	0	-0.002	0.027	0.03	0.32	0	0.036	0.05	0.18	0.039	0.037	0.07	0.1	0.37	0.17	1	77	0.21	0.11
BMB5904	Zircon_Sample-165.FIN2	Fe-rich	700000		-0.13	0.21	9.5	4.8	107.5	6	13.7	3.5	1430	110	155	6.9	165	13	3.3	1.4	2.73	0.95	3.28	0.64	0.38	0.14	0.056	0.087	-0.078	0.049	0.004	0.039	0.15	0.14	0	0.23	0.006	0.017	-0.42	0.12	0.059	0.035	0.04	0	-0.014	0.038	0.15	0.33	-0.001	0.027	-0.09	0.18	0.049	0.032	0.13	0.2	0.66	0.19	-1	62	0.043	0.062
BMB5904	Zircon_Sample-166.FIN2	Fe-rich	700000		-0.09	0.23	18.1	4	261	48	18	7.7	1290	150	149	15	137	18	4.1	1.5	8.8	1.3	3.75	0.94	0.44	0.28	0.021	0.053	-0.008	0.096	0.003	0.056	0.1	0.22	0.19	0.28	-0.001	0.011	-0.15	0.37	-0.026	0.07	0.1	0	-0.023	0.022	-0.03	0.17	-0.005	0.013	-0.08	0.17	0.003	0.013	0.05	0.15	1.62	0.34	-20	160	0.11	0.11
BMB5904	Zircon_Sample-167.FIN2	Fe-rich	700000		0.03	0.13	10.9	8.7	237	43	14.6	2.5	1424	71	147.8	4.3	146.5	7.5	3.05	0.89	6.8	1.6	3.88	0.93	0.68	0.18	0.06	0.13	-0.052	0.038	0.033	0.033	-0.08	0.29	0.12	0.17	0.013	0.026	-0.36	0.5	-0.01	0.12	0.18	0	0.002	0.012	-0.08	0.21	0.024	0.031	-0.08	0.12	0.004	0.012	0.021	0.049	1.38	0.3	-10	180	0.152	0.075
BMB5904	Zircon_Sample-168.FIN2	Fe-rich	700000		-0.07	0.13	20.9	2.8	199	11	16.8	4.5	1622	47	142.7	5.5	124.6	4.4	3.4	1.1	5.22	0.51	2.5	1.6	0.32	0.24	0.17	0.17	0.166	0.066	0.033	0.049	-0.09	0.21	0.1	0.22	-0.00614	0.00089	0.62	0.39	0.02	0.086	0.02	0	-0.011	0.074	0.03	0.26	0.024	0.017	-0.1	0.14	-0.00424	0.00062	-0.03	0.12	0.77	0.18	-44	50	0.11	0.12
BMB5904	Zircon_Sample-169.FIN2	Fe-rich	700000		0.08	0.11	6.9	6	62	14	7.7	3.2	1170	120	173.9	8	233	15	4.23	0.75	1.47	0.83	2.33	0.34	0.23	0.2	-0.01	0.14	0.03	0.025	-0.001	0.052	-0.07	0.16	-0.01	0.11	-0.0052	0.0011	0.03	0.55	-0.003	0.032	-0.03	0	-0.017	0.018	-0.08	0.26	0.017	0.025	-0.04	0.11	0.024	0.031	0.07	0.11	0.373	0.087	-10	160	0.068	0.057
BMB5904	Zircon_Sample-176.FIN2	Fe-rich	700000		-0.01	0.13	7	4.9	690	160	35.1	4.6	1270	120	126	3.9	126.8	5.2	2.98	0.76	21.4	3.1	3.84	0.49	0.48	0.15	0.12	0.17	0.009	0.07	-0.023	0.039	0.201	0.058	-0.1	0.12	0.014	0.025	-0.04	0.39	0.05	0.045	0.06	0	0.004	0.013	-0.02	0.18	0.015	0.03	-0.048	0.078	0.006	0.013	-0.01	0.065	2.88	0.38	-1	85	0.025	0.038
BMB5904	Zircon_Sample-177.FIN2	Fe-rich	700000		0.06	0.11	11.4	5.4	110	23	16.3	5.3	1350	120	143	12	168	20	4.6	2.2	2.7	1.4	2.9	0.58	0.39	0.21	0	0.12	0.12	0.12	0.025	0.031	-0.09	0.19	-0.006	0.057	0.03	0.032	0.06	0.51	-0.023	0.071	-0.05	0	-0.015	0.022	0.01	0.17	0.01	0.038	0.058	0.052	0.013	0.022	0.08	0.13	0.75	0.23	60	120	0.08	0.1
BMB5904	Zircon_Sample-178.FIN2	Fe-rich	700000		0.12	0.13	11.1	4.7	487	63	40.6	5.2	1110	120	107.3	2.6	80.8	4	1.92	0.41	11.8	1.9	3.43	0.36	0.58	0.13	0.013	0.098	0.005	0.051	0.013	0.038	-0.05	0.18	0.12	0.15	0.021	0.033	0.12	0.76	-0.007	0.055	-0.19	0	-0.018	0.015	0.16	0.28	0.014	0.024	0.07	0.16	0.016	0.033	0.05	0.13	2.14	0.51	10	140	0.11	0.16
BMB5904	Zircon_Sample-179.FIN2	Fe-rich	700000		0.05	0.13	19	10	126.7	8.3	13.7	2.4	1220	40	132.8	8.2	190	15	3.52	0.38	4.01	0.78	2.85	0.52	0.3	0.24	-0.014	0.052	-0.033	0.041	0.035	0.043	-0.09	0.12	0	0.14	0.033	0.033	-0.6	0.75	-0.017	0.066	-0.03	0	-0.001	0.028	0.12	0.2	0.008	0.017	0.04	0.11	0.0006	0.0081	0.16	0.13	0.69	0.13	-30	130	0.019	0.047
BMB5904	Zircon_Sample-180.FIN2	Fe-rich	700000		0.08	0.2	8.6	3.7	108	12	14.7	2.7	1404	88	154.6	8.8	176	13	4.49	0.43	3.2	1.3	2.39	0.45	0.35	0.23	0	0.15	0.029	0.092	0.019	0.033	0.09	0.18	0.02	0.11	0.01	0.017	0.27	0.67	0.015	0.067	-0.06	0	0.004	0.03	0.06	0.064	0.007	0.014	0.01	0.15	0.037	0.053	0.16	0.2	0.407	0.082	60	150	0.072	0.059
BMB5904	Zircon_Sample-181.FIN2	Fe-rich	700000		-0.067	0.05	7.6	4.5	80.8	7.2	9	3.2	1138	63	159.4	4.9	243	13	4.9	1.1	1.41	0.85	2.71	0.67	0.42	0.16	0.045	0.075	0.006	0.078	-0.01	0.018	0.1	0.17	0.09	0.21	0.02	0.037	0.36	0.85	-0.011	0.034	0.13	0	-0.01	0.016	-0.05	0.11	0.006	0.017	0.04	0.1	0.008	0.017	0.037	0.087	0.359	0.076	-92	29	0.048	0.076
BMB5904	Zircon_Sample-182.FIN2	Fe-rich	700000		-0.12	0.15	12.7	5.3	145.8	5.4	12.4	2.9	1528	63	130.7	5.5	138.1	4.7	3.05	0.45	3.61	0.52	2.62	0.91	0.45	0.28	-0.01	0.073	-0.068	0.058	0.037	0.063	0.13	0.23	-0.109	0.048	0.031	0.026	0.26	0.69	0.072	0.072	-0.105	0	-0.017	0.014	0.12	0.24	-0.0136	0.0024	0.029	0.045	0.006	0.012	0.067	0.078	0.83	0.18	70	140	0.121	0.062
BMB5904	Zircon_Sample-189.FIN2	Fe-rich	700000		-0.043	0.061	10.6	2.7	153	13	19.5	3.4	1545	46	121.1	4.4	128	11	3.42	0.73	4	1.3	2.91	0.78	0.51	0.21	0.013	0.05	-0.025	0.069	-0.006	0.014	-0.06	0.16	0.16	0.21	0.038	0.043	-0.07	0.83	-0.033	0.057	-0.07	0	0.023	0.043	0.09	0.12	-0.008	0.011	0.19	0.17	0.027	0.017	0.06	0.15	0.92	0.13	30	180	0.084	0.069
BMB5904	Zircon_Sample-190.FIN2	Fe-rich	700000		-0.06	0.17	8.3	3.7	124.6	6	18.5	4.8	1501	63	129.9	2.9	146.6	7.1	3.46	0.84	2.28	0.95	2.31	0.46	0.54	0.3	0.1	0.13	0.075	0.066	0.059	0.042	-0.163	0.073	0.14	0.21	0.034	0.05	0.42	0.48	0.041	0.08	0.07	0	0.013	0.046	-0.01	0.12	-0.002	0.01	-0.007	0.066	0.017	0.025	0.143	0.084	0.79	0.26	90	140	0.07	0.075
BMB5904	Zircon_Sample-191.FIN2	Fe-rich	700000		0	0.13	6.8	5.1	111	21	19.1	5	1410	120	126.5	8.5	145	15	3.51	0.74	4.6	1.4	2.5	0.11	0.46	0.32	0.08	0.14	0.012	0.047	-0.001	0.022	-0.1	0.19	-0.058	0.089	0.04	0.035	0.05	0.22	0.041	0.058	-0.03	0	-0.025	0.011	0.11	0.22	-0.006	0.011	0.06	0.14	0.021	0.024	0.05	0.11	1	0.12	172	92	0.03	0.069
BMB5904	Zircon_Sample-192.FIN2	Fe-rich	700000		-0.09	0.11	8.2	4	80.3	2.3	15	4.8	1320	130	150.6	7.6	210	14	5.28	0.68	2	1.1	3	1	0.29	0.16	-0.036	0.076	0.035	0.043	0.002	0.033	0.11	0.22	-0.02	0.14	0.036	0.049	-0.56	0.39	-0.029	0.064	0	0	-0.0024	0.0068	-0.12	0.28	-0.006	0.014	0.03	0.12	0.008	0.015	0.124	0.096	0.57	0.21	72	89	0.101	0.081
BMB5904	Zircon_Sample-193.FIN2	Fe-rich	700000		0.08	0.17	9.3	6.7	171	26	17.1	4.9	1380	120	124.1	3.7	137.8	5.6	3.2	1.1	5.1	1.3	3.08	0.55	0.35	0.18	0.003	0.077	0.1	0.076	0.018	0.04	0.04	0.25	-0.05	0.13	0.021	0.029	-0.01	0.33	0.014	0.081	-0.059	0	0.001	0.024	0.056	0.089	-0.004	0.011	0.1	0.19	0.021	0.016	0.117	0.083	0.82	0.16	-70	100	0.122	0.04
BMB5904	Zircon_Sample-194.FIN2	Fe-rich	700000		-0.021	0.065	6.1	3.2	65	15	14.2	3.3	1180	130	148	7	225	32	43	75	2.8	0.64	2.57	0.95	0.37	0.26	0.101	0.042	0.011	0.026	-0.002	0.024	-0.09	0.13	0.05	0.31	0.009	0.017	-0.1	0.11	0.055	0.019	-0.14	0	0.027	0.023	0.11	0.2	0	0.028	0.04	0.25	0.017	0.042	-0.086	0.045	0.36	0.2	10	150	0.102	0.053
BMB5904	Zircon_Sample-195.FIN2	Fe-rich	700000		-0.02	0.14	10.4	5.1	234	18	24.1	5.2	1438	96	118.6	3.3	116.9	5.1	2.51	0.36	5.4	1.8	2.21	0.45	0.493	0.073	-0.011	0.084	0.036	0.054	0.013	0.037	0.15	0.13	0.08	0.12	0.027	0.031	0.07	0.32	-0.02	0.025	0.059	0	0.005	0.039	-0.12	0.15	-0.001	0.024	-0.106	0.063	0.016	0.027	-0.094	0.055	1.18	0.23	12	69	0.035	0.048
BMB5904	Zircon_Sample-202.FIN2	Fe-rich	700000		0.19	0.15	14.3	6.6	320	59	25.6	3.9	1296	24	105.5	2.7	91.6	2.1	2.6	0.6	9.9	1.6	3.49	0.48	0.45	0.26	0.02	0.14	-0.04	0.065	0.007	0.014	-0.09	0.22	0.17	0.31	0.037	0.072	-0.01	0.19	0.001	0.091	0.05	0	0.047	0.046	-0.111	0.08	-0.001	0.017	0.003	0.091	0.02	0.024	0.12	0.18	1.61	0.25	95	76	0.069	0.074
BMB5904	Zircon_Sample-203.FIN2	Fe-rich	700000		-0.09	0.14	6	4.9	156.3	9.3	16.2	2.7	1565	88	132.3	4.4	126.9	9.2	3.19	0.71	3.5	1.2	2.55	0.41	0.374	0.095	0.059	0.055	0.014	0.095	0.024	0.046	-0.02	0.13	0.12	0.13	0.011	0.018	-0.12	0.33	0.054	0.02	0.193	0	0.002	0.023	0	0.33	0.0099	0.0067	0.06	0.12	0.008	0.013	0.03	0.1	0.79	0.13	0	150	0.108	0.03
BMB5904	Zircon_Sample-204.FIN2	Fe-rich	700000		-0.01	0.12	8.6	9.1	82	9.8	11.8	1.6	1371	57	159.1	9.3	190.5	8.5	6.3	1.8	3.3	1.8	2.41	0.45	0.452	0.088	-0.073	0.089	0.043	0.052	0.01	0.063	0.03	0.28	0.11	0.12	0.01	0.018	0.17	0.15	0.052	0.084	0.129	0	0	0.034	-0.01	0.14	0.015	0.029	0.03	0.12	0.014	0.023	0.15	0.13	0.48	0.18	60	100	0.039	0.086
BMB5904	Zircon_Sample-205.FIN2	Fe-rich	700000		0.042	0.023	6.2	3	70.2	2.8	10.14	0.51	1229	67	147.7	6.9	193	12	4.9	1.4	1.9	1.3	2.112	0.061	0.31	0.1	-0.038	0.054	0.071	0.091	-0.014	0.015	0.04	0.24	0.1	0.15	0.003	0.016	0	0.16	-0.01	0.034	0.08	0	0.012	0.03	0.01	0.29	-0.003	0.011	-0.01	0.19	0.0273	0.007	0.18	0.16	0.292	0.092	-60	86	0.092	0.072
BMB5904	Zircon_Sample-206.FIN2	Fe-rich	700000		-0.031	0.049	7.7	1.7	209	19	17.4	4	1540	110	126.3	8.5	118	14	3.9	1.1	4.7	1.6	2.329	0.094	0.39	0.16	0.012	0.046	0.003	0.042	-0.01	0.03	0.05	0.34	0.16	0.33	0.022	0.037	0	0.17	-0.004	0.044	0.14	0	0.002	0.023	-0.031	0.072	-0.001	0.02	-0.08	0.092	0.014	0.023	0.035	0.04	0.87	0.17	-20	140	0.072	0.012
BMB5904	Zircon_Sample-207.FIN2	Fe-rich	700000		-0.04	0.16	0	23	94	49	43	38	1750	570	136	31	177	23	2900	4600	5.2	3.9	2.6	1.3	0.62	0.46	0.12	0.1	0.8	1.4	0.09	0.18	0.6	1.2	-0.29	0.33	-0.023	0.026	1.17	0.96	0.02	0.18	0.57	1	0	0.16	0.9	1.6	-0.028	0.081	0.6	1.4	-0.006	0.032	0.13	0.35	1.37	0.74	80	150	3.9	4.7
BMB5904	Zircon_Sample-208.FIN2	Fe-rich	700000		0	0.1	4.3	3.8	94	11	13.7	1.2	1522	97	149.8	8.9	195	17	7.1	1.5	2.12	0.41	2.6	1	0.44	0.14	-0.022	0.047	0.085	0.082	0.05	0.034	0.01	0.21	0.14	0.25	0.008	0.025	0.078	0.054	-0.018	0.04	0.1	0	0.028	0.033	0.12	0.12	0.007	0.015	0.013	0.073	0.0008	0.0084	0.03	0.12	0.459	0.066	-35	58	0.49	0.58
BMB5904	Zircon_Sample-215.FIN2	Fe-rich	700000		-0.06	0.31	1.1	4.8	72	17	10.5	2.6	1180	140	181	14	212	22	6.16	0.72	0.9	1.1	2.37	0.41	0.49	0.23	0.054	0.032	0.08	0.11	-0.005	0.025	0.06	0.22	-0.01	0.088	0.029	0.03	0.09	0.3	0.002	0.025	0.01	0	0.017	0.031	0.16	0.13	0.001	0.011	-0.055	0.092	-0.0002	0.0083	0.09	0.16	0.52	0.1	118	94	0.066	0.039
BMB5904	Zircon_Sample-216.FIN2	Fe-rich	700000		0.03	0.15	13.9	5.4	223	25	22.4	1.6	1487	46	148.3	7.4	128.9	8.1	4.02	0.61	7.89	0.14	2.54	0.76	0.473	0.081	0	0.19	0.017	0.071	0.017	0.064	-0.17	0.11	0.13	0.22	0.04	0.051	-0.14	0.1	-0.028	0.061	-0.09	0	-0.003	0.026	0.18	0.15	-0.007	0.013	-0.088	0.044	-0.0046	0.0024	-0.07	0.14	1.73	0.91	50	120	0.18	0.28
BMB5904	Zircon_Sample-217.FIN2	Fe-rich	700000		-0.11	0.14	5.2	4.5	76	19	12.5	2.2	1039	48	174.5	4	231	15	4.54	0.62	1.32	0.39	2.04	0.42	0.53	0.32	-0.008	0.069	-0.0142	0.009	0.005	0.055	0	0.21	-0.064	0.073	0.022	0.027	0.25	0.46	-0.007	0.079	0.13	0	0.023	0.035	0.153	0.075	0.015	0.013	0.04	0.11	0.011	0.016	0.03	0.036	0.32	0.047	27	38	0.021	0.028
BMB5904	Zircon_Sample-218.FIN2	Fe-rich	700000		-0.015	0.081	6.7	2.6	101	12	16.2	2.4	1500	210	177	16	226	10	205	97	2.4	1.7	2.66	0.39	0.27	0.18	-0.021	0.06	0.05	0.1	0.006	0.011	-0.01	0.22	0.01	0.13	0.024	0.027	-0.18	0.27	0.055	0.072	0.04	0	0	0.038	-0.041	0.068	0.005	0.019	-0.128	0.093	0.01	0.016	0.063	0.02	0.46	0.17	0	180	0.28	0.18
BMB5904	Zircon_Sample-219.FIN2	Fe-rich	700000		0.18	0.12	11.2	2.1	482	49	50.3	4.9	1278	91	139	14	73.6	6.8	2.46	0.27	12.4	2.2	3.29	0.7	0.61	0.41	-0.038	0.062	-0.004	0.07	0.033	0.026	0.11	0.23	-0.005	0.091	0.017	0.027	-0.26	0.44	-0.031	0.07	0.016	0	0	0.011	-0.04	0.36	0.01	0.027	0.063	0.072	0.009	0.014	0.02	0.11	2.15	0.33	45	93	0.103	0.095
BMB5904	Zircon_Sample-220.FIN2	Fe-rich	700000		4.6	8.7	400	820	55	25	470	840	1530	330	229	47	300	130	84	55	0.3	0.93	-0.7	5.4	2.2	4.3	-2.4	5.4	-0.6	1.3	-0.6	1.3	-6	12	-2.1	3.9	1.5	2.9	-0.4	1	0.12	0.16	-6	12	-0.8	1.6	-3.3	6.8	-0.21	0.48	-3.9	7.7	0.5	1.1	9	16	2	2.7	150	140	4.3	6.9
BMB5904	Zircon_Sample-221.FIN2	Fe-rich	700000		0.14	0.15	2.6	5.9	96.1	5.1	16.5	3.1	1321	53	165.9	7.3	159	17	3.26	0.63	4.15	0.91	2.55	0.64	0.384	0.067	0.14	0.2	-0.03	0.13	0.01	0.037	0.14	0.25	0.12	0.12	0.063	0.085	0.37	0.32	-0.008	0.072	-0.14	0	0.006	0.013	0	0.2	-0.007	0.0073	0.1	0.2	0.013	0.025	0.06	0.13	0.64	0.29	50	140	0.078	0.097

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5905 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5905	Zircon_Sample-072.FIN2	Fe-rich	700000		0.079	0.091	2.6	4.1	8.97	0.69	7.9	4	1054	43	8.04	0.69	4.74	0.54	4.5	0.54	3.6	0.9	0.34	0.16	0.062	0.051	0.041	0.062	-0.028	0.068	0.012	0.024	-0.02	0.12	0.04	0.07	0.037	0.016	0.1	0.5	-0.013	0.053	0.011	0	0.0045	0.0083	-0.063	0.046	-0.00046	0.00011	0.036	0.086	0.0071	0.0098	0.024	0.029	0.216	0.041	120	220	0.01	0.019
BMB5905	Zircon_Sample-073.FIN2	Fe-rich	700000		0.12	0.17	1.1	2.9	7.74	0.13	5.9	3.9	1182	59	8.71	0.75	5.73	0.59	3.6	1.5	2.34	0.9	0.29	0.18	0.107	0.07	0.04	0.078	0.005	0.037	0.002	0.024	0.02	0.14	-0.019	0.035	0.018	0.023	-0.03	0.39	-0.014	0.025	-0.005	0	0.0146	0.0095	-0.06	0.13	0.01	0.015	0.03	0.056	0.024	0.023	-0.002	0.029	0.28	0.13	46	86	-0.005	0.052
BMB5905	Zircon_Sample-074.FIN2	Fe-rich	700000		0.01	0.19	3.4	7.3	52	11	11.1	1.1	1730	100	9.9	1.9	4.78	0.46	2.23	0.82	16.8	3.8	0.54	0.077	0.14	0.12	0.04	0.14	-0.001	0.074	0.037	0.035	-0.01	0.21	-0.002	0.048	0.0044	0.0098	0.15	0.4	-0.034	0.02	-0.02	0	0.029	0.022	0.123	0.045	0.0208	0.0045	0.008	0.044	0.011	0.014	0.007	0.034	0.93	0.33	-64	43	0.08	0.13
BMB5905	Zircon_Sample-075.FIN2	Fe-rich	700000		0.13	0.2	-0.8	2.5	8.99	0.76	5	1.8	1323	78	10.25	0.9	5.97	0.22	1.86	0.4	1.7	1.6	0.14	0.2	0.032	0.019	-0.015	0.068	0.026	0.033	0	0.019	0.02	0.1	-0.023	0.029	0.043	0.039	-0.33	0.59	-0.001	0.012	0.04	0	0.022	0.015	0.06	0.11	0.0074	0.0097	0.02	0.038	0.013	0.011	0.15	0.1	0.21	0.1	30	110	0.03	0.048
BMB5905	Zircon_Sample-076.FIN2	Fe-rich	700000		-0.024	0.098	-0.44	0.78	7.59	0.61	5.1	4	1276	62	9.9	2	6.2	0.47	1.41	0.24	1.52	0.44	0.39	0.25	0.04	0.021	-0.022	0.025	-0.022	0.058	0.004	0.028	0.08	0.13	0.077	0.032	0.04	0.024	0.08	0.53	0.029	0.026	-0.0234	0	0.016	0.013	-0.02	0.19	0.017	0.025	-0.001	0.036	-0.0011	0.00027	0.17	0.13	0.22	0.14	60	170	-0.028	0.017
BMB5905	Zircon_Sample-077.FIN2	Fe-rich	700000		0.01	0.14	0.3	2.8	9.7	1.1	6	3	1280	110	10.08	0.68	6.03	0.4	14	12	2.35	0.52	0.11	0.35	0.096	0.075	0.002	0.071	0.001	0.036	-0.004	0.023	-0.07	0.057	0.099	0.095	0.045	0.024	-0.04	0.33	0.002	0.046	-0.036	0	0.011	0.012	-0.0254	0.0047	0.0039	0.0087	0.047	0.045	0.0024	0.007	0.05	0.1	0.246	0.066	160	230	0.034	0.053
BMB5905	Zircon_Sample-078.FIN2	Fe-rich	700000		-0.04	0.16	2.4	2.6	11.5	2.3	8.5	2.2	1273	53	9.8	1.2	6.03	0.5	2.79	0.58	3.1	1.1	0.18	0.2	0.087	0.06	0.004	0.061	-0.02	0.043	0	0.025	-0.037	0.087	0.057	0.065	-0.00048	0.0001	-0.28	0.19	-0.022	0.028	-0.02	0	0.0036	0.0081	0.01	0.16	0.01	0.014	0.113	0.063	0.017	0.01	0.047	0.061	0.286	0.078	140	170	-0.008	0.05
BMB5905	Zircon_Sample-085.FIN2	Fe-rich	700000		0.01	0.14	7.6	5.1	20.6	7.3	15.2	2.3	1378	48	9.23	0.27	4.94	0.73	2.69	0.53	6.3	2.2	0.18	0.26	0.15	0.019	0.025	0.068	-0.038	0.035	0.017	0.038	0.136	0.078	0.34	0.26	0.043	0.062	-0.02	0.23	0.049	0.032	0.008	0	0.008	0.024	-0.02	0.1	0.013	0.014	0.084	0.084	0.01	0.012	0.067	0.083	0.36	0.12	-30	130	-0.014	0.062
BMB5905	Zircon_Sample-086.FIN2	Fe-rich	700000		-0.145	0.044	5.1	3.4	17.6	4.2	10.4	3.7	1343	74	8.74	0.85	4.83	0.62	3.89	0.92	3.88	0.92	0.16	0.33	0.087	0.042	-0.029	0.064	-0.009	0.039	0.012	0.011	0.13	0.23	0.08	0.12	0.016	0.015	0.02	0.26	-0.015	0.048	0.06	0	0.025	0.017	0.03	0.16	0.002	0.005	0.026	0.043	-0.00107	0.00026	0.06	0.11	0.229	0.084	60	130	0.077	0.043
BMB5905	Zircon_Sample-087.FIN2	Fe-rich	700000		-0.18	0.21	4.5	3.2	8.96	0.33	6.3	4.5	1233	76	9.27	0.63	6.1	0.94	2.57	0.85	2.19	0.73	0.14	0.17	0.057	0.048	0.083	0.084	-0.015	0.049	0.027	0.039	0.06	0.11	-0.001	0.044	0.038	0.033	0.19	0.28	-0.008	0.054	0.08	0	0.004	0.014	-0.05	0.17	0.008	0.01	0.043	0.074	0.008	0.011	0.024	0.026	0.19	0.11	90	160	0.006	0.049
BMB5905	Zircon_Sample-088.FIN2	Fe-rich	700000		-0.07	0.11	2.3	1.8	9.44	0.91	6	1.5	1286	40	10.32	0.34	5.05	0.55	1.82	0.55	1.7	1.1	0.68	0.16	0.116	0.044	0.04	0.11	-0.026	0.056	0.019	0.039	0.04	0.28	0.19	0.17	0.012	0.016	0.03	0.29	0.031	0.059	-0.05	0	0.019	0.023	0.08	0.23	0.0029	0.0068	0.057	0.047	0.005	0.011	0.08	0.041	0.21	0.16	-60	100	-0.003	0.078

BMB5905	Zircon_Sample-089.FIN2	Fe-rich	700000		-0.09	0.16	5.1	5.2	10.73	0.92	5.3	4	1190	100	8.01	0.88	5.45	0.56	2.15	0.77	3.2	1.7	0.12	0.19	0.048	0.04	0.025	0.081	0.036	0.05	0.002	0.014	-0.03	0.11	0.1	0.12	0.006	0.014	0.05	0.22	0.026	0.043	-0.084	0	0.0108	0.0079	-0.05	0.1	0.017	0.018	0.064	0.085	0.004	0.01	0.02	0.055	0.229	0.076	116	97	0.013	0.032
BMB5905	Zircon_Sample-090.FIN2	Fe-rich	700000		-0.06	0.12	1.1	5.7	9.79	0.78	8.5	3.4	1329	91	9.7	1	7.1	1.6	8.6	9.2	2.3	0.98	0.26	0.49	0.05	0.038	0.005	0.085	0.021	0.081	-0.001	0.028	-0.004	0.093	0.112	0.099	-0.00058	0.00015	0.19	0.3	0.039	0.073	-0.056	0	0.019	0.019	0.03	0.12	0.012	0.015	0.07	0.063	0.004	0.01	0.14	0.12	0.25	0.1	23	59	0.51	0.11
BMB5905	Zircon_Sample-091.FIN2	Fe-rich	700000		-0.008	0.066	-0.4	4.2	10.7	2.1	7.7	3	1172	32	8.86	0.67	4.97	0.58	1.8	1.1	1.93	0.9	0.15	0.2	0.057	0.04	0.08	0.12	-0.004	0.068	0.017	0.02	0.06	0.2	0.09	0.13	0.009	0.012	0.18	0.35	0.016	0.074	0.06	0	0.01	0.015	-0.01	0.11	0.0044	0.0095	-0.004	0.038	-0.00094	0.00024	0.022	0.033	0.37	0.16	47	98	-0.028	0.013
BMB5905	Zircon_Sample-098.FIN2	Fe-rich	700000		0.01	0.22	1.09	0.66	8.4	1.1	10.7	1.7	1540	360	9.37	0.31	8.3	1.3	8.3	9	2.7	2.1	0.39	0.51	0.046	0.059	0.033	0.088	-0.07	0.04	-0.007	0.031	0.06	0.12	-0.01	0.039	-0.000502	0.000084	0.48	0.16	-0.001	0.032	0.03	0	0.0031	0.0079	-0.02	0.17	0.0028	0.0064	-0.018	0.034	0.004	0.01	0.006	0.03	0.22	0.1	130	230	0.13	0.18
BMB5905	Zircon_Sample-099.FIN2	Fe-rich	700000		-0.02	0.14	3.8	2.9	14.4	6.4	8.3	3.4	1207	71	9.03	0.63	5.21	0.62	1.42	0.3	6.2	6.1	0.48	0.34	0.115	0.074	-0.001	0.031	0.004	0.042	0.005	0.023	0.09	0.16	0.023	0.05	0.043	0.047	-0.09	0.22	-0.029	0.02	0	0	0.003	0.0081	0.01	0.15	0.0033	0.0073	0.06	0.16	0.019	0.018	0.08	0.13	0.35	0.26	30	140	-0.021	0.037
BMB5905	Zircon_Sample-100.FIN2	Fe-rich	700000		-0.067	0.047	3.9	5.5	7.89	0.98	6.6	3.9	1370	160	10.6	1.1	5.94	0.7	9.2	9	2.17	0.89	0.33	0.38	0.088	0.063	-0.035	0.041	-0.035	0.045	0.001	0.023	0.12	0.28	0.101	0.068	0.018	0.016	-0.23	0.14	0.024	0.016	0.01	0	0.031	0.024	0.02	0.15	0.011	0.015	0.06	0.12	-0.0009	0.00019	0.016	0.05	0.366	0.048	130	160	0.006	0.074
BMB5905	Zircon_Sample-101.FIN2	Fe-rich	700000		0.21	0.14	8.8	4.1	26.9	6.4	7.4	5.2	1380	120	8.99	0.62	3.53	0.28	1.75	0.56	3.29	0.8	0.44	0.31	0.094	0.062	-0.017	0.038	-0.013	0.031	0.021	0.035	0.01	0.13	0.11	0.11	0.018	0.027	0.04	0.29	0.009	0.038	-0.03	0	0.016	0.021	0.09	0.11	0.0072	0.0095	-0.011	0.038	0.012	0.018	0.043	0.041	0.344	0.052	130	180	-0.012	0.047
BMB5905	Zircon_Sample-102.FIN2	Fe-rich	700000		0.04	0.091	0.1	1.4	9.2	1	4.1	3.3	1110	100	9.09	0.53	4.97	0.57	1.59	0.49	2.23	0.94	0.21	0.39	0.042	0.056	-0.025	0.04	-0.02	0.044	0.001	0.0093	0.01	0.15	0.04	0.15	0.028	0.022	0.14	0.33	0.019	0.037	0	0	0.024	0.036	0.05	0.21	0.009	0.012	0.036	0.082	0.006	0.013	0.09	0.12	0.29	0.14	-20	110	0.042	0.083
BMB5905	Zircon_Sample-103.FIN2	Fe-rich	700000		0.042	0.076	-0.3	4.7	10.09	0.93	10.9	3.7	1192	57	9.1	1	4.42	0.49	1.38	0.66	2.5	1.2	0.58	0.31	0.087	0.047	0.06	0.12	-0.017	0.029	0.005	0.021	-0.07	0.18	0.1	0.14	0.013	0.019	-0.05	0.48	-0.011	0.049	0	0	0.027	0.029	-0.035	0.063	-0.0004	0.0001	-0.021	0.034	0.0097	0.0093	0.054	0.072	0.187	0.086	160	190	-0.019	0.038
BMB5905	Zircon_Sample-104.FIN2	Fe-rich	700000		0.11	0.3	0.1	2.4	9.07	0.82	6.4	3.9	1570	460	9.2	1.8	5.19	0.35	1.48	0.68	3	1.9	0.23	0.55	0.047	0.033	-0.043	0.052	-0.033	0.028	-0.0134	0.009	0.056	0.078	0.14	0.17	0.013	0.016	-0.02	0.25	0.025	0.023	-0.01	0	0.024	0.026	0.09	0.13	0.0033	0.0073	0.093	0.09	0.0022	0.0059	0.04	0.022	0.4	0.27	13	98	0.037	0.073
BMB5905	Zircon_Sample-111.FIN2	Fe-rich	700000		-0.13	0.15	4.2	3.9	8.5	1	4.1	2.3	1111	58	8.92	0.59	5.58	0.69	1.43	0.65	2.5	1.1	0.73	0.56	0.085	0.049	0.008	0.034	-0.013	0.053	-0.012	0.019	0.01	0.14	0.103	0.097	0.022	0.027	0.02	0.34	-0.012	0.024	0	0	0.031	0.025	-0.007	0.095	0.008	0.011	0.13	0.17	0.018	0.03	0.043	0.067	0.219	0.039	0	110	-0.014	0.036
BMB5905	Zircon_Sample-112.FIN2	Fe-rich	700000		0.03	0.15	4.5	5.6	9.28	0.64	1.6	1.7	1233	57	10.05	0.98	5.32	0.41	1	0.42	1.94	0.96	0.88	0.6	0.052	0.05	-0.004	0.09	-0.015	0.025	0.002	0.03	0.01	0.13	0.062	0.089	0.016	0.022	0.01	0.31	0.019	0.065	0.08	0	0.02	0.011	-0.01	0.16	0.009	0.012	0.019	0.055	-0.00076	0.00012	0.106	0.093	0.26	0.11	-11	91	0.005	0.072
BMB5905	Zircon_Sample-113.FIN2	Fe-rich	700000		0.15	0.19	8.8	9	12	3.1	6.3	2.5	1420	130	9.5	1.4	6.1	1.6	6.8	7.5	2.3	1.2	0.05	0.27	0.098	0.068	-0.007	0.057	-0.025	0.034	0.024	0.023	0.11	0.11	0.104	0.098	0.017	0.023	-0.28	0.23	0.029	0.031	0.015	0	0.0288	0.0083	0.069	0.08	0.012	0.016	0.033	0.07	0.009	0.014	0.071	0.053	0.269	0.078	160	130	0.218	0.057
BMB5905	Zircon_Sample-114.FIN2	Fe-rich	700000		0.27	0.2	6.1	9	8.69	0.44	4.9	2.9	1390	150	9.63	0.83	5.78	0.4	1.59	0.37	1.33	0.74	0.42	0.82	0.055	0.023	-0.016	0.085	-0.074	0.048	-0.019	0.019	0.06	0.11	0.06	0.084	0.0042	0.0096	-0.08	0.41	-0.005	0.05	0.04	0	0.006	0.015	0.03	0.23	0.014	0.021	-0.003	0.061	0.005	0.011	0.048	0.036	0.17	0.11	10	140	-0.006	0.021
BMB5905	Zircon_Sample-115.FIN2	Fe-rich	700000		0.18	0.23	2.2	6.1	8	1.2	7.1	6.1	1550	150	8.66	0.62	5.96	0.85	4.9	5.3	1.75	0.93	0.47	0.25	0.027	0.058	-0.059	0.064	-0.023	0.032	-0.002	0.032	-0.03	0.13	0.07	0.13	0.022	0.012	-0.29	0.48	0.028	0.046	0.012	0	0.01	0.013	0.04	0.19	0.014	0.019	0.063	0.087	0.011	0.017	0.06	0.11	0.18	0.05	60	240	0.28	0.16
BMB5905	Zircon_Sample-116.FIN2	Fe-rich	700000		0.08	0.13	4.2	4.8	12.1	5.3	8.9	3.2	1490	200	9.1	0.87	5.16	0.68	3.8	3.2	3	2	0.31	0.26	0.073	0.026	-0.01	0.08	-0.005	0.053	0.005	0.014	-0.06	0.12	0.06	0.12	0.022	0.021	-0.18	0.21	0.021	0.046	0.033	0	-0.0009	0.0064	-0.005	0.087	-0.000359	0.000074	0.034	0.03	0.024	0.024	0.05	0.11	0.236	0.053	-10	190	0.076	0.031
BMB5905	Zircon_Sample-117.FIN2	Fe-rich	700000		0.04	0.21	-3.2	5	24	25	8.3	4.3	1260	130	9.6	1.2	5.68	0.53	1.24	0.53	10	12	0.54	0.56	0.021	0.02	-0.003	0.081	0.023	0.043	0.01	0.047	0.03	0.19	0.094	0.089	0.011	0.015	-0.48	0.47	0.012	0.02	0.18	0	0.008	0.016	-0.04	0.15	-0.00041	0.00012	0.07	0.1	0.013	0.015	0.071	0.059	0.44	0.31	80	220	0.011	0.091
BMB5905	Zircon_Sample-124.FIN2	Fe-rich	700000		0.08	0.12	3.8	2	9.34	0.73	6.9	1.7	1175	99	8.63	0.65	4.62	0.82	1.12	0.22	2.1	2	-0.02	0.25	0.092	0.078	-0.042	0.043	-0.006	0.025	-0.011	0.021	-0.041	0.075	0.076	0.072	0.03	0.02	-0.18	0.35	-0.009	0.027	0.1	0	0.017	0.015	-0.056	0.089	0.008	0.01	0.074	0.047	0.0105	0.0094	0.053	0.048	0.196	0.096	90	240	-0.008	0.034
BMB5905	Zircon_Sample-125.FIN2	Fe-rich	700000		0.02	0.16	9	5.9	16.3	6.9	4.8	2.2	1134	94	7.91	0.45	4.41	0.78	2.9	1.2	4	1.3	0.26	0.87	0.049	0.024	0.049	0.068	0.006	0.04	-0.02	0.011	0.17	0.23	0.009	0.042	0.014	0.013	-0.63	0.46	0.022	0.032	0.004	0	0.025	0.0079	-0.01	0.14	0.0033	0.0072	0.01	0.068	0.013	0.027	0.016	0.027	0.29	0.12	240	120	-0.015	0.042
BMB5905	Zircon_Sample-126.FIN2	Fe-rich	700000		0.058	0.098	2.1	3.5	11.8	2.6	6.1	2.8	1067	95	7.89	0.71	4.4	0.91	1.21	0.71	2.7	2.2	0.59	0.54	0.03	0.037	0.004	0.056	-0.033	0.06	-0.011	0.017	0.04	0.18	0.086	0.038	0.019	0.023	-0.02	0.43	0.027	0.013	0	0	0.0077	0.0071	0.08	0.24	0.009	0.011	-0.02	0.042	0.0022	0.0057	0.008	0.03	0.385	0.098	130	100	-0.0205	0.0099
BMB5905	Zircon_Sample-127.FIN2	Fe-rich	700000		0.04	0.15	-0.1	4.1	9.03	0.62	3.4	3.8	1253	63	10.4	1.7	5.99	0.28	2.55	0.71	3	2.3	0.2	0.41	0.072	0.079	-0.012	0.047	0.049	0.016	-0.004	0.027	-0.02	0.13	0.053	0.056	-0.00061	0.00015	0.01	0.23	0.004	0.038	-0.049	0	0.015	0.018	0.176	0.065	0.008	0.016	0.035	0.067	0.0057	0.0084	0.105	0.065	0.22	0.13	-14	84	0.069	0.051
BMB5905	Zircon_Sample-128.FIN2	Fe-rich	700000		-0.08	0.16	0.3	8.9	8.89	0.65	6.2	1.9	1199	96	8.7	1.1	5.25	0.31	1.6	0.57	2.9	1.7	0.81	0.88	0.04	0.034	0.087	0.082	0.007	0.049	0.028	0.04	0	0.17	0.05	0.13	0.019	0.029	-0.29	0.17	-0.024	0.035	0.03	0	0.02	0.02	0.13	0.17	0.038	0.039	0.06	0.11	0.018	0.019	0.007	0.039	0.27	0.16	30	140	-0.003	0.029
BMB5905	Zircon_Sample-129.FIN2	Fe-rich	700000		0.16	0.13	3.8	2.3	8.57	0.56	4.3	1.3	1240	60	10.49	0.5	5.69	0.52	1.91	0.5	1.9	1.3	0.29	0.42	0.035	0.037	-0.008	0.051	0.004	0.046	-0.003	0.014	0.04	0.079	0.037	0.063	0.013	0.012	-0.45	0.38	-0.006	0.053	0.02	0	0.018	0.011	0.03	0.19	-0.000318	0.000079	0.053	0.054	0.0033	0.0079	0.088	0.078	0.276	0.072	60	120	0.027	0.055
BMB5905	Zircon_Sample-130.FIN2	Fe-rich	700000		0.25	0.13	2	2.9	8.49	0.68	2.8	2.1	1207	55	9.3	0.8	5.56	0.77	2	1.4	0.83	0.61	0.88	0.78	0.033	0.044	-0.043	0.034	-0.042	0.048	0.01	0.019	0	0.25	0.19	0.2	-0.00065	0.00015	-0.01	0.31	0.02	0.048	0	0	0.019	0.012	-0.03	0.21	0.0042	0.0091	0.029	0.066	0.017	0.013	0.048	0.034	0.136	0.09	50	200	0.028	0.04
BMB5905	Zircon_Sample-137.FIN2	Fe-rich	700000		-0.026	0.028	7	22	31	28	7.6	3.1	1580	410	8.5	1.5	3.86	0.72	1.59	0.69	7.6	7.5	0.68	0.55	0.15	0.21	-0.013	0.055	-0.033	0.057	-0.021	0.012	-0.167	0.079	0.045	0.09	0.015	0.016	-0.23	0.62	0.004	0.046	-0.066	0	0.006	0.01	0.14	0.2	0.02	0.025	0.02	0.13	0.005	0.011	0.047	0.028	0.71	0.5	-1	89	0.016	0.028
BMB5905	Zircon_Sample-138.FIN2	Fe-rich	700000		0.09	0.066	4.3	3.9	10.5	1.3	4.5	1.9	1321	50	9.6	1.3	5.02	0.53	2.29	0.85	2.2	1.1	0.11	0.56	0.069	0.081	-0.005	0.039	0.029	0.052	-0.018	0.018	-0.04	0.13	0.13	0.14	0.018	0.016	0.23	0.23	0.038	0.065	-0.03	0	0.018	0.014	0	0.15	0.01	0.012	-0.042	0.037	0.0022	0.0058	0.017	0.054	0.271	0.087	50	59	0.014	0.065
BMB5905	Zircon_Sample-139.FIN2	Fe-rich	700000		0.083	0.082	-0.2	6.6	9.69	0.79	5.1	3.1	1210	140	9.1	0.77	4.85	0.24	2.77	0.54	3.8	1.5	1.09	0.76	0.072	0.033	0.002	0.063	0.014	0.086	-0.008	0.019	-0.146	0.083	0.03	0.049	0.009	0.012	-0.06	0.42	-0.003	0.021	0.005	0	0.025	0.024	0.12	0.19	0.0038	0.0083	0.014	0.084	0.0041	0.0094	0.032	0.038	0.238	0.098	120	150	0.109	0.074
BMB5905	Zircon_Sample-140.FIN2	Fe-rich	700000		-0.07	0.13	2	3.3	11.1	0.61	2.3	3	1267	49	8.76	0.99	4.75	0.84	9	9.7	2.21	0.91	0.14	0.38	0.082	0.048	0.061	0.064	0.007	0.016	0.0009	0.0089	0	0.12	0.033	0.034	0.022	0.036	0.22	0.31	0	0.043	0.101	0	0.029	0.015	0.081	0.094	0.006	0.013	-0.034	0.038	0.015	0.014	0.064	0.073	0.26	0.077	130	190	0.033	0.029
BMB5905	Zircon_Sample-141.FIN2	Fe-rich	700000		-0.025	0.017	3.72	0.77	54.7	6.5	14.87	0.5	6200	1300	48	11	22.1	0.75	0.795	0.084	18.4	4.4	1.66	0.34	0.137	0.025	0.004	0.02	0.002	0.016	-0.0006	0.008	-0.019	0.03	0.023	0.015	0.0022	0.003	0.02	0.07	0.011	0.016	-0.002	0	0.0008	0.0025	-0.005	0.023	-0.000067	0.00002	0.0025	0.0097	0.0028	0.0025	0.014	0.021	1.839	0.081	120	180	0.18	0.22
BMB5905	Zircon_Sample-142.FIN2	Fe-rich	700000		0.07	0.044	14.1	5.7	107	25	25.1	2.7	3990	420	30.3	3.8	18.7	1.5	0.6	0.12	25.4	2.1	2.36	0.26	0.192	0.028	-0.004	0.019	-0.009	0.013	-0.0039	0.0052	0.004	0.039	0.005	0.015	0.009	0.01	-0.08	0.11	0.0056	0.0084	-0.021	0	0.0038	0.0061	0.032	0.058	0.0022	0.0045	0.022	0.028	0.0025	0.0019	0.034	0.027	2.73	0.24	110	130	0.058	0.026
BMB5905	Zircon_Sample-143.FIN2	Fe-rich	700000		0.21	0.19	15	17	78	5	35	16	4140	240	35.2	3.6	22.37	0.57	5.3	2.4	23.5	3.3	1.8	1	0.142	0.096	0.051	0.04	0.013	0.035	0.002	0.012	-0.2	0.39	0.11	0.12	0.07	0.14	-0.29	0.85	-0.014	0.024	0.007	0	0.044	0.066	0.015	0.057	0.006	0.0095	0.17	0.35	-0.001	0.0015	0.15	0.22	2.24	0.57	110	140	1.5	1.5

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5910 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5910	Zircon_sample-007.FIN2	Fe-rich	700000		0.1	0.11	7.3	4.2	43.9	3.4	17.8	5.5	527	24	14.54	0.96	17.6	0.83	6.2	2	14.4	2.2	1.05	0.4	3.22	0.38	0.006	0.078	-0.002	0.049	-0.002	0.025	0.09	0.16	0.017	0.05	0.008	0.017	0.13	0.19	0.013	0.037	-0.018	0	0.0093	0.0084	0.045	0.082	0.0042	0.006	0.049	0.059	0.034	0.031	0.008	0.034	1.13	0.089	0	150	0.165	0.095
BMB5910	Zircon_sample-008.FIN2	Fe-rich	700000		0.132	0.094	620	430	163	47	44	17	41000	32000	14.9	1.4	26	12	5.8	2.3	33.4	3.9	1.13	0.36	4.44	0.68	0.028	0.022	0.048	0.072	-0.011	0.023	0.17	0.23	0.017	0.053	0.0036	0.008	0.26	0.21	-0.031	0.02	-0.032	0	-0.001	0.0003	-0.05	0.11	-0.00055	0.00017	0.041	0.069	0.02	0.018	0.102	0.094	3.19	0.2	40	130	0.21	0.13
BMB5910	Zircon_sample-009.FIN2	Fe-rich	700000		0.06	0.11	5.8	1.6	23.59	0.97	15.4	4.9	518	28	20.2	1.4	24.44	0.67	4.6	0.21	6.2	1.1	0.61	0.61	2.558	0.076	-0.02	0.1	-0.033	0.052	0.005	0.0095	0.08	0.1	-0.022	0.056	0.023	0.03	0.41	0.66	-0.021	0.024	-0.006	0	0.0074	0.0088	0.07	0.21	0.009	0.01	0.009	0.034	0.03	0.036	0.03	0.11	0.9	0.16	245	67	0.108	0.038
BMB5910	Zircon_sample-010.FIN2	Fe-rich	700000		-0.03	0.12	14	12	153	58	41.9	9.8	740	530	11.71	0.6	9.6	2.6	3.8	2.4	63.1	4.6	0.55	0.044	2.42	0.18	-0.034	0.078	-0.032	0.063	0.009	0.017	0.28	0.36	0.094	0.087	0.01	0.021	0.13	0.62	-0.018	0.022	0.03	0	-0.0009	0.00019	0.26	0.26	0.0028	0.0066	0.011	0.037	-0.00175	0.00036	0.047	0.069	4.03	0.93	230	320	0.11	0.12
BMB5910	Zircon_sample-011.FIN2	Fe-rich	700000		0.024	0.036	2.5	4.7	63.2	6.8	16	14	540	27	17.7	1.1	15.9	1.2	4.2	1.5	19.3	2.4	0.76	0.56	3.12	0.59	-0.024	0.058	0.007	0.085	0.021	0.035	0.06	0.14	-0.017	0.058	0.014	0.029	-0.04	0.12	0.01	0.032	-0.02	0	0.009	0.011	-0.03	0.12	-0.00046	0.00013	-0.0073	0.002	0.031	0.035	0.06	0.1	1.77	0.19	-210	130	0.111	0.024
BMB5910	Zircon_sample-012.FIN2	Fe-rich	700000		0.048	0.09	1.3	5.3	26.1	2.8	13.2	2.8	421	38	13.7	2.2	20.6	1.2	38	27	8.8	1.8	0.43	0.46	1.8	0.48	0.05	0.05	-0.006	0.065	-0.005	0.025	0.04	0.13	0.12	0.26	0.027	0.055	0.02	0.28	0.003	0.03	-0.04	0	0.008	0.018	-0.07	0.12	0.01	0.015	0.057	0.07	0.003	0.01	0.032	0.042	0.81	0.22	-95	93	0.108	0.052
BMB5910	Zircon_sample-013.FIN2	Fe-rich	700000		0.06	0.11	4.4	2.7	19.5	1.2	13.4	2.1	454	34	16.3	1.4	27	5.2	3.15	0.98	5.4	1.3	0.45	0.35	2.184	0.095	0.021	0.035	0.03	0.035	0.0111	0.006	0.16	0.13	0.14	0.17	0.024	0.028	0.06	0.44	-0.009	0.031	0.065	0	0.019	0.033	0.03	0.088	0.0044	0.0058	0.008	0.029	-0.00143	0.00027	0.002	0.03	0.638	0.097	-4	75	0.089	0.05
BMB5910	Zircon_sample-020.FIN2	Fe-rich	700000		0.13	0.1	4.5	8.5	47	3.9	12.4	3.5	648	17	18.36	0.93	21.7	1.8	5.3	3.1	16.5	2.1	0.88	0.42	2.98	0.28	-0.055	0.054	-0.01	0.037	0.015	0.03	0.04	0.14	0.11	0.11	0.019	0.016	0.12	0.24	0.04	0.055	0	0	0.006	0.009	-0.03	0.11	-0.000527	0.000099	0.051	0.052	0.007	0.011	0.05	0.059	1.71	0.37	-80	120	0.215	0.077
BMB5910	Zircon_sample-021.FIN2	Fe-rich	700000		0.28	0.11	7.5	5.6	88.3	7.2	29.7	5.9	291	65	12.1	2.4	13.82	0.48	3.9	1.9	42.3	6.1	0.67	0.64	4.4	1	0	0.11	-0.042	0.066	0.011	0.025	0.08	0.15	-0.02	0.053	0.017	0.02	0.13	0.56	-0.022	0.035	-0.066	0	0.011	0.016	0.052	0.072	0.028	0.037	0.029	0.047	0.018	0.013	0.128	0.093	3.77	0.46	100	230	0.08	0.045
BMB5910	Zircon_sample-022.FIN2	Fe-rich	700000		0.18	0.12	12.5	5.2	91.1	8.2	26.5	4.4	358	52	14.74	0.37	14.1	1.5	3.2	1.6	28.4	3	1.05	0.29	4	0.89	-0.038	0.032	-0.021	0.054	0.006	0.011	0.1	0.19	-0.016	0.062	0.022	0.028	0.41	0.55	-0.005	0.025	-0.051	0	0.025	0.016	0.048	0.098	0.0054	0.0073	0.053	0.062	0.0032	0.0099	0.018	0.049	2.85	0.45	20	130	0.066	0.058
BMB5910	Zircon_sample-023.FIN2	Fe-rich	700000		0.09	0.14	9.8	4.8	67.6	6.3	21	4	423	29	15.1	1.3	25.5	5.8	150	160	20.2	3.6	0.93	0.43	4.07	0.29	0.004	0.038	0.078	0.071	0.002	0.014	0.05	0.12	0.17	0.15	-0.000362	0.000079	-0.02	0.31	0.018	0.048	-0.074	0	0.014	0.015	-0.016	0.089	0.0061	0.0082	0.079	0.067	0.005	0.013	0.05	0.13	2.19	0.52	20	270	0.44	0.48
BMB5910	Zircon_sample-024.FIN2	Fe-rich	700000		0.23	0.15	78	77	40.1	7.6	16.1	4.6	631	78	12.7	1.1	24.3	2.3	26	15	14.7	2.2	0.74	0.3	3.4	0.44	-0.01	0.026	-0.019	0.049	0.007	0.026	0.15	0.32	0.11	0.15	0.02	0.017	-0.02	0.18	0.019	0.026	-0.03	0	0.0031	0.0092	0.031	0.089	0.005	0.011	-0.0114	0.0018	0.024	0.029	0.068	0.055	0.93	0.37	20	150	0.29	0.2
BMB5910	Zircon_sample-025.FIN2	Fe-rich	700000		0.077	0.083	9.1	2.3	96	9.5	23.8	4.7	393	53	11.33	0.39	15.2	1.1	2.36	0.14	31.2	2.5	0.77	0.23	3.38	0.23	0.03	0.039	0.02	0.11	0.014	0.011	0.28	0.13	0.025	0.076	0.02	0.026	-0.08	0.21	0.007	0.059	0.01	0	0.022	0.024	-0.05	0.16	0.011	0.0085	0.054	0.045	0.004	0.01	0.15	0.12	2.39	0.34	130	150	0.12	0.044
BMB5910	Zircon_sample-026.FIN2	Fe-rich	700000		-0.15	0.28	12	12	56	7.3	21.3	4.3	554	56	14	1.7	16	2.1	4.6	1.2	17.9	5.8	0.39	0.19	4.06	0.67	-0.019	0.011	0.052	0.047	-0.005	0.016	0.03	0.14	0.2	0.35	0.005	0.011	-0.2	0.21	-0.013	0.051	0	0	0.014	0.031	-0.05	0.14	0.005	0.011	0.048	0.071	-0.00182	0.00044	0.13	0.12	2.11	0.59	125	60	0.064	0.059
BMB5910	Zircon_sample-033.FIN2	Fe-rich	700000		0	0.38	5.3	6	63.4	2.8	19.8	5.1	509	88	12.94	0.87	16.5	1	160	42	23.3	1.6	0.78	0.45	4.1	1	-0.011	0.05	0.017	0.064	0.004	0.03	-0.07	0.13	0.17	0.024	0.07	0.12	0.13	0.37	-0.028	0.04	0.04	0	0.009	0.013	0.086	0.076	0.0032	0.0076	0.079	0.021	0.02	0.031	0.08	0.12	2.14	0.36	90	220	0.074	0.087
BMB5910	Zircon_sample-034.FIN2	Fe-rich	700000		0.003	0.091	8.9	7.7	49	3.3	17.7	3.1	534	29	13.85	0.82	19.4	1.8	390	400	18.5	1.2	0.6	0.54	2.96	0.35	0.042	0.079	-0.012	0.035	0.0091	0.0057	0.05	0.15	0.08	0.14	0.005	0.011	-0.33	0.24	0.002	0.044	-0.072	0	0.013	0.011	-0.001	0.084	-0.00053	0.00011	0.2	0.14	0.012	0.019	0.09	0.11	1.47	0.18	70	160	0.15	0.13
BMB5910	Zircon_sample-035.FIN2	Fe-rich	700000		0.065	0.088	38.4	5.9	42.1	4.4	300	40	1910	290	71.7	7	861	19	3.4	1.6	359	20	34.8	3.4	10.51	0.96	0.051	0.063	0.004	0.047	1.3	2.5	3.9	7.9	0.129	0.083	0.063	0.082	-0.07	0.36	-0.002	0.034	0.35	0	0.4	0.72	-0.063	0.034	0.015	0.031	0.068	0.074	-0.00192	0.00062	0.077	0.088	5.38	0.71	25	55	0.36	0.21
BMB5910	Zircon_sample-036.FIN2	Fe-rich	700000		0.13	0.18	2.3	2.4	21.22	0.57	11.5	4.4	610	160	17.2	1.6	28.1	1.8	120	180	5.6	1.3	0.19	0.19	2.43	0.66	-0.07	0.061	-0.019	0.063	0.028	0.034	0	0.2	-0.023	0.044	0.018	0.028	0.31	0.3	-0.005	0.063	-0.01	0	0.032	0.028	-0.02	0.16	-0.00058	0.00011	0.029	0.04	-0.00173	0.00032	0.12	0.13	0.74	0.19	180	150	0.089	0.08
BMB5910	Zircon_sample-037.FIN2	Fe-rich	700000		0.056	0.052	5.1	3.2	26.1	2.1	8.6	2.7	483	28	16.6	1.1	22.3	1.7	4.7	2.2	8.3	2.6	0.17	0.28	2.27	0.23	-0.017	0.085	-0.012	0.072	-0.005	0.018	0.012	0.079	0.01	0.047	0.013	0.028	-0.08	0.26	0.019	0.0083	0.092	0	0.01	0.015	-0.046	0.09	-0.00046	0.0001	0.032	0.092	0.012	0.026	0.11	0.18	0.81	0.11	0	90	0.019	0.052
BMB5910	Zircon_sample-038.FIN2	Fe-rich	700000		-0.051	0.099	12.8	7.5	55	12	16.1	2.8	535	89	17.4	3.1	22.32	0.89	5.68	0.94	18.7	8	0.56	0.83	2.69	0.3	0.025	0.073	-0.0356	0.0036	0.014	0.019	-0.1	0.16	0.14	0.14	0.026	0.035	-0.03	0.77	0.016	0.044	-0.043	0	0.0018	0.0077	-0.08	0.11	-0.00051	0.00016	0.087	0.073	0.007	0.017	0.094	0.053	1.47	0.49	20	130	0.18	0.17
BMB5910	Zircon_sample-039.FIN2	Fe-rich	700000		0.09	0.16	15.1	5.6	41.2	3.5	17.5	4.7	586	32	15.3	1.2	20.7	1.4	7.8	1.8	14	2	0.53	0.39	3.14	0.34	0.03	0.1	-0.041	0.058	0.001	0.015	0.12	0.23	0.082	0.094	0.0035	0.008	-0.14	0.48	0.034	0.053	-0.003	0	0.011	0.012	-0.14	0.12	0.009	0.013	0.033	0.044	0.017	0.016	0.1	0.035	1.48	0.21	120	160	0.037	0.032
BMB5910	Zircon_sample-046.FIN2	Fe-rich	700000		0.014	0.099	35	55	42.2	6.9	11.8	3.8	548	50	15.16	0.85	24.5	2.1	4.6	1.4	12.85	0.54	0.49	0.67	3.1	1.1	-0.02	0.11	-0.02	0.031	-0.01	0.013	0.24	0.22	0.06	0.073	-0.000373	0.000066	-0.26	0.29	0.008	0.069	0.04	0	0.02	0.021	0.005	0.093	0.0023	0.0057	0.057	0.099	-0.00132	0.00023	0.048	0.088	1.27	0.24	220	170	0.026	0.051
BMB5910	Zircon_Sample-047.FIN2	Fe-rich	700000		-0.02	0.15	80	110	69.9	9.3	21.7	7.3	3000	3700	13.97	0.97	16.2	3	5.77	0.9	20.2	6	0.39	0.17	3.49	0.93	-0.037	0.071	-0.003	0.027	-0.02	0.016	-0.09	0.17	0.02	0.06	0.031	0.039	0.03	0.59	0.002	0.04	-0.055	0	0.0072	0.0098	-0.05	0.12	-0.00052	0.00013	0.013	0.057	0.012	0.014	0.1	0.14	2.09	0.68	30	160	0.088	0.098
BMB5910	Zircon_Sample-048.FIN2	Fe-rich	700000		0.03	0.13	6	3.1	43.8	2.7	11.8	3.8	528	43	14.8	1	23.2	2.2	107	69	12.8	5.8	0.37	0.17	2.81	0.64	0.008	0.05	-0.038	0.038	0.025	0.058	-0.038	0.08	-0.015	0.043	0.007	0.014	0.27	0.5	-0.014	0.022	0.07	0	0.0025	0.0065	0	0.15	0.0066	0.0089	0.019	0.043	-0.00149	0.00037	0.103	0.077	0.94	0.17	80	150	0.19	0.14
BMB5910	Zircon_Sample-049.FIN2	Fe-rich	700000		0.16	0.12	6.2	4.3	112	23	26.4	5	334	19	12.7	1.7	14.9	1.6	210	240	40.2	4.4	0.69	0.23	4.08	0.77	0.051	0.071	0.013	0.028	0.004	0.022	0.01	0.11	0.132	0.095	0.012	0.016	0.05	0.62	0.033	0.056	0.07	0	0.0088	0.0096	0.01	0.19	0.022	0.013	0.05	0.11	0.004	0.011	0.091	0.082	3.93	0.68	110	160	0.16	0.12
BMB5910	Zircon_Sample-050.FIN2	Fe-rich	700000		0.2	0.24	3.8	2.6	31.5	4.8	6.9	3.2	524	29	16.4	1.5	23.9	2.7	3.4	1	9.1	2	0.46	0.18	2.6	0.23	0.007	0.084	-0.023	0.019	0.016	0.028	-0.137	0.057	0.1	0.12	0.012	0.015	0.29	0.45	0.054	0.051	0.11	0	0.013	0.023	0.024	0.09	0.016	0.016	-0.001	0.036	-0.0015	0.00025	0.066	0.086	1.11	0.18	40	230	0.034	0.063
BMB5910	Zircon_Sample-051.FIN2	Fe-rich	700000		0.05	0.16	9.9	2	57	11	21.9	4.6	388	56	11	1.4	14.2	1.5	1.91	0.74	24.4	4	0.43	0.24	3.76	0.8	0.052	0.034	0.021	0.041	0.02	0.039	-0.02	0.15	0.13	0.13	0.0031	0.007	-0.36	0.61	0.023	0.024	0.14	0	0.016	0.021	-0.051	0.092	0.018	0.013	-0.009	0.023	-0.00137	0.00032	0.037	0.068	2.16	0.52	-140	200	0.039	0.061
BMB5910	Zircon_Sample-052.FIN2	Fe-rich	700000		-0.031	0.098	3.9	9.2	30.2	2.5	12.5	5.3	587	27	19.5	1.7	23.8	1.2	2.62	0.31	8.9	1.2	0.53	0.36	2.63	0.62	0.051	0.099	-0.028	0.034	0.033	0.02	-0.05	0.14	0.116	0.056	0.014	0.028	0.15	0.28	-0.014	0.039	-0.05	0	0.016	0.014	0.05	0.17	0.011	0.023	0.014	0.073	0.017	0.025	-0.006	0.032	1.06	0.17	40	180	0.07	0.053
BMB5910	Zircon_Sample-059.FIN2	Fe-rich	700000		0.062	0.05	22.1	4.9	89.9	5.6	36	4	720	480	12.6	1.6	12.4	1.8	1.905	0.098	30.6	7.3	1.4	0.57	6	1.2	0.014	0.066	0.016	0.037	-0.001	0.024	0.114	0.035	0.06	0.1	0.0304	0.0096	-0.3	1.7	0.025	0.049	0.01	0	0.006	0.017	-0.03	0.32	-0.00058	0.00018	0.03	0.11	-0.00145	0.00046	0.009	0.04	3.08	0.8	22	76	0.101	0.024
BMB5910	Zircon_Sample-060.FIN2	Fe-rich	700000		-0.019	0.082	12.4	4.2	49.8	7.5	14.4	3.8	604	80	15.5	1.2	17.2	1.8	4.3	1.1	15.9	2.5	0.52	0.28	2.91	0.58	0.027	0.076	-0.037	0.076	0.004	0.026	-0.065	0.09	0.093	0.094	0.039	0.036	0.18	0.79	0.015	0.033	-0.004	0	0.017	0.015	-0.043	0.058	0.012	0.016	0.011	0.043	0.027	0.028	0.01	0.038	1.61	0.36	10	240	0.07	0.081
BMB5910	Zircon_Sample-061.FIN2	Fe-rich	700000		0.08	0.13	3.3	4	27.5	4.2	14.5	2	483	47	14.58	0.31	23.1	1.2	2.5	1	8.7	2.9	0.49	0.2	3.08	0.32	-0.045	0.042	0.018	0.039	0.006	0.041	0.07	0.12	0.057	0.091	0.012	0.016	0.23	0.34	0.013	0.064	0.12	0	0.01	0.016	0.15	0.18	0.016	0.025	0.08	0.11	0.023	0.019	0.044	0.065	0.92	0.24	30	140	0.13	0.14
BMB5910	Zircon_Sample-062.FIN2	Fe-rich	700000		-0.1	0.12	7.8	2.8	57.4	6.4	20.5	3.7	512	58	15.01	0.88	18.1	2	3.77	0.87	20	2.3	0.51	0.26	3.8	0.72	-0.05	0.067	0.013	0.027	0.005	0.032	0.06	0.22	0.027	0.073	0.032	0.037	-0.1	1	0.001	0.033	-0.03	0	0.024	0.014	0	0.13	0.012	0.025	0.08	0.082	0.0013	0.0057	0.058	0.062	2.1	0.29	-210	160	0.09	0.17
BMB5910	Zircon_Sample-063.FIN2	Fe-rich	700000		-0.07	0.23	6.4	3.2	43.9	4.9	14.1	3.6	526	24	16.3	1.1	21	2.4	2.9	1.2	12.2	2.2	0.73	0.51	2.66	0.43	0.034	0.057	0.068	0.056	-0.012	0.017	0.076	0.025	0.012	0.058	-0.00043	0.00014	0.4	2.2	-0.036	0.053	0.02	0	0.0211	0.0083	0.03	0.13	-0.00049	0.00016	0.04	0.12	-0.00119	0.0004	0.017	0.04	1.46	0.29	70	230	0.074	0.085
BMB5910	Zircon_Sample-064.FIN2	Fe-rich	700000		0.15	0.23	6.6	2.8	25.4	1.7	13.5	2.6	660	250	18	1.1	26	1.6	3.27	0.9	8.1	2	0.32	0.21	2.85	0.27	0.011	0.043	-0.071	0.051	-0.008	0.027	-0.09	0.1	0.132	0.031	0.039	0.039	-0.32	0.82	0.003	0.043	0.01	0	0.025	0.024	0.04	0.15	0.0084	0.0077	-0.0255	0.0083	0.028	0.032	0.117	0.09	0.93	0.18	30	200	0.065	0.092
BMB5910	Zircon_Sample-065.FIN2	Fe-rich	700000		0.14	0.13	14	21	34.4	7.6	16.4	4.1	668	80	17.1	0.88	26.2	2.7	59	52	7.9	4	0.52	0.41	3.09	0.73	0.016	0.078	0.023	0.036	0.024	0.031	0.09	0.17	0.14	0.13	0.007	0.015	0.4	1.1	0.039	0.043	-0.08	0	0.0091	0.0091	-0.05	0.036	0.0067	0.0091	0.07	0.15	0.008	0.011	0.041	0.079	1.66	0.38	140	220	0.64	0.14

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5911 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5911	Zircon_Sample-267.FIN2	Fe-rich	700000		0.084	0.054	144	78	421	55	590	140	4160	130	333	19	37.2	7.3	3.3	1.7	409	13	4.06	0.69	1.329	0.068	0.018	0.021	0.126	0.01	0.0042	0.008	0.06	0.07	-0.003	0.033	0.0007	0.0019	0.042	0.072	0	0.011	0.031	0	-0.0009	0.0025	0.019	0.049	0.0056	0.0056	0.039	0.034	0.0028	0.0026	0.016	0.027	7.4	1.6	960	410	0.32	0.27
BMB5911	Zircon_Sample-268.FIN2	Fe-rich	700000		0.103	0.023	24.6	3.2	259	34	340	120	4320	350	321	20	31.4	6.2	13	10	441	99	3.49	0.91	1.76	0.27	0.016	0.048	0.0372	0.0075	0.0014	0.0091	0.012	0.065	-0.017	0.049	-0.000392	0.000086	0.02	0.11	0.003	0.018	0.022	0	-0.0063	0.0067	0.048	0.068	0.0104	0.0067	0.055	0.048	0.0066	0.0068	-0.003	0.017	11.5	1.6	2190	530	0.32	0.1
BMB5911	Zircon_Sample-269.FIN2	Fe-rich	700000		0.099	0.023	42.3	8.5	220	12	315	32	5350	240	478	13	34.4	3.7	5.2	1	382	12	3.586	0.063	1.959	0.073	0.007	0.022	0.11	0.032	-0.008	0.01	0.078	0.078	0.029	0.05	0.0181	0.0093	0.14	0.25	-0.006	0.01	-0.018	0	-0.0055	0.0055	0.034	0.015	0.0093	0.0084	0.058	0.039	0.0068	0.0059	0.022	0.037	11.9	1.2	1650	570	0.73	0.32
BMB5911	Zircon_Sample-270.FIN2	Fe-rich	700000		0.123	0.074	22.4	2.1	160.6	6	238	8.4	5120	270	505	44	26	2.6	6.6	5.7	360	30	2.86	0.15	1.76	0.14	0.055	0.036	0.1	0.1	-0.0025	0.0073	0.14	0.12	0.044	0.063	0.019	0.021	0.09	0.12	0.008	0.018	0.091	0	0.001	0.013	0.045	0.019	0.0057	0.0059	0.099	0.07	0.0047	0.0076	0.003	0.018	11.8	1.4	1090	490	0.49	0.11
BMB5911	Zircon_Sample-271.FIN2	Fe-rich	700000		0.106	0.057	16.24	0.97	152.6	7.5	305	29	2229	48	198.8	9	20.2	6	600	790	1400	95	3.02	0.31	1.52	0.13	0.029	0.019	0.008	0.018	0.003	0.017	0.08	0.086	-0.012	0.031	0.0038	0.0029	-0.072	0.076	0.005	0.012	-0.033	0	0.0077	0.0088	0.013	0.049	0.0034	0.0025	0.032	0.027	0.0059	0.0021	0.0131	0.0097	8.2	0.75	318	74	0.113	0.091
BMB5911	Zircon_Sample-272.FIN2	Fe-rich	700000		0.0311	0.0028	60	55	230	150	310	110	3070	710	223	14	7.5	3.1	109	62	1140	190	2.86	0.5	1.3	0.2	0.018	0.022	-0.0196	0.0089	-0.002	0.01	-0.012	0.032	-0.0279	0.009	0.004	0.0058	-0.042	0.083	0.009	0.012	0.008	0	0.0015	0.0042	0.021	0.037	0.0008	0.0016	0.043	0.025	0.0005	0.0014	-0.004	0.011	8.6	3.7	-40	100	0.041	0.032
BMB5911	Zircon_Sample-273.FIN2	Fe-rich	700000		0.29	0.31	15	18	77	59	170	200	6.40E+03	2.80E+03	146	70	180	210	120	120	270	230	2.9	1.9	0.25	0.23	0.04	0.53	0.06	0.21	-0.061	0.092	0.16	0.48	0.35	0.32	0.052	0.058	0.6	1.6	0.015	0.092	-0.09	0	-0.045	0.07	0.02	0.13	0.025	0.026	0.05	0.053	0.022	0.042	0.01	0.15	3.1	2.4	120	200	34	33
BMB5911	Zircon_Sample-280.FIN2	Fe-rich	700000		0.028	0.024	0.01	0.72	3.8	2.6	22.2	6	4.80E+03	1.10E+03	66	23	2.2	1.5	2.6	1.7	33	11	0.33	0.24	0.062	0.054	0.007	0.013	0.002	0.015	-0.0021	0.0053	0.009	0.036	0.017	0.033	0.0014	0.002	-0.01	0.11	-0.0064	0.0046	0.013	0	0.0057	0.0058	-0.013	0.061	0.0039	0.0038	0.02	0.018	0.0016	0.0037	0.003	0.021	0.38	0.12	60	100	0.16	0.29
BMB5911	Zircon_Sample-281.FIN2	Fe-rich	700000		0.038	0.077	7.2	7.6	25	16	50	25	8780	800	175	42	19	23	4	1.6	89	39	0.85	0.66	0.21	0.13	-0.002	0.014	-0.011	0.043	-0.0036	0.0078	-0.009	0.056	0.01	0.043	0.009	0.015	0.08	0.2	-0.008	0.012	0.043	0	0.007	0.014	-0.01	0.037	0.0097	0.0042	0.041	0.071	0.0059	0.0074	-0.003	0.02	1.1	0.34	90	170	1.9	2.7
BMB5911	Zircon_Sample-282.FIN2	Fe-rich	700000		0.09	0.093	5.6	2.7	31	13	72	20	6940	530	450	120	15.4	7.5	5.2	1.1	185	47	0.96	0.46	0.46	0.16	-0.012	0.028	-0.015	0.036	-0.003	0.014	0.03	0.11	-0.005	0.063	0.0068	0.0083	-0.01	0.13	0.003	0.023	-0.052	0	0.0011	0.0043	0.06	0.11	0.0013	0.0028	0.005	0.012	0.01	0.015	0.006	0.028	1.91	0.61	149	41	2	1
BMB5911	Zircon_Sample-283.FIN2	Fe-rich	700000		0.102	0.044	24	24	150	120	151	57	7.10E+03	3.20E+03	241	83	20.6	9.3	150	270	630	320	1.55	0.15	0.72	0.43	0.17	0.33	0.038	0.043	0.26	0.47	-0.07	0.13	0.016	0.081	0.0031	0.005	-0.05	0.19	-0.0107	0.0097	0.11	0	-0.007	0.017	0.02	0.18	0.8	1.6	0.005	0.015	0.0023	0.0039	0.052	0.083	3.8	1.5	80	170	21	27
BMB5911	Zircon_Sample-284.FIN2	Fe-rich	700000		0.41	0.39	30.8	8.5	126	45	137	47	1.90E+04	1.50E+04	228	24	82	47	29	39	340	150	2.4	1.7	0.661	0.053	-0.01	0.15	0.09	0.11	-0.029	0.066	-0.1	0.71	-0.06	0.33	0.044	0.09	0.02	0.99	-0.004	0.039	0	0	-0.002	0.025	0.14	0.27	0.02	0.021	0.042	0.06	0.025	0.014	0.12	0.22	4.2	3.8	180	220	12.8	1.2
BMB5911	Zircon_Sample-285.FIN2	Fe-rich	700000		-0.011	0.041	2.63	0.5	29	18	50	27	6170	260	138	21	7.7	1.4	1.3	0.69	101	45	0.71	0.24	0.3	0.093	0.016	0.025	-0.004	0.011	-0.0008	0.004	-0.02	0.023	-0.006	0.032	0.015	0.012	0.01	0.19	0.004	0.011	0.002	0	-0.0026	0.0038	0.04	0.03	0.0046	0.0041	0.008	0.02	0.0015	0.0034	0.008	0.026	1.2	0.66	100	170	0.124	0.04
BMB5911	Zircon_Sample-286.FIN2	Fe-rich	700000		-0.014	0.015	-0.94	0.66	0.021	0.061	0.3	0.2	3480	770	19.621	0.057	1.35	0.88	0.729	0.099	1.3	1.9	0.101	0.016	0.00813	0.0002	0.006	0.036	-0.018	0.014	-0.006	0.011	0.019	0.065	0.025	0.048	-0.0001648	0.0000041	0	0.017	-0.0025	0.0021	-0.009	0	-0.002652	0.000033	0.021	0.013	-0.0001084	0.0000023	0.016	0.011	0.003	0.0063	0.013	0.027	0.01	0.021	206	25	0.086	0.026
BMB5911	Zircon_Sample-293.FIN2	Fe-rich	700000		0.038	0.024	47	59	308	55	270	120	3500	480	156	12	29	14	4.2	4	469	96	2.19	0.32	1.98	0.24	-0.004	0.025	-0.004	0.023	0.0021	0.0097	-0.002	0.012	0.002	0.058	-0.000252	0.000058	0.06	0.15	-0.002	0.013	0.002	0	0.006	0.012	-0.012	0.015	0.0033	0.0047	0.0186	0.0065	0.0094	0.0092	-0.003	0.034	8.22	0.67	131	46	0.06	0.025
BMB5911	Zircon_Sample-294.FIN2	Fe-rich	700000		0.39	0.39	32	30	77	37	210	71	6.70E+03	3.00E+03	234	40	83	60	8.3	6.2	590	520	3.7	2.3	0.69	0.47	-0.11	0.29	0.12	0.31	0.05	0.13	-0.29	0.81	0.67	0.6	-0.0003	0.0093	2.4	5.8	0.038	0.092	-0.45	1	-0.019	0.056	-0.5	1.4	0.044	0.092	-0.027	0.061	0.016	0.04	-0.03	0.16	3	1.6	10	160	5.6	5.2
BMB5911	Zircon_Sample-295.FIN2	Fe-rich	700000		0.1	0.14	38	40	186	54	234	29	1.18E+04	1.90E+03	426	44	16.6	8.9	2.6	1.9	470	180	1.55	0.26	1.14	0.44	0.0001	0.0076	-0.032	0.033	-0.022	0.058	-0.04	0.16	-0.03	0.12	0.034	0.068	-0.38	0.13	-0.002	0.018	0.001	0	0.001	0.02	0.07	0.14	0.0035	0.0092	0.012	0.029	0.0038	0.0094	0.07	0.17	3.7	1.1	-70	280	0.62	0.87
BMB5911	Zircon_Sample-296.FIN2	Fe-rich	700000		0.037	0.04	12.2	4.5	109	60	136	59	7570	980	660	170	13.2	1.2	3	2.5	300	120	1.39	0.43	1.28	0.6	-0.003	0.022	-0.01	0.0097	0.0011	0.0081	-0.001	0.046	-0.004	0.045	0.0013	0.0032	-0.02	0.15	-0.0022	0.0058	-0.014	0	-0.0051	0.006	0	0.079	0.0063	0.0068	0.034	0.041	0.0077	0.0059	0.028	0.014	3	1.3	-126	77	0.6	1
BMB5911	Zircon_Sample-297.FIN2	Fe-rich	700000		0.05	0.076	18.8	2.6	151.8	5.7	229.3	8.2	2770	110	276	56	25.32	0.46	1.15	0.71	2.60E+03	1.00E+03	2.21	0.15	1.99	0.12	-0.01	0.018	-0.013	0.015	-0.0093	0.0097	-0.027	0.081	-0.014	0.031	0.0033	0.0036	0.14	0.27	0.001	0.011	-0.006	0	0.011	0.011	0.011	0.036	0.0011	0.0029	0.0184	0.0041	0.0054	0.0078	-0.005	0.03	18.1	2.7	730	460	0.2	0.13
BMB5911	Zircon_Sample-298.FIN2	Fe-rich	700000		0.08	0.11	5.70E+03	9.30E+03	1.70E+03	1.90E+03	700	210	3180	240	137.6	8.6	62	52	200	240	520	310	3.39	0.87	0.9	0.1	0.011	0.028	0.031	0.041	0.0038	0.0085	0.011	0.011	-0.034	0.042	0.006	0.012	0.29	0.36	0.001	0.017	-0.007	0	-0.007	0.014	0.105	0.095	-0.00055	0.00054	0.01	0.015	0.0034	0.0031	0.001	0.018	8.9	7.7	650	380	53	82
BMB5911	Zircon_Sample-299.FIN2	Fe-rich	700000		0.02	0.044	14.9	4.2	174	85	229	80	2608	81	338	56	180	250	58	91	2040	470	1.97	0.58	1.42	0.4	-0.018	0.024	0.022	0.028	-0.0097	0.0098	0.022	0.029	0.017	0.03	0.0015	0.0035	0.11	0.23	-0.0112	0.0048	0.007	0	-0.0045	0.0032	0.045	0.038	-0.00037	0.00014	0.016	0.018	0.0006	0.0018	0.052	0.082	7	2.2	300	100	14	28
BMB5911	Zircon_Sample-306.FIN2	Fe-rich	700000		0.06	0.11	6.7	7.6	23.4	3	57.4	6.9	6940	220	259	18	9.7	2.2	324	98	56.5	2.1	0.82	0.28	0.35	0.18	-0.04	0.14	-0.003	0.072	-0.012	0.034	-0.194	0.045	-0.023	0.062	0.029	0.037	-0.38	0.57	0.044	0.042	-0.01	0	0.01	0.031	0.12	0.22	-0.00165	0.00011	0.022	0.075	0.01	0.022	0.17	0.21	0.62	0.22	50	120	1.5	2.4
BMB5911	Zircon_Sample-307.FIN2	Fe-rich	700000		0.11	0.11	3.3	3.5	22.2	1.6	59.8	5.8	6610	340	265	16	11	1.9	270	330	65	10	0.94	0.16	0.41	0.17	0.046	0.071	0.05	0.12	-0.002	0.014	-0.085	0.058	0.03	0.11	0.026	0.039	-0.06	0.37	-0.017	0.057	-0.03	0	0.013	0.064	-0.022	0.042	0.011	0.02	0.028	0.033	0.031	0.023	0.05	0.12	0.87	0.15	-90	100	0.63	0.32
BMB5911	Zircon_Sample-308.FIN2	Fe-rich	700000		0.064	0.052	21.3	7.7	92	27	109	14	9.70E+03	1.30E+03	190	15	4.9	1.5	19	26	243	63	0.78	0.21	0.512	0.053	-0.0352	0.0075	-0.013	0.045	0.008	0.012	0.07	0.19	0	0.13	0.033	0.041	-0.14	0.93	-0.017	0.036	0.086	0	-0.0049	0.0071	0.09	0.15	0.0027	0.0077	0.04	0.042	0.014	0.013	0.014	0.074	2.38	0.75	38	91	0.17	0.11
BMB5911	Zircon_Sample-309.FIN2	Fe-rich	700000		0.07	0.21	6.7	7.5	18.7	1.8	42.2	6.3	6400	410	267.8	5.5	10.4	3	56	18	42.8	6.7	0.65	0.23	0.36	0.13	-0.02	0.11	-0.014	0.073	0.026	0.014	0.059	0.066	-0.084	0.076	0.0036	0.0086	-0.12	0.35	0.022	0.036	-0.02	0	0.023	0.047	-0.04	0.14	0.026	0.029	0.052	0.041	0.015	0.013	0.05	0.12	0.846	0.087	-30	160	0.53	0.29
BMB5911	Zircon_Sample-310.FIN2	Fe-rich	700000		-0.01	0.11	5.2	4.9	32.1	3.2	60.1	4.1	6380	360	236.8	7.6	5	0.7	1.411	0.08	88	14	0.62	0.19	0.36	0.13	-0.001	0.051	-0.02	0.034	0.001	0.021	0.001	0.046	0.064	0.095	0.009	0.012	0.07	0.58	-0.011	0.029	0.1	0	-0.004	0.018	0.034	0.094	0.0059	0.0091	0.025	0.023	0.0168	0.0054	-0.047	0.038	1.38	0.35	-10	200	0.021	0.026
BMB5911	Zircon_Sample-311.FIN2	Fe-rich	700000		-0.04	0.11	106	55	349	66	206	38	1.43E+04	1.80E+03	208.2	9.8	2.41	0.56	26	22	1030	100	1.43	0.6	0.65	0.11	0.035	0.072	-0.01	0.069	-0.022	0.018	-0.121	0.092	0.07	0.33	-0.00067	0.00016	-0.1	0.59	0.01	0.073	0.01	0	0.002	0.011	-0.01	0.073	0.024	0.014	0.073	0.08	0.014	0.013	0.04	0.15	7.21	0.81	-70	190	0.04	0.053
BMB5911	Zircon_Sample-312.FIN2	Fe-rich	700000		-0.168	0.033	8	12	35.2	2.8	62.6	6.5	6580	420	253	21	6.42	0.76	1.67	0.79	103	11	0.69	0.17	0.298	0.099	0.013	0.049	-0.024	0.042	0.006	0.026	0.083	0.059	0.17	0.19	0.011	0.023	0.37	0.81	0.019	0.071	-0.031	0	-0.000243	0.000073	-0.002	0.052	0.016	0.015	0.04	0.1	0.004	0.01	0.08	0.12	1.27	0.14	30	250	0.0008	0.00015
BMB5911	Zircon_Sample-319.FIN2	Fe-rich	700000		0.1	0.15	2.5	2.6	26.6	3.4	57.8	5.6	6380	490	259	19	7.52	0.92	2.5	1.8	74	11	0.81	0.4	0.206	0.076	0.028	0.043	0.038	0.057	0.001	0.032	0.08	0.16	-0.04	0.14	0.037	0.047	-0.58	0.53	-0.005	0.053	-0.04	0	-0.007	0.025	0	0.13	0.01	0.024	0.068	0.067	0.006	0.014	0.06	0.058	0.94	0.22	-200	160	0.09	0.058
BMB5911	Zircon_Sample-320.FIN2	Fe-rich	700000		0.058	0.028	1.7	1.1	24	1.4	44.1	2.5	6070	510	294.2	8.7	6.99	0.43	2.13	0.28	65.2	7.5	0.56	0.12	0.204	0.057	-0.016	0.05	-0.004	0.037	0.019	0.014	-0.062	0.069	-0.065	0.09	0.005	0.011	0.25	0.47	-0.0129	0.0086	0.09	0	-0.011	0.014	-0.021	0.08	0.013	0.018	0.106	0.083	0.014	0.018	0.13	0.13	0.89	0.12	10	150	0.096	0.026
BMB5911	Zircon_Sample-321.FIN2	Fe-rich	700000		0.11	0.11	4.7	3.1	40.5	9.5	53.4	6.7	6490	650	315	10	7.39	0.54	2.8	0.98	113	30	0.41	0.23	0.27	0.13	-0.04	0.06	0.027	0.043	0.016	0.03	0.01	0.12	0.27	0.46	0.012	0.025	0.7	1.2	-0.041	0.063	0.047	0	0.002	0.02	0.07	0.13	0.0101	0.0088	0	0.039	0.025	0.032	0.001	0.071	1.54	0.25	-90	170	0.025	0.028
BMB5911	Zircon_Sample-322.FIN2	Fe-rich	700000		0.14	0.14	26	24	69	34	80	11	7.50E+03	1.00E+03	258.6	8.7	5.27	0.99	1.33	0.72	230	110	0.79	0.24	0.29	0.059	-0.07	0.11	-0.012	0.019	0.018	0.023	0.04	0.26	0.051	0.044	0.023	0.019	0.26	0.53	0.006	0.055	0.02	0	-0.0076	0.0015	-0.02	0.1	0.0017	0.008	0.09	0.12	0.017	0.013	0.024	0.086	1.95	0.2	100	200	0.022	0.042
BMB5911	Zircon_Sample-323.FIN2	Fe-rich	700000		0.03	0.11	0.9	4.4	18.7	2.3	35.3	3.9	5150	280	334	23	8.79	0.66	1.61	0.39	60	11	0.51	0.18	0.159	0.083	-0.065	0.068	0.035	0.07	0.008	0.024	-0.03	0.13	0	0.14	0.031	0.045	0.03	0.23	-0.017	0.051	-0.07	0	0.003	0.011	-0.03	0.12	0.023	0.022	0.08	0.033	0.023	0.02	-0.022	0.049	0.73	0.21	20	250	0.000439	0.000068
BMB5911	Zircon_Sample-324.FIN2	Fe-rich	700000		0.03	0.2	1.2	3.8	19.3	1.8	40	1.9	5080	360	289	12	7.79	0.68	4.3	2.3	60	9.3	0.56	0.14	0.171	0.069	-0.012	0.064	0.012	0.034	-0.007	0.023	0.05	0.21	0.08	0.17	0.017	0.016	0.18	0.37	0.028	0.04	0.07	0	0.01	0.018	-0.01	0.11	0.006	0.0074	0.04	0.12	0.013	0.013	-0.026	0.027	0.72	0.17	-14	62	0.12	0.15
BMB5911	Zircon_Sample-325.FIN2	Fe-rich	700000		-0.12	0.15	0.3	5.3	21.8	1.7	44.2	4.9	5600	360	294	24	8.1	1.7	1.34	0.72	58.5	2.8	0.38	0.12	0.2	0.049	-0.057	0.065	0.047	0.049	-0.026	0.03	-0.13	0.15	0.16	0.18	0.005	0.012	0.31	0.86	0.008	0.069	-0.09	0	-0.01	0.024	0.05	0.15	-0.0002	0.0066	0.08	0.11	0.015	0.025	-0.057	0.063	0.68	0.26	-10	160	0.049	0.061
BMB5911	Zircon_Sample-332.FIN2	Fe-rich	700000		0	0.12	12	10	47	16	60.1	3.1	6690	230	267	30	6.27	0.94	2.3	1.7	149	69	0.83	0.13	0.233	0.083	0.069	0.066	-0.051	0.023	0.01	0.025	-0.07	0.064	-0.03	0.28	0.012	0.014	0	0.9	-0.005	0.058	0.024	0	0.005	0.013	0.18	0.14	0.007	0.011	0.067	0.098	0.011	0.014	0.06	0.14	1.37	0.52	20	120	0.063	0.054
BMB5911	Zircon_Sample-333.FIN2	Fe-rich	700000		0.036	0.093	5.3	3.3	48.3	4.4	82	12	8360	720	233	19	7	1.7	87	79	128	14	0.77	0.14	0.221	0.045	-0.009	0.065	-0.025	0.047	0.016	0.019	0.047	0.08	0.16	0.2	0.01	0.012	-0.39	0.2	-0.015	0.054	0.03	0	-0.001	0.027	0.104	0.081	0.007	0.012	0.038	0.063	0.01	0.014	0.021	0.061	1.69	0.53	90	270	0.23	0.17
BMB5911	Zircon_Sample-334.FIN2	Fe-rich	700000		0.02	0.15	7.4	3.9	18.1	1.9	35.9	3.3	5560	280	314	21	8.09	0.62	1.44	0.43	46.3	6.3	0.24	0.18	0.168	0.062	-0.006	0.059	0.005	0.053	0.007	0.024	-0.038	0.059	0.031	0.08	0.021	0.02	-0.09	0.67	-0.006	0.043	0.07	0	-0.008	0.021	0	0.11	0.015	0.018	0.071	0.083	0.027	0.029	0.007	0.026	0.76	0.12	170	130	0.032	0.027
BMB5911	Zircon_Sample-335.FIN2	Fe-rich	700000		0.02	0.07	2	2.8	23.4	3.6	41.4	6.2	5970	530	294	10	7.82	0.62	1.78	0.31	69	18	0.51	0.13	0.193	0.091	-0.034	0.038	0.063	0.063	0.015	0.022	0.21	0.25	0	0.14	0.02	0.012	0.23	0.87	0.003	0.034	0.06	0	-0.005	0.02	0.08	0.16	0.015	0.016	0.034	0.067	0.023	0.016	0.137	0.063	1.13	0.35	-60	110	0.018	0.036
BMB5911	Zircon_Sample-336.FIN2	Fe-rich	700000		0.041	0.046	4.1	1.1	24.8	3.1	47.4	4.1	6430	370	264.6	8.2	9.1	1.3	2.12	0.65	59.3	6.7	0.51	0.16	0.169	0.072	0.003	0.045	0.029	0.047	0.017	0.027	0.06	0.21	-0.097	0.095	0.014	0.012	-0.11	0.46	0.047	0.067	0.016	0	0.011	0.022	-0.01	0.11	0.0048	0.009	0.1	0.11	0.0124	0.0072	0.048	0.082	1.03	0.25	78	81	0.155	0.091
BMB5911	Zircon_Sample-337.FIN2	Fe-rich	700000		0.03	0.13	4.1	1.5	25.3	5.2	52	1.4	6860	160	247	13	6.8	1.4	1.99	0.32	68	6	0.65	0.25	0.21	0.073	-0.02	0.058	0.032	0.027	0.026	0.018	0.03	0.11	0.015	0.098	0.011	0.014	-0.2	1.3	0.016	0.034	0.06	0	-0.016	0.03	-0.04	0.12	0.004	0.014	0.099	0.083	0.027	0.037	0.009	0.029	0.91	0.26	-50	130	0.008	0.017
BMB5911	Zircon_Sample-338.FIN2	Fe-rich	700000		-0.01	0.14	4	3.7	25.3	5.1	49.5	5.2	7280	580	239	12	13.4	7.8	4.1	3.2	59.6	7.7	0.51	0.25	0.127	0.042	-0.01	0.061	0.045	0.095	0.019	0.015	0.002	0.055	-0.048	0.081	0.029	0.013	0.08	0.27	0.011	0.036	-0.028	0	0	0.016	0.023	0.012	0.004	0.0075	-0.005	0.028	0.014	0.017	-0.008	0.056	0.97	0.39	179	95	0.12	0.11

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5913 — CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5913	Zircon_sample-007.FIN2	Fe-rich	700000		-0.1	0.15	21	21	206	29	21	5.8	748	82	21.5	1.3	32.1	4.9	1.77	0.85	18.7	4.4	0.8	0.19	4.75	0.72	-0.002	0.049	0.009	0.072	-0.012	0.027	0	0.13	0.11	0.22	-0.017	0.028	-0.19	0.68	-0.04	0.027	0.08	0	0.009	0.01	-0.126	0.091	0.0078	0.0099	0	0.027	0.0091	0.0095	0.078	0.069	7	1.3	-40	190	0.107	0.038
BMB5913	Zircon_sample-008.FIN2	Fe-rich	700000		0.05	0.085	30	17	197	22	46	17	860	200	76	32	45.1	7.6	1.12	0.52	70	12	1.75	0.68	7.9	3.5	0.013	0.043	-0.011	0.039	0.013	0.02	0.06	0.17	0.044	0.048	-0.009	0.017	0.27	0.39	-0.019	0.011	-0.036	0	0.004	0.011	0.06	0.1	0.0035	0.0046	0.16	0.16	0.0082	0.0093	0.03	0.034	22.5	2.5	90	160	0.157	0.08
BMB5913	Zircon_sample-009.FIN2	Fe-rich	700000		0.09	0.11	-1.7	1.2	69.3	4.7	10.5	2.3	748	44	28.4	1.2	41.6	4	2.03	0.24	8.8	3.2	0.85	0.26	5.71	0.41	0.005	0.039	-0.007	0.04	-0.004	0.014	-0.02	0.1	0.012	0.096	-0.012	0.011	-0.04	0.24	-0.004	0.05	0.035	0	0.011	0.017	0.13	0.17	0.0023	0.0048	-0.016	0.037	0.0168	0.0084	0.126	0.095	4.69	0.33	90	210	0.056	0.05
BMB5913	Zircon_sample-010.FIN2	Fe-rich	700000		0.01	0.12	25.2	6.1	573	91	27.7	3.5	540	190	22	3.2	32.9	3.4	2.46	0.54	67	28	1.59	0.34	8.9	1	0.018	0.033	-0.019	0.038	-0.001	0.017	0.03	0.13	0.07	0.16	-0.0144	0.0021	-0.09	0.31	-0.03	0.048	-0.069	0	0.017	0.02	0.06	0.1	-0.000096	0.000014	-0.0472	0.0069	0.0068	0.0081	0.1	0.18	20.2	5.1	50	190	0.23	0.12
BMB5913	Zircon_sample-011.FIN2	Fe-rich	700000		0	0.13	38	27	442	70	22.3	2.6	365	94	21.42	0.52	28.9	4.7	1.76	0.76	53	13	1.6	0.48	7.94	0.68	-0.02	0.1	0.004	0.041	0.005	0.024	-0.009	0.062	0.09	0.11	-0.002	0.011	-0.14	0.29	-0.003	0.037	-0.04	0	0.01	0.016	-0.013	0.097	-0.000091	0.000016	-0.016	0.035	0.007	0.017	0.07	0.1	15.6	4.1	-90	100	0.111	0.038
BMB5913	Zircon_sample-012.FIN2	Fe-rich	700000		3.3	1.8	24	12	169	31	17.8	2.9	550	110	22.9	2.8	39.2	8.3	1.8	1.2	35.4	9.7	1.59	0.36	6.4	1.7	0.154	0.08	0.6	0.5	0.175	0.038	0.77	0.89	0.44	0.24	0.2	0.24	1.2	1	0.41	0.52	3.5	2	0.79	0.58	3.1	2.8	0.49	0.27	6.6	1.5	0.69	0.43	20	15	10.8	3.9	80	150	0.57	0.51
BMB5913	Zircon_sample-013.FIN2	Fe-rich	700000		0.042	0.067	0.5	6.4	54	16	8.6	3.5	579.9	8.2	26.6	1.8	53.8	5.7	2.53	0.55	7	1.8	0.78	0.51	4.61	0.69	0.013	0.029	-0.001	0.047	-0.011	0.014	-0.015	0.088	0.09	0.13	0.001	0.011	0.07	0.35	0.012	0.045	-0.028	0	0.023	0.024	0.004	0.079	0.002	0.0043	-0.01	0.034	0.02	0.029	0.062	0.088	2.87	0.43	270	110	0.059	0.015

BMB5913	Zircon_sample-020.FIN2	Fe-rich	700000		0.017	0.068	6.8	4.1	54.7	4.8	9.52	0.81	736	95	24.73	0.82	42.4	3.2	21.1	4.5	5.5	1.9	0.49	0.33	4.63	0.95	-0.009	0.049	0.008	0.049	0	0.026	0.1	0.13	0.041	0.084	0.015	0.011	0.11	0.33	0.003	0.022	0.04	0	0.007	0.012	0.012	0.036	0.0045	0.0055	0.1	0.17	0.008	0.011	0.089	0.087	2.84	0.34	10	180	0.053	0.019
BMB5913	Zircon_sample-021.FIN2	Fe-rich	700000		0.045	0.041	8.9	4.4	49.3	4.3	12.9	2.1	352	37	14.9	1.7	42.2	4.4	6.3	2.2	17.4	2.7	0.8	0.34	8	0.87	-0.02	0.072	0.018	0.076	0.008	0.024	-0.095	0.042	-0.04	0.14	0.009	0.01	0.17	0.36	0.032	0.095	-0.059	0	0.021	0.019	0.2	0.23	-0.000112	0.00002	0.025	0.063	0.0013	0.0057	0.07	0.12	0.87	0.22	-40	130	0.019	0.043
BMB5913	Zircon_sample-022.FIN2	Fe-rich	700000		0.079	0.034	10.4	5.3	67.6	4.7	15.3	1.4	610	470	14.34	0.85	38.9	1.9	610	410	22.6	1.9	0.55	0.24	8.49	0.58	0.08	0.1	-0.016	0.075	0.018	0.02	0.143	0.026	-0.068	0.08	0.013	0.019	0.41	0.32	-0.012	0.04	0.3	0	0.0001	0.009	-0.12	0.14	0.0036	0.0074	0.038	0.054	0.0013	0.0061	0.1	0.1	0.923	0.097	83	87	0.26	0.33
BMB5913	Zircon_sample-023.FIN2	Fe-rich	700000		0.1	0.13	13	10	46	11	12.2	1.5	433	26	17.6	1.1	66	13	2.34	0.77	10.3	3.6	0.655	0.062	6.89	0.95	-0.067	0.082	-0.02	0.054	-0.022	0.013	0.05	0.28	-0.02	0.15	0.005	0.013	0.21	0.36	-0.0392	0.0057	-0.08	0	0.014	0.033	0.11	0.27	-0.000115	0.000034	0.033	0.097	0.0025	0.0081	0.12	0.1	0.95	0.5	-60	160	0.42	0.26
BMB5913	Zircon_sample-024.FIN2	Fe-rich	700000		0.09	0.13	32	37	51.3	4.3	13.8	1.2	850	760	15.7	2	49.4	9.1	8	8.5	15.3	4.2	0.38	0.36	6.75	0.94	0	0.1	0.017	0.042	-0.004	0.018	-0.04	0.077	-0.081	0.091	0.016	0.024	-0.09	0.67	0.005	0.034	0.09	0	0.026	0.032	-0.08	0.11	0.009	0.013	0.047	0.059	0.014	0.018	0.005	0.033	0.72	0.24	-225	70	0.25	0.16
BMB5913	Zircon_sample-025.FIN2	Fe-rich	700000		0.085	0.065	13	2.3	69	15	14.4	2.4	486	86	14.9	1	36.1	5.8	6.5	5.8	26.1	5.2	0.68	0.32	8.3	1.1	-0.073	0.036	0.017	0.087	-0.004	0.015	0.018	0.079	0.015	0.056	0.026	0.016	0.21	0.26	-0.041	0.045	-0.06	0	0.012	0.013	-0.09	0.13	0.0035	0.0072	0.09	0.1	0.01	0.023	0.013	0.029	1.229	0.093	110	120	0.06	0.025
BMB5913	Zircon_sample-026.FIN2	Fe-rich	700000		0.119	0.089	3.4	3	47.7	7.2	9.5	1.4	720	110	27.4	2.1	58.9	1.2	18	10	4.1	2.1	0.85	0.21	5.25	0.67	0.003	0.045	0.03	0.1	0.024	0.034	0.082	0.09	-0.12	0.12	0.02	0.034	0.02	0.37	0.032	0.039	0.07	0	0.014	0.03	-0.13	0.13	0.008	0.01	0.034	0.097	0.015	0.021	0.076	0.086	2.15	0.32	60	200	0.201	0.074
BMB5913	Zircon_sample-033.FIN2	Fe-rich	700000		0.028	0.057	18.3	8.4	167	21	13.97	0.92	900	370	22.3	2.3	37.7	5.9	2.64	0.62	15.4	2.5	1.18	0.41	5.5	1.4	-0.006	0.064	-0.009	0.061	0.008	0.028	0.02	0.21	-0.034	0.086	0.037	0.035	-0.07	0.23	0.014	0.037	0.024	0	0.01	0.012	0.11	0.12	0.0079	0.0094	0.19	0.2	0.031	0.014	0.036	0.035	5.13	0.4	190	250	0.097	0.084
BMB5913	Zircon_sample-034.FIN2	Fe-rich	700000		0.23	0.16	1	3.9	47.4	6.1	6.1	1.7	590	23	25.9	1.8	54.2	4	1.33	0.25	5.2	1.4	0.63	0.26	3.94	0.54	-0.041	0.013	-0.025	0.029	0.008	0.029	0.01	0.15	0.05	0.2	-0.00041	0.0001	0.14	0.3	0.014	0.058	0.02	0	0.014	0.017	0.05	0.15	0.012	0.023	0.071	0.055	0.0033	0.0094	0.074	0.051	2.14	0.13	0	180	0.008	0.062
BMB5913	Zircon_sample-035.FIN2	Fe-rich	700000		0.041	0.036	27	43	160	63	12.3	2.9	590	230	26.7	4.2	130	100	3	1.1	18	12	0.77	0.14	4.83	0.63	-0.026	0.083	0.1	0.12	0.035	0.035	-0.01	0.13	0.01	0.13	0.022	0.03	-0.02	0.44	0.003	0.067	-0.055	0	0.015	0.017	0.09	0.26	0.0103	0.0013	0.041	0.047	0.007	0.015	0.057	0.085	4.9	2	84	77	1	1.4
BMB5913	Zircon_sample-036.FIN2	Fe-rich	700000		0.07	0.13	4.3	5.9	118	21	15.9	3.5	700	140	34	17	46	6.1	2.04	0.96	11	2.5	1.6	1.2	4.9	1.4	0.004	0.045	0.001	0.032	0.01	0.022	0.14	0.11	-0.012	0.07	0.012	0.014	0.1	0.57	-0.008	0.059	0.14	0	0.015	0.016	0.1	0.15	0.0064	0.0079	0.02	0.025	0.012	0.014	0.27	0.31	4.39	0.89	200	200	1.5	1.1
BMB5913	Zircon_sample-037.FIN2	Fe-rich	700000		0.12	0.18	10.9	8.2	57	24	19.3	9.6	900	160	25.4	1.2	79.9	9.7	33	22	4.94	0.88	1.5	0.3	4.58	0.18	-0.009	0.032	0.08	0.14	0.032	0.06	0.21	0.13	0.007	0.075	0.0039	0.0089	0.317	0.07	0.009	0.039	0.06	0	0.0069	0.0022	-0.015	0.097	0.015	0.013	0.013	0.027	-0.00109	0.00035	0.08	0.14	2.285	0.096	80	140	4.9	2.2
BMB5913	Zircon_sample-038.FIN2	Fe-rich	700000		-0.041	0.062	0.8	2.6	82	18	8.5	2.1	644	44	24.6	2.7	45.7	6	3.6	2.1	6.9	1.6	0.81	0.35	4.01	0.47	-0.005	0.059	-0.037	0.022	0.013	0.019	0.011	0.092	0.08	0.27	0.024	0.021	0.29	0.38	0.011	0.018	-0.048	0	0.019	0.017	0.038	0.064	0.008	0.011	0.069	0.08	-0.00126	0.0002	0.037	0.044	2.76	0.19	171	90	0.27	0.25
BMB5913	Zircon_sample-039.FIN2	Fe-rich	700000		0.01	0.1	57	14	186	27	1670	170	9.90E+03	1.90E+03	82.2	7	3370	390	31.2	3.3	668	94	198	17	27.6	4.4	0.038	0.086	0.061	0.073	-0.0133	0.008	0.09	0.12	-0.052	0.089	0.025	0.032	-0.05	0.31	-0.006	0.04	-0.089	0	-0.0008	0.0064	0.06	0.17	0.005	0.01	0.083	0.043	0.0014	0.0056	0.16	0.21	18	3.6	70	140	194	63
BMB5913	Zircon_sample-046.FIN2	Fe-rich	700000		0.16	0.16	27	30	108	48	11.5	2.4	1010	200	27.8	2.2	52.7	7.3	2.9	1	7.6	3.4	1.02	0.43	4.45	0.39	0.14	0.2	0.7	1.2	0.3	0.58	5	9.6	18	37	10	19	100	210	27	53	250	##	45	87	160	300	17	32	90	170	11	21	0.24	0.17	2.54	0.57	20	180	1.8	1.9
BMB5913	Zircon_Sample-047.FIN2	Fe-rich	700000		-0.018	0.097	32	27	107	14	10.8	2	718	88	24.13	0.97	39.8	2.3	2.6	1.1	9.4	2.9	0.78	0.34	6	1.6	0.034	0.043	-0.017	0.047	0.002	0.019	0.18	0.13	-0.042	0.052	0.006	0.013	-0.1	0.67	-0.015	0.038	-0.03	0	-0.0055	0.001	-0.05	0.12	0.007	0.014	0.0501	0.0094	0.012	0.013	0.007	0.037	3.89	0.41	250	240	0.28	0.14
BMB5913	Zircon_Sample-048.FIN2	Fe-rich	700000		0.08	0.1	18.8	8.3	204	43	14.6	2.7	695	95	20.3	2	25.1	6.7	1.94	0.56	20.2	4.5	0.59	0.31	5.3	2.2	0.069	0.045	-0.005	0.035	-0.001	0.012	0.018	0.084	-0.031	0.059	0.013	0.016	0.54	0.4	-0.02	0.023	0	0	0.008	0.011	-0.063	0.095	0.01	0.013	0.059	0.072	0.016	0.026	0.12	0.11	5.3	1	120	140	0.073	0.056
BMB5913	Zircon_Sample-049.FIN2	Fe-rich	700000		0.106	0.083	14	9.4	170.9	9.8	13.4	1.4	733	11	19.5	1.6	28.1	3.6	2.07	0.34	13.7	2.2	0.43	0.18	2.78	0.53	-0.016	0.051	-0.009	0.02	0.002	0.013	0.015	0.098	0.037	0.034	0.02	0.018	-0.16	0.5	-0.004	0.015	0.013	0	0.0018	0.0064	-0.015	0.093	0.008	0.011	0.024	0.028	-0.0011	0.00013	0.11	0.11	4.27	0.32	40	150	0.013	0.049
BMB5913	Zircon_Sample-050.FIN2	Fe-rich	700000		0.32	0.39	49	92	92	21	11.7	1.9	1.40E+03	1.50E+03	25	1.6	47.1	4.3	108	77	10	4.3	0.75	0.12	4.5	1.3	0.9	2	1.6	3.2	0.3	0.58	1.4	2.7	0.56	0.94	0.06	0.094	0.5	1.3	0.11	0.19	1	2	0.23	0.46	0.9	1.7	0.17	0.34	1.3	2.5	0.15	0.28	0.22	0.31	3.4	1.1	30	130	0.135	0.096
BMB5913	Zircon_Sample-051.FIN2	Fe-rich	700000		0.1	0.13	29	25	189	43	16.2	3.7	1020	630	19.6	1.1	30.2	5.8	0.8	0.15	18.1	8.5	0.91	0.61	5.7	1.6	0.052	0.09	-0.009	0.024	0.0107	0.0095	0.12	0.19	-0.01	0.035	0.028	0.037	-0.04	0.6	-0.006	0.042	0.045	0	0.018	0.021	-0.094	0.088	0.005	0.011	0.12	0.15	0.0107	0.0081	0.082	0.089	4.6	1.5	10	100	0.034	0.091
BMB5913	Zircon_Sample-052.FIN2	Fe-rich	700000		0.133	0.099	60	42	250	12	19.9	2.2	1260	380	20.8	1.4	30.1	4.9	0.32	0.28	24.3	8.1	0.86	0.16	3.6	1.1	0.004	0.076	-0.018	0.041	0.001	0.036	0.17	0.13	-0.06	0.14	0.026	0.025	0.06	0.51	-0.026	0.045	-0.014	0	0.017	0.017	-0.07	0.15	0.01	0.02	0.07	0.063	0.0017	0.006	0.075	0.073	6.6	1.9	25	94	0.18	0.14

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe_2O_3 x 0.89981.

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CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5923	Zircon_sample-007.FIN2	Fe-rich	700000		-0.13	0.13	6.3	3	11.43	0.64	11.2	1.1	5090	330	70.3	4.3	6.70E+03	1.10E+03	3.3	0.64	-0.09	0.39	4.23	0.82	2860	200	-0.008	0.043	0.01	0.056	-0.002	0.022	0.14	0.11	0.03	0.14	0.00043	0.0001	0.02	0.65	-0.025	0.04	0.13	0	0.019	0.01	-0.03	0.13	0.02	0.026	0.028	0.039	0.03	0.03	0.06	0.12	0.24	0.15	240	140	0.716	0.064
BMB5923	Zircon_sample-008.FIN2	Fe-rich	700000		0.1	0.21	4.7	4.6	8.39	0.94	10	2.2	4450	490	57.4	3.3	8160	310	3.27	0.73	-0.39	0.96	4.1	1.2	2430	350	0.006	0.072	-0.012	0.059	0.0026	0.0071	0.16	0.33	0.03	0.18	0.0044	0.008	-0.32	0.35	-0.004	0.035	0.09	0	0.011	0.017	0.19	0.25	0.008	0.015	0.005	0.018	0.018	0.024	0.108	0.091	0.232	0.075	40	130	0.4	0.25
BMB5923	Zircon_sample-009.FIN2	Fe-rich	700000		0.064	0.075	5.3	2.6	11.2	1.2	13.9	1.1	4610	650	70	22	4.30E+03	1.10E+03	2.96	0.74	-0.17	0.94	3	1.3	2550	940	0.028	0.036	0.019	0.035	0.015	0.034	0.027	0.08	-0.032	0.056	0.011	0.015	-0.38	0.26	-0.006	0.028	0.05	0	0.007	0.015	-0.025	0.081	0.013	0.016	0.025	0.035	0.0075	0.0063	0.056	0.091	0.37	0.084	300	170	0.45	0.15
BMB5923	Zircon_sample-010.FIN2	Fe-rich	700000		0.02	0.15	5.5	6	18.7	3.9	16.6	5	3900	690	48.6	9	6.90E+03	1.70E+03	2.4	0.79	-0.2	1.1	3.06	0.82	2070	620	0.023	0.034	0.004	0.015	-0.008	0.017	0.028	0.054	-0.019	0.032	0.002	0.0036	-0.07	0.37	-0.034	0.041	0.002	0	-0.001	0.011	0	0.069	0.0000153	0.0000043	0.011	0.016	0.01	0.02	0.054	0.076	0.354	0.042	130	300	0.34	0.12
BMB5923	Zircon_sample-011.FIN2	Fe-rich	700000		0.05	0.19	7.1	2.3	23.2	1.6	16.7	3.1	5020	390	51.7	4.8	6700	170	2.22	0.7	2	1.4	5.65	0.73	3170	350	0.13	0.31	0.022	0.06	0.007	0.026	0.02	0.12	0.087	0.049	0.0047	0.0089	-0.2	0.84	-0.038	0.023	0.02	0	0.015	0.02	0.158	0.086	0.02	0.03	0.022	0.036	0.0072	0.0085	0.168	0.097	0.48	0.15	170	140	0.67	0.4
BMB5923	Zircon_sample-012.FIN2	Fe-rich	700000		0.075	0.07	8.6	1.9	35	10	25.5	8.3	9.30E+03	1.40E+03	88	23	7580	970	3.75	0.79	1.9	1.4	8.8	2.2	4800	680	0.32	0.58	0.008	0.056	-0.005	0.022	-0.05	0.11	0.004	0.085	0.015	0.018	0	0.49	-0.013	0.016	0.06	0	0.012	0.02	0.013	0.075	0.008	0.01	0.016	0.023	0.013	0.015	0.057	0.078	0.62	0.27	200	140	1.18	0.12
BMB5923	Zircon_sample-013.FIN2	Fe-rich	700000		0.054	0.024	3.5	1.4	9.5	1.4	14.3	1.8	5660	350	60	11	4040	680	4.49	0.89	0.34	0.76	5.1	1.9	3090	440	0.005	0.038	-0.008	0.033	0.004	0.01	0.004	0.05	-0.003	0.09	0.0049	0.0097	-0.07	0.19	-0.006	0.011	0.01	0	0.0007	0.0048	0.06	0.17	-0.0000094	0.0000021	0.048	0.05	0.000095	0.000017	0.075	0.05	0.204	0.081	298	84	0.305	0.087
BMB5923	Zircon_sample-020.FIN2	Fe-rich	700000		-6.00E+04	2.30E+04	-3.40E+05	8.60E+05	0	10000	5.20E+05	5.60E+05	2.80E+04	2.90E+04	9.00E+05	1.80E+05	1.10E+05	1.40E+05	4.80E+04	4.10E+04	2.40E+04	9.90E+04	3.00E+04	2.30E+04	7.60E+03	8.40E+03	700	5000	2.40E+03	3.80E+03	50	640	3.80E+03	7.00E+03	3.80E+03	9.30E+03	-0.61	0.57	1.00E+04	2.00E+04	-4.80E+03	4.60E+03	3.10E+03	##	1.80E+03	1.80E+03	-1.10E+04	1.50E+04	1.20E+03	2.40E+03	-660	700	1.70E+03	3.40E+03	-2.20E+03	5.30E+03	1.20E+03	2.50E+03	90	190	1.50E+05	1.10E+05
BMB5923	Zircon_sample-021.FIN2	Fe-rich	700000		-0.02	0.12	2.7	5.1	6.77	0.64	12.1	2.8	5050	920	56.7	2	8010	350	4	1.2	0.9	1	4.85	0.82	2090	150	0.02	0.14	0.047	0.063	0.009	0.018	0.038	0.082	0.205	0.088	-0.000057	0.000011	0.13	0.59	-0.015	0.03	0.045	0	0.017	0.023	0.04	0.14	0.019	0.038	0.005	0.035	0.0041	0.0083	0.09	0.13	0.33	0.098	210	180	0.3	0.11
BMB5923	Zircon_sample-022.FIN2	Fe-rich	700000		0.062	0.087	7.5	6.9	13.4	1.4	14.5	2.2	5460	580	61	2.9	4330	330	2.09	0.56	1.17	0.68	4	0.9	2480	380	0.01	0.036	-0.0088	0.0048	-0.011	0.016	0.01	0.13	0.04	0.19	-0.000086	0.000016	0	0.48	-0.023	0.055	-0.03	0	-0.0102	0.0019	0.09	0.14	0.008	0.016	0.08	0.13	0.012	0.023	-0.001	0.099	0.41	0.13	108	95	0.34	0.22
BMB5923	Zircon_sample-023.FIN2	Fe-rich	700000		0.06	0.085	3.3	6.9	23.9	2.1	18.73	0.65	6880	770	46.9	5	5260	410	2.65	0.9	2.33	0.81	6.3	1.2	2660	170	-0.033	0.049	0.02	0.05	0.0123	0.0083	-0.089	0.044	-0.074	0.063	0.0028	0.006	-0.18	0.58	-0.01	0.032	-0.031	0	0.039	0.044	0.01	0.16	0.019	0.029	0.054	0.066	0.015	0.013	0.04	0.11	0.41	0.11	270	220	0.98	0.26
BMB5923	Zircon_sample-024.FIN2	Fe-rich	700000		0.07	0.12	4.4	4.2	35.1	3	27.2	2.7	6020	440	42.2	1.7	3510	190	2	0.81	1.9	1.5	7.5	1.6	3430	280	0.43	0.47	0.022	0.061	-0.004	0.02	0.03	0.12	-0.039	0.085	0.017	0.024	0.2	1.3	-0.005	0.042	-0.05	0	0.003	0.015	0	0.26	0.009	0.018	0.1	0.15	0.0045	0.0092	-0.032	0.049	0.88	0.32	100	140	0.51	0.11
BMB5923	Zircon_sample-025.FIN2	Fe-rich	700000		0.18	0.19	8.7	4.9	29.6	1.2	25.1	2.3	7740	940	45.6	4.7	5200	450	2.23	0.73	0.44	0.56	7.9	1.4	3610	310	0.17	0.42	0.01	0.081	0	0.016	0.11	0.15	-0.03	0.1	0.031	0.039	0.42	0.65	0.015	0.027	0.03	0	0.011	0.026	0.1	0.17	-0.000211	0.000044	0.001	0.036	0.012	0.024	0.05	0.24	0.76	0.29	180	300	0.95	0.15
BMB5923	Zircon_sample-026.FIN2	Fe-rich	700000		0.03	0.12	6.5	3.7	6.71	0.62	6.1	1.5	5430	500	69.4	3.8	9730	720	4.34	0.71	-0.11	0.21	2.63	0.43	1750	190	0.06	0.26	-0.02	0.15	0.022	0.053	0.11	0.27	0.071	0.077	0.038	0.038	0.03	0.32	0.045	0.061	0.19	0	-0.0143	0.0016	0.1	0.14	-0.000265	0.000029	0.02	0.078	0.009	0.018	0.02	0.32	0.27	0.16	-80	100	0.35	0.19
BMB5923	Zircon_sample-033.FIN2	Fe-rich	700000		0.0058	0.0052	8.52	0.68	35.9	6.4	30.4	4.3	5.00E+03	1.00E+03	118	23	9.20E+03	2.10E+03	1.03	0.2	1.7	1.5	3.03	0.74	4390	500	0.551	0.076	0.0188	0.0069	-0.0055	0.0075	0.019	0.022	0.02	0.046	0.0061	0.0062	-0.13	0.14	0.006	0.0086	-0.003	0	0.007	0.012	0.031	0.075	0.0035	0.0071	0.006	0.021	0.0041	0.0053	-0.008	0.014	0.615	0.044	290	140	1.55	0.19
BMB5923	Zircon_sample-034.FIN2	Fe-rich	700000		0.002	0.035	9.27	0.73	22.1	3.6	25.5	5.4	5070	730	126	25	7.40E+03	1.50E+03	2.52	0.66	1.11	0.41	8.9	1.4	3610	550	0.38	0.15	0.0145	0.0081	0.0018	0.0099	-0.002	0.042	0.02	0.016	0.0014	0.0032	0.11	0.23	0.002	0.021	0.047	0	0.0022	0.0069	0.009	0.036	0.0045	0.0053	0.055	0.059	0.0038	0.0078	-0.004	0.01	0.61	0.18	410	250	0.36	0.1
BMB5923	Zircon_sample-035.FIN2	Fe-rich	700000		0.054	0.028	7.7	4.8	15.5	3.4	25.1	4.4	4.90E+03	1.20E+03	94	18	7.70E+03	3.00E+03	1.88	0.31	1.02	0.15	8.7	2.7	3080	870	0.29	0.15	0.006	0.011	0.0027	0.0058	0.014	0.025	0.01	0.011	0.0043	0.0088	0.06	0.14	-0.0063	0.0046	0.015	0	0.003	0.0047	-0.006	0.02	0.002	0.0042	0.019	0.015	0.004	0.0055	0.009	0.026	0.6	0.2	210	180	0.17	0.13
BMB5923	Zircon_sample-036.FIN2	Fe-rich	700000		0.051	0.043	9.8	1.2	33.6	3.9	37.5	1.4	8.50E+03	1.30E+03	96.7	8	1.68E+04	6.90E+03	4.83	0.93	1.56	0.88	11.4	1.2	5230	450	0.36	0.12	0.0131	0.0079	-0.0014	0.0047	0.011	0.032	0.028	0.02	0.0052	0.0054	0	0.13	0.0036	0.0087	0.012	0	0.0041	0.0034	0.007	0.019	0.0052	0.0045	0.019	0.015	0.0013	0.0027	0.011	0.021	0.8	0.068	470	170	0.32	0.13
BMB5923	Zircon_sample-037.FIN2	Fe-rich	700000		0.055	0.026	13.6	4.4	33.7	7.7	35.2	5.6	8.60E+03	1.90E+03	112	33	2.40E+04	1.50E+04	5.41	0.78	1.34	0.59	16.1	3.5	4230	440	0.473	0.088	0.0125	0.008	-0.0019	0.0047	0.031	0.058	0.03	0.047	0.003	0.0046	0.005	0.092	-0.0031	0.0046	0.027	0	-0.0008	0.0036	0.019	0.015	-0.000069	0.000027	0.014	0.016	0.0023	0.0033	0.009	0.022	0.72	0.15	300	290	0.48	0.24
BMB5923	Zircon_sample-038.FIN2	Fe-rich	700000		0.054	0.051	6.8	1.2	20.1	3.9	22.3	6	5.50E+03	1.60E+03	80	13	5960	890	2.26	0.58	1.28	0.44	5.4	1.4	2740	180	0.32	0.39	0.034	0.011	0.0113	0.005	0.037	0.034	0.07	0.14	0.0019	0.0043	0.04	0.23	0.0108	0.0095	0.031	0	0.013	0.016	-0.022	0.044	0.0039	0.005	0.005	0.022	0.013	0.012	0.04	0.043	0.59	0.16	110	150	1.09	0.54
BMB5923	Zircon_sample-039.FIN2	Fe-rich	700000		0.02	0.034	16.3	1.6	74	14	57.6	9.2	5140	450	152.2	9	8470	510	2.79	0.56	2.47	0.27	12.1	1.2	5540	390	0.74	0.17	0.038	0.015	0.0032	0.009	0.043	0.044	-0.002	0.018	0.0037	0.0052	0.17	0.32	-0.0087	0.0099	0	0	0.0079	0.0054	-0.034	0.071	0.0012	0.0025	0.022	0.025	0.0048	0.0058	-0.0155	0.0088	1.394	0.087	210	310	0.78	0.19
BMB5923	Zircon_sample-046.FIN2	Fe-rich	700000		0.082	0.032	24	1.9	144	41	88	17	6.20E+03	1.90E+03	67.2	1.6	10700	780	3.15	0.24	1.31	0.43	16.2	1.7	2850	160	0.37	0.26	0.003	0.011	-0.0006	0.0025	-0.022	0.014	0.025	0.023	0.005	0.004	0.12	0.16	0.0049	0.0072	0.034	0	0.0039	0.0082	0.024	0.038	0.0027	0.0035	-0.0008	0.0074	0.0027	0.0036	-0.0231	0.0093	1	0.14	640	290	1.4	0.2
BMB5923	Zircon_Sample-047.FIN2	Fe-rich	700000		0.1	0.03	22.9	9.5	63	27	59	26	4940	260	115.8	9.8	1.29E+04	2.50E+03	3.32	0.94	1.54	0.48	15.5	7.5	4.70E+03	1.10E+03	0.52	0.14	0.024	0.018	0.0073	0.0066	0.004	0.015	0.013	0.022	0.0008	0.0022	0.068	0.076	0.019	0.014	0.043	0	0.0026	0.0045	0.001	0.037	0.0048	0.0029	0.007	0.018	0.0015	0.0021	0.019	0.027	1.24	0.55	110	150	1.2	0.2
BMB5923	Zircon_Sample-048.FIN2	Fe-rich	700000		0.083	0.02	24.1	7.3	173	16	104	13	5180	330	72	13	1.24E+04	3.00E+03	5	1.7	1.93	0.6	20.9	5.3	5.90E+03	1.10E+03	0.4	0.26	0.009	0.01	0.0019	0.0081	0.009	0.021	0.014	0.036	-0.000303	0.000095	0.04	0.19	-0.0036	0.0082	0.0166	0	0.0046	0.0032	-0.014	0.023	0.0025	0.0036	0.0055	0.0082	-0.000178	0.000056	0.016	0.046	2.7	1.4	520	230	2.12	0.66
BMB5923	Zircon_Sample-049.FIN2	Fe-rich	700000		0.055	0.013	20	4.1	67	21	61	15	4890	360	144	22	9.60E+03	2.20E+03	1.72	0.34	1.87	0.65	7.25	0.87	6.30E+03	2.30E+03	0.37	0.14	0.015	0.012	0.0027	0.0063	-0.004	0.028	0	0.019	0.0028	0.0062	0.14	0.23	0.0012	0.0082	0.034	0	0.0054	0.0071	0.01	0.016	-0.000087	0.000013	0.019	0.021	0.0035	0.005	-0.002	0.027	1.25	0.37	200	150	1.19	0.29
BMB5923	Zircon_Sample-050.FIN2	Fe-rich	700000		0.033	0.072	3.1	2.6	5.5	2.7	6.5	3.6	3.70E+03	1.00E+03	58	17	2.70E+03	1.00E+03	1.11	0.4	0.24	0.62	0.73	0.61	780	320	0.021	0.032	-0.0059	0.0052	0.002	0.0036	0.075	0.026	0.031	0.065	0.0058	0.0078	-0.09	0.16	-0.003	0.019	0.028	0	0.005	0.012	-0.024	0.062	0.005	0.0063	0.01	0.018	0.0074	0.0059	0.005	0.065	0.45	0.15	110	130	0.27	0.12
BMB5923	Zircon_Sample-051.FIN2	Fe-rich	700000		0.061	0.024	27.3	4.6	174	53	126	29	5.30E+03	1.20E+03	94	22	1.49E+04	3.50E+03	4.5	1.4	2.39	0.54	22.6	5.1	6.70E+03	1.20E+03	0.53	0.27	0.016	0.019	0.0023	0.0031	0.001	0.019	0.008	0.033	0.0009	0.0025	0.01	0.1	0.0055	0.0067	0.015	0	0.0032	0.0017	-0.017	0.033	0.0009	0.002	0.023	0.023	-0.000195	0.000071	0.006	0.021	2.17	0.21	370	220	2.71	0.88
BMB5923	Zircon_Sample-052.FIN2	Fe-rich	700000		0.042	0.014	0.07	0.78	0.085	0.067	0.056	0.09	3190	720	37.8	5.4	4.70E+03	2.50E+03	0.91	0.26	0.34	0.35	-0.052	0.032	48	34	0.001	0.014	0.0057	0.0096	0.0011	0.0069	-0.007	0.031	-0.003	0.021	0.0008	0.0021	0.04	0.11	-0.001	0.012	0.006	0	0.0023	0.0056	0.004	0.037	0.0019	0.0023	0.008	0.012	0.0029	0.0041	0.002	0.017	0.019	0.012	60	170	0.037	0.041
BMB5923	Zircon_Sample-059.FIN2	Fe-rich	700000		0.029	0.031	1.3	2.4	1.28	0.67	2.42	0.69	3140	240	46	11	5.30E+03	1.30E+03	0.833	0.022	0.08	0.24	0.4	0.13	217	38	0.0004	0.0065	0.001	0.012	-0.0025	0.0064	0.012	0.024	0.013	0.04	-0.00041	0.00013	0.08	0.12	0.002	0.019	-0.009	0	0.0082	0.0077	-0.004	0.025	0.0068	0.005	0.006	0.01	0.0018	0.0024	-0.006	0.011	0.039	0.015	190	300	0.211	0.034
BMB5923	Zircon_Sample-060.FIN2	Fe-rich	700000		0.03	0.027	0.37	0.76	0.137	0.056	1.54	0.97	2192	78	36.6	1.6	993	67	0.52	0.1	0.04	0.23	0.14	0.19	30	8.4	0	0.014	-0.0045	0.008	0.004	0.0074	0.028	0.024	0.019	0.053	0.0018	0.0026	0.01	0.14	-0.0015	0.0083	0.001	0	0.0016	0.0054	0.031	0.04	0.0044	0.0033	0.001	0.01	0.0017	0.0023	-0.001	0.013	0.08	0.053	300	300	0.091	0.032
BMB5923	Zircon_Sample-061.FIN2	Fe-rich	700000		0.041	0.028	-0.41	0.95	0.35	0.1	0.69	0.4	6450	930	85.8	5.6	4200	260	1.18	0.12	0.17	0.36	0.14	0.11	113	16	-0.009	0.018	0.0034	0.0061	0.0022	0.003	-0.011	0.032	0.027	0.043	0.0008	0.0025	0.114	0.098	-0.0046	0.0087	0.004	0	0.0038	0.008	0.03	0.033	0.0016	0.0034	0.0003	0.0069	0.003	0.0066	0.002	0.037	0.29	0.045	240	270	0.39	0.17
BMB5923	Zircon_Sample-062.FIN2	Fe-rich	700000		0.039	0.056	3.23	0.64	7.6	1.4	10	1.7	4490	860	68	15	5050	940	2.63	0.65	0.38	0.21	3.3	0.57	1009	50	0.17	0.27	0.022	0.041	-0.005	0.012	0.028	0.057	0.02	0.057	0.0043	0.0078	0.02	0.29	-0.003	0.012	0.1	0	-0.0003	0.006	0.009	0.018	-0.00024	0.00022	-0.0068	0.0062	0.0003	0.0019	0.014	0.021	0.116	0.066	14	97	0.298	0.064
BMB5923	Zircon_Sample-063.FIN2	Fe-rich	700000		0.14	0.12	11	11	15	11	16	12	4770	950	56.1	8.1	2.40E+03	1.00E+03	1.17	0.8	0.18	0.99	1.9	1.2	770	630	0.06	0.11	-0.016	0.02	-0.006	0.017	-0.025	0.08	-0.026	0.091	0.0057	0.0067	0.18	0.37	0.019	0.037	-0.05	0	0.02	0.035	0.14	0.21	0.006	0.012	0.01	0.024	0.011	0.013	-0.002	0.047	0.26	0.18	220	180	0.234	0.088
BMB5923	Zircon_Sample-064.FIN2	Fe-rich	700000		0.019	0.035	0.6	1.7	0.28	0.27	1.07	0.65	2350	440	51.9	7.5	5.20E+03	1.80E+03	0.82	0.23	-0.09	0.17	0.136	0.077	60	19	0	0.014	0.0031	0.0029	-0.0015	0.0078	0.005	0.019	0.011	0.049	0.0015	0.0041	0.07	0.11	0.0042	0.0072	0.005	0	-0.00202	0.00064	-0.008	0.022	0.0025	0.0033	-0.0019	0.005	0.0015	0.0034	-0.0126	0.0051	0.032	0.024	220	160	0.21	0.12
BMB5923	Zircon_Sample-065.FIN2	Fe-rich	700000		0.0352	0.0062	2	2.3	8.3	1.9	9.01	0.89	3250	240	54	7	1610	310	0.945	0.08	0.51	0.29	1.78	0.36	460	91	0.015	0.025	-0.009	0.013	-0.0008	0.0068	-0.012	0.016	-0.007	0.011	-0.00042	0.00017	-0.088	0.037	0.002	0.021	0.004	0	0.0066	0.0099	0.004	0.034	-0.000134	0.000056	0.004	0.0075	0.0042	0.0087	-0.017	0.015	0.192	0.07	367	87	0.374	0.096

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe_2O_3 x 0.89981.

BMB 5930

CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5930	Zircon_Sample-137.FIN2	Fe-rich	700000		0.087	0.0063	1.12	0.74	2.05	0.55	0.61	0.18	66	27	22.8	3.4	31.4	9	5.93	0.72	4.6	1.2	2.79	0.3	0.491	0.076	0.214	0.034	0.334	0.067	0.0335	0.0041	0.168	0.069	0.052	0.09	0.0055	0.0069	0.04	0.12	0.0041	0.0014	0.038	0	0.0103	0.0096	0.039	0.021	0.0074	0.0087	0.0217	0.007	0.0043	0.0035	0.004	0.022	0.0027	0.004	250	99	360	140
BMB5930	Zircon_Sample-138.FIN2	Fe-rich	700000		0.112	0.028	9.3	9.7	1.16	0.79	0.89	0.44	143	24	43.1	7.6	49	14	7.1	3.1	0.73	0.28	2.4	1.1	0.39	0.14	0.179	0.036	0.464	0.038	0.041	0.012	0.194	0.088	0.051	0.012	0.012	0.0073	-0.062	0.053	-0.003	0.013	0.016	0	0.009	0.011	0.017	0.024	0.0062	0.003	0.028	0.015	0.0033	0.004	0.019	0.037	0.0122	0.0074	167	95	90	45
BMB5930	Zircon_Sample-139.FIN2	Fe-rich	700000		0.09	0.024	-0.36	0.65	0.05	0.036	1.1	0.61	32.9	3.7	49.4	1.5	123	21	0.92	0.66	3.31	0.67	5	2.6	0.21	0.12	0.005	0.018	0.0007	0.0085	-0.0024	0.0036	0.001	0.013	0.034	0.067	0.0024	0.0036	0.04	0.1	0.005	0.014	0.024	0	0.0045	0.0044	0.001	0.02	-0.0000346	0.0000097	0.014	0.018	0.0005	0.0014	-0.0131	0.0077	0.054	0.02	270	160	11	5.2
BMB5930	Zircon_Sample-140.FIN2	Fe-rich	700000		0.08	0.042	0.52	0.65	0.17	0.23	0.36	0.28	23	8.2	23.3	9.9	101	42	0.43	0.57	3.2	1.6	4.4	2.3	0.55	0.45	0.0085	0.0095	0.007	0.018	0.005	0.01	0.028	0.014	0.012	0.025	0.0007	0.002	-0.02	0.093	0.0017	0.0083	0.01	0	0.0002	0.0019	-0.003	0.011	0.0006	0.0013	0.004	0.017	0.0012	0.0017	-0.004	0.015	0.17	0.14	240	300	190	160
BMB5930	Zircon_Sample-141.FIN2	Fe-rich	700000		0.071	0.029	0.51	0.97	0.183	0.077	0.78	0.25	37	17	120	15	320	34	0.79	0.35	6	0.47	7.72	0.14	3.12	0.79	0.003	0.0065	0.087	0.015	0.0065	0.0044	0.071	0.093	0.017	0.019	0.005	0.011	0	0.14	-0.007	0.012	0.014	0	0.0012	0.0036	0.021	0.012	0.003	0.0061	0.01	0.014	0.0009	0.0021	0.008	0.022	0.123	0.078	300	270	630	330
BMB5930	Zircon_Sample-142.FIN2	Fe-rich	700000		-0.015	0.049	-0.57	0.66	0.031	0.018	0.76	0.39	21	6.7	77	21	396	95	0.2	0.21	7.6	2	7.7	2.2	1.13	0.49	0.012	0.013	0.001	0.018	0.0009	0.0054	0.002	0.022	0.014	0.034	0.0015	0.0022	0.05	0.11	-0.0042	0.0061	0.011	0	-0.0007	0.0028	-0.002	0.02	-0.0000323	0.0000063	0.009	0.011	0.0027	0.004	0.011	0.023	0.27	0.11	390	190	12	4.8
BMB5930	Zircon_Sample-143.FIN2	Fe-rich	700000		-0.033	0.034	0.02	0.53	0.111	0.052	1.11	0.32	10.5	0.72	93	12	341	23	0.088	0.064	7.1	0.68	6.15	0.6	0.89	0.13	-0.004	0.012	0.001	0.015	0.0021	0.0052	0.018	0.026	0.017	0.025	0.0015	0.0035	0.1	0.16	-0.0069	0.0058	0.003	0	0.002	0.0034	0.013	0.019	0.0026	0.0023	-0.001	0.0067	-0.000186	0.000049	0.001	0.012	0.171	0.024	210	180	17.1	2.9
BMB5930	Zircon_Sample-150.FIN2	Fe-rich	700000		0.051	0.072	-0.4	1.1	0.029	0.013	0.08	0.21	31.2	1.5	10.5	4	8.7	4	0.55	0.9	0.99	0.38	0.249	0.098	0.159	0.023	-0.0082	0.0077	-0.001	0.01	-0.0019	0.0023	-0.002	0.045	-0.009	0.017	0.0012	0.003	-0.05	0.15	-0.0052	0.0072	0.001	0	-0.0013	0.0025	-0.017	0.013	0.0006	0.0014	0.01	0.018	0.0017	0.0025	0.014	0.027	0.055	0.028	220	130	0.76	0.22
BMB5930	Zircon_Sample-151.FIN2	Fe-rich	700000		0.115	0.045	-1	1	0.18	0.18	0.6	1	31.8	4.5	44	33	230	220	0.8	1.3	2.7	1	4.6	4.5	0.4	0.17	0.0044	0.0074	-0.0021	0.0057	-0.0015	0.0027	-0.0215	0.0097	-0.006	0.019	0.0005	0.0015	-0.09	0.084	0.0005	0.0073	0.011	0	-0.0004	0.0054	0.0027	0.0081	0.0029	0.0059	0.009	0.02	0.0006	0.0015	0.019	0.021	0.16	0.14	370	300	0.96	0.36
BMB5930	Zircon_Sample-152.FIN2	Fe-rich	700000		0.124	0.029	-0.61	0.87	0.012	0.024	0.01	0.45	29.8	2.6	11.7	4.5	50	29	0.46	0.78	0.88	0.43	0.82	0.44	0.24	0.16	-0.0013	0.0089	0.0058	0.0061	-0.0001	0.0034	0.0123	0.0083	0.023	0.043	0.0022	0.0033	0.12	0.19	-0.001	0.0082	-0.006	0	-0.002	0.0026	-0.001	0.01	0.003	0.0038	0.007	0.01	0.0005	0.0014	-0.006	0.012	0.041	0.025	190	160	0.96	0.2
BMB5930	Zircon_Sample-153.FIN2	Fe-rich	700000		0.119	0.053	0.09	0.65	0.09	0.097	0.49	0.33	37.7	6	17	21	28	51	0.45	0.45	2.5	3.7	1.6	2.8	0.46	0.79	0.029	0.027	0.042	0.082	-0.0025	0.0029	0.037	0.072	0.054	0.067	0.0024	0.0052	-0.03	0.057	-0.0046	0.0077	0.011	0	-0.0021	0.0035	-0.013	0.02	-0.000036	0.0000077	0.009	0.019	0.005	0.011	0.017	0.008	0.07	0.11	80	170	60	110
BMB5930	Zircon_Sample-154.FIN2	Fe-rich	700000		0.082	0.056	-0.46	0.36	0	0.017	0.39	0.23	39.8	2.8	7.6	1.6	0.74	0.62	0.23	0.38	0.2	0.36	0.044	0.05	0.021	0.02	0.01	0.022	0.0116	0.0053	0.0035	0.0061	-0.029	0.016	-0.007	0.017	-0.00025	0.00007	0.04	0.18	-0.001	0.012	-0.01	0	-0.000081	0.000023	-0.003	0.036	0.006	0.0062	0.014	0.035	0.002	0.0043	0.00347	0.00096	0.0115	0.0064	250	340	0.31	0.33
BMB5930	Zircon_Sample-155.FIN2	Fe-rich	700000		0.058	0.051	0.4	2.1	0.0033	0.0097	0.38	0.69	46.7	9.3	10.8	1.7	0.16	0.18	0.197	0.085	0.21	0.31	-0.009	0.044	0.0026	0.0065	0.02	0.026	-0.0012	0.0051	0.0011	0.0089	0.056	0.065	0.018	0.05	-0.00027	0.00011	0.02	0.16	-0.008	0.012	0.007	0	-0.002	0.004	0.023	0.035	-0.000037	0.000015	0.023	0.053	-0.000175	0.000072	0.018	0.036	0.0034	0.0045	110	100	0.053	0.041
BMB5930	Zircon_Sample-156.FIN2	Fe-rich	700000		-0.006	0.029	-0.26	0.9	-0.0094	0.0081	0.55	0.28	45.4	7.4	10.1	1.8	0.08	0.11	0.119	0.075	0.22	0.19	0.11	0.1	0.008	0.013	-0.0056	0.0063	-0.0065	0.0071	-0.0012	0.0059	-0.006	0.027	-0.002	0.0074	0.0006	0.0017	-0.07	0.1	0.0013	0.0051	0.011	0	-0.0001	0.0044	-0.016	0.014	0.0013	0.0017	-0.0007	0.0062	-0.000156	0.000048	0.006	0.015	0.0053	0.0076	130	220	0.042	0.034
BMB5930	Zircon_Sample-163.FIN2	Fe-rich	700000		0.086	0.052	-0.5	1.3	0.012	0.042	0.72	0.13	11.3	4.7	6.29	0.51	3.45	0.89	0.042	0.032	0.63	0.98	0.035	0.051	0.018	0.012	0.023	0.017	0.001	0.021	-0.0021	0.009	0.011	0.027	0.002	0.04	0.0035	0.0076	0.02	0.1	-0.004	0.015	0.017	0	-0.0003	0.0058	0.003	0.03	0.0034	0.003	0.016	0.021	0.0053	0.003	0.028	0.03	0.0063	0.0064	120	150	0.35	0.18
BMB5930	Zircon_Sample-164.FIN2	Fe-rich	700000		0.212	0.077	-0.1	1.2	0.004	0.02	-0.34	0.3	13.7	2.6	7.93	0.62	1.47	0.74	0.119	0.088	0.23	0.39	0.1	0.1	0.016	0.018	0.009	0.019	0.003	0.018	-0.0031	0.0067	-0.005	0.033	-0.015	0.03	0.0015	0.0036	0.07	0.12	0.012	0.013	0.039	0	-0.0026	0.0045	0.009	0.034	-0.000052	0.000015	0.008	0.017	0.0022	0.0033	0.038	0.03	0.016	0.019	60	180	0.111	0.053
BMB5930	Zircon_Sample-165.FIN2	Fe-rich	700000		0.127	0.064	-0.29	0.96	0	0.01	0.47	0.36	37	11	11.12	0.63	0.79	0.6	0.097	0.049	0.34	0.25	0.07	0.11	0.0059	0.0082	-0.008	0.011	-0.0115	0.0067	-0.0009	0.0086	0.011	0.031	0.009	0.03	0.0027	0.0058	0.05	0.11	0.001	0.011	-0.014	0	0.0023	0.0072	-0.012	0.026	0.0011	0.0022	0.001	0.01	0.0021	0.0026	0.012	0.016	0.0149	0.006	130	420	0.097	0.034
BMB5930	Zircon_Sample-166.FIN2	Fe-rich	700000		0.129	0.058	1.4	1.9	-0.01	0.056	0.67	0.94	8	3.9	10.4	1.5	0.5	0.3	0.04	0.13	1.46	0.61	0.05	0.12	0.012	0.014	-0.01	0.011	-0.006	0.018	0.0074	0.0079	0.03	0.032	0.015	0.044	0.007	0.0061	0.02	0.26	-0.0117	0.0073	0.02	0	-0.0043	0.004	-0.032	0.063	0.01	0.0091	0.031	0.059	0.002	0.003	0.032	0.03	0.013	0.018	70	170	0.124	0.036
BMB5930	Zircon_Sample-167.FIN2	Fe-rich	700000		0.071	0.022	-0.09	0.28	0.08	0.1	0.26	0.55	19.3	2	28.8	9.1	51	51	0.55	0.15	3.3	2.5	5.8	5	0.37	0.41	0.0064	0.0044	0.022	0.013	-0.0016	0.0067	0.009	0.058	-0.005	0.014	0.008	0.017	0.065	0.044	0.009	0.032	0	0	0.0009	0.0053	0.007	0.026	0.0038	0.0047	0.007	0.021	0.0012	0.0027	0.043	0.052	0.053	0.018	-90	100	0.107	0.025
BMB5930	Zircon_Sample-168.FIN2	Fe-rich	700000		0.075	0.039	0.1	1.5	-0.01	0.051	0.46	0.94	3.6	2.6	13.8	1.9	0.51	0.32	1.28	0.42	1.1	1.2	0.13	0.11	0.0068	0.0097	-0.015	0.014	0.016	0.022	0.0082	0.0077	-0.009	0.067	0.006	0.079	0.0049	0.0069	0.1	0.22	0.003	0.018	0.003	0	0.012	0.022	-0.011	0.066	-0.000076	0.000021	0.012	0.041	0.006	0.012	0.036	0.023	0.0149	0.004	170	330	0.108	0.041
BMB5930	Zircon_Sample-169.FIN2	Fe-rich	700000		0.015	0.032	1.6	2.1	0.18	0.16	0.88	0.49	47	33	13.7	4.4	17	15	3	2.8	0.77	0.57	0.25	0.24	0.041	0.023	0.13	0.1	0.25	0.17	0.027	0.018	0.15	0.12	-0.004	0.013	0.013	0.011	-0.1	0.28	0.008	0.011	0.018	0	-0.0001	0.0053	-0.004	0.025	0.0021	0.0042	0.048	0.03	0.0015	0.0032	0.007	0.014	0.018	0.016	200	170	6.8	4.8
BMB5930	Zircon_Sample-176.FIN2	Fe-rich	700000		0.121	0.053	1	1	0.042	0.034	-0.14	0.47	38.1	9.9	20	2.6	13	11	0.8	0.42	1.18	0.25	0.59	0.35	0.16	0.12	0.031	0.029	0.042	0.019	0.005	0.0041	0.026	0.035	-0.006	0.012	0.0066	0.0045	0.11	0.15	0.012	0.013	-0.009	0	0.0027	0.0048	0.008	0.029	0.0023	0.0046	0.043	0.014	0.0014	0.0032	0.018	0.02	0.026	0.013	210	110	0.4	0.22
BMB5930	Zircon_Sample-177.FIN2	Fe-rich	700000		0.173	0.053	-0.1	1.3	0.049	0.02	0.29	0.67	22	0.97	44.8	7	29	14	2.43	0.61	3.4	2	1.88	0.67	0.05	0.024	0.018	0.039	0.0195	0.0071	-0.0031	0.0046	-0.007	0.034	0.005	0.035	0.0063	0.0094	0.18	0.19	-0.0084	0.0061	0.012	0	-0.0017	0.0047	0.008	0.042	0.0054	0.0083	0.018	0.024	0.0026	0.0035	0.036	0.031	0.074	0.036	60	240	0.36	0.31
BMB5930	Zircon_Sample-178.FIN2	Fe-rich	700000		0.122	0.022	-0.74	0.74	0.26	0.25	0.3	0.43	280	210	25.3	2.6	30	10	0.97	0.57	4.6	1.1	1.51	0.96	0.224	0.09	0.14	0.13	0.21	0.19	0.017	0.021	0.08	0.11	0.02	0.043	0.0028	0.003	0.1	0.16	-0.0015	0.0085	0.017	0	0.0013	0.0022	0.015	0.043	0.0037	0.0075	0.025	0.022	-0.0001047	0.0000027	0.02259	0.0006	0.085	0.039	20	240	2.3	2.4
BMB5930	Zircon_Sample-179.FIN2	Fe-rich	700000		0.18	0.094	-0.2	1.1	0.073	0.025	0.34	0.66	11.1	3	36.3	3.6	67.4	7.8	0.162	0.05	3.77	0.82	6.1	1.1	0.443	0.042	-0.019	0.013	-0.0072	0.005	-0.0043	0.0035	-0.01	0.05	-0.015	0.016	0.0023	0.0033	0.06	0.16	-0.0012	0.007	-0.019	0	0.0002	0.0053	0.018	0.032	0.0017	0.0035	0.009	0.017	0.0025	0.0053	0.047	0.027	0.197	0.037	60	120	0.0099	0.0099
BMB5930	Zircon_Sample-180.FIN2	Fe-rich	700000		0.12	0.11	3	6.9	0.24	0.47	0.06	0.34	33	10	32.9	1.6	55	61	1.9	1.3	0.75	0.19	0.13	0.25	0.034	0.026	0.16	0.22	0.32	0.49	0.044	0.074	0.19	0.28	0.021	0.087	0.01	0.02	0.1	0.12	0	0.016	0.005	0	0.005	0.011	0.026	0.032	0.0012	0.0024	0.042	0.046	0.001	0.0024	0.017	0.018	0.0056	0.0045	210	120	25	30
BMB5930	Zircon_Sample-181.FIN2	Fe-rich	700000		0.034	0.029	-0.27	0.4	0.023	0.03	0.01	0.34	54	26	22.1	6.9	13.1	5.6	0.74	0.35	1.88	0.88	0.079	0.089	0.144	0.043	0.038	0.038	0.048	0.047	0.0034	0.0056	0.008	0.042	0.016	0.011	0.0041	0.0064	0.11	0.16	-0.002	0.01	0.009	0	0.0024	0.0059	-0.002	0.026	0.0009	0.0018	0.028	0.031	0.0019	0.0026	0.008	0.012	0.019	0.016	30	220	1.8	1.2
BMB5930	Zircon_Sample-182.FIN2	Fe-rich	700000		-0.007	0.02	-0.18	0.89	0.116	0.053	0.45	0.35	15.4	3.3	33.1	2.9	83	63	1.24	0.63	4.7	1.4	1.9	1.3	0.55	0.35	0.015	0.019	0.054	0.03	0.0055	0.0067	0.035	0.051	0.063	0.052	0.0057	0.0067	0.069	0.086	0.003	0.014	-0.016	0	-0.0013	0.0023	-0.012	0.015	0.0023	0.0048	0.012	0.023	0.0038	0.0037	0.0137	0.0017	0.21	0.059	35	19	75	38
BMB5930	Zircon_Sample-189.FIN2	Fe-rich	700000		0.076	0.056	1.66	0.86	0.25	0.15	1.18	0.57	58	14	32	11	190	110	0.91	0.62	5	2.8	6.7	4.4	0.55	0.31	0.022	0.016	0.126	0.09	0.0128	0.009	0.057	0.045	-0.013	0.02	0.0045	0.0074	0.074	0.094	0.004	0.0079	0.011	0	0.003	0.0053	0.033	0.025	0.0055	0.0056	0.007	0.013	-0.000111	0.00004	0.035	0.021	0.153	0.08	150	180	13	9.2
BMB5930	Zircon_Sample-190.FIN2	Fe-rich	700000		0.13	0.047	-0.5	1	0.068	0.082	0.56	0.66	37.5	5.7	44	39	80	120	0.15	0.13	4.3	3.9	4.4	6.7	0.59	0.76	-0.002	0.012	0.023	0.028	0.0075	0.0041	0.002	0.022	0.017	0.03	0.0055	0.0064	-0.047	0.077	-0.003	0.011	0.006	0	-0.002	0.0033	-0.014	0.021	0.003	0.0038	0.021	0.024	0.0007	0.0016	0.017	0.017	0.1	0.12	100	260	2.7	3.4
BMB5930	Zircon_Sample-191.FIN2	Fe-rich	700000		0.149	0.011	-0.2	1.1	0.041	0.019	0.51	0.63	24.7	1.3	39.3	5.6	221	84	0.51	0.67	6.9	2.4	4.9	2.5	0.8	0.33	0.007	0.022	0.003	0.009	-0.0002	0.0055	0.046	0.021	0.01	0.026	0.0038	0.0057	-0.06	0.085	0.0136	0.0077	0.014	0	-0.0021	0.0022	-0.021	0.034	0.001	0.0021	0.014	0.016	-0.000118	0.000014	0.005	0.015	0.211	0.058	190	210	2.97	0.39
BMB5930	Zircon_Sample-192.FIN2	Fe-rich	700000		0.127	0.036	0	0.81	0	0.023	0.33	0.32	18.7	4.5	34	5.6	12.2	8.7	0.13	0.19	2	2	1.2	1.8	0.033	0.025	-0.0039	0.009	-0.003	0.013	0.0017	0.0092	0.017	0.039	-0.005	0.018	0.0009	0.0021	0.06	0.16	0.003	0.012	0.008	0	-0.0002	0.0037	0.009	0.027	0.0021	0.0027	0.066	0.07	0.0033	0.0029	0.006	0.021	0.03	0.023	130	160	0.2	0.28
BMB5930	Zircon_Sample-193.FIN2	Fe-rich	700000		0.069	0.017	0.46	0.83	0.16	0.12	0.52	0.63	24	3.1	101	54	430	270	0.7	1.1	5.8	3.3	9.9	6.2	1.19	0.82	-0.0008	0.0031	0.0065	0.0072	-0.0008	0.0013	-0.005	0.021	0.016	0.024	0.0014	0.0032	0.08	0.12	0.001	0.014	0.02	0	0.0012	0.0013	-0.017	0.011	0.0039	0.0062	0.0068	0.0093	-0.000099	0.000038	0.0123	0.0097	0.091	0.047	190	320	0.057	0.016
BMB5930	Zircon_Sample-194.FIN2	Fe-rich	700000		0.037	0.017	-0.2	1.2	0.087	0.031	0.98	0.27	22	13	80	19	164	42	0.26	0.17	4.8	1.7	6.1	1.7	0.68	0.33	0.007	0.029	0.029	0.039	0.0045	0.0091	0.024	0.047	0.013	0.037	0.0049	0.005	-0.029	0.076	-0.0048	0.0074	-0.029	0	0.0027	0.0027	0.028	0.03	0.0016	0.002	0.0141	0.0093	-0.000103	0.000017	0.009	0.025	0.085	0.045	-35	87	1.9	1.7
BMB5930	Zircon_Sample-195.FIN2	Fe-rich	700000		-0.011	0.044	0.56	0.96	0.085	0.028	0.73	0.36	24.1	5.2	35.9	7	199	48	0.6	0.15	6.5	1.2	6	2.3	0.83	0.29	0.028	0.017	0.054	0.024	0.0104	0.0093	0.031	0.018	-0.008	0.018	0.0029	0.0041	0.013	0.057	-0.0043	0.0069	-0.001	0	-0.001	0.0019	0.014	0.024	0.0024	0.0032	0.026	0.018	0.0007	0.0017	0.014	0.023	0.23	0.11	140	180	5.3	1.9

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe_2O_3 x 0.89981.

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CONCENTRATIONS

Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5933	Zircon_Sample-202.FIN2	Fe-rich	700000		0.13	0.1	0.49	0.42	0.044	0.08	0.02	0.2	460	130	28	12	0.86	0.69	14.84	0.71	0.04	0.4	0.049	0.066	0.175	0.086	1.07	0.23	2.06	0.65	0.224	0.087	0.99	0.31	0.27	0.16	0.037	0.012	0.185	0.092	0.027	0.013	0.118	0	0.019	0.012	0.097	0.07	0.017	0.012	0.067	0.042	0.0067	0.0048	-0.007	0.011	0.0068	0.0091	130	170	44.8	2.4
BMB5933	Zircon_Sample-203.FIN2	Fe-rich	700000		0.201	0.036	0.23	0.25	0.015	0.012	0.28	0.12	315	48	22.3	3.2	0.64	0.12	14.1	2	0.38	0.3	0.071	0.041	0.0979	0.0086	0.7	0.28	1.56	0.51	0.181	0.062	0.69	0.22	0.184	0.063	0.044	0.021	0.28	0.17	0.016	0.013	0.084	0	0.0165	0.0048	0.067	0.025	0.0067	0.0031	0.044	0.017	0.0065	0.0022	0.003	0.012	0.0054	0.0041	130	150	48.2	2
BMB5933	Zircon_Sample-204.FIN2	Fe-rich	700000		0.232	0.066	0.39	0.15	0.03	0.024	-0.04	0.32	229	42	19.8	2.7	1.55	0.25	21.1	1.4	0.23	0.29	0.043	0.053	0.111	0.051	1.69	0.13	3.21	0.21	0.334	0.034	1.57	0.2	0.385	0.054	0.052	0.012	0.459	0.081	0.036	0.012	0.243	0	0.035	0.013	0.144	0.043	0.0189	0.0059	0.133	0.045	0.0128	0.0031	0.01	0.018	0.0029	0.005	160	200	59.5	1.7

BMB5933	Zircon_Sample-205.FIN2	Fe-rich	700000		0.078	0.052	70	120	0.44	0.82	0.9	1.3	170	120	3	1.7	1.86	0.93	130	230	-0.06	0.19	0.003	0.058	0.11	0.14	0.68	0.68	1.06	0.91	0.111	0.098	0.55	0.46	0.102	0.099	0.023	0.018	0.23	0.18	0.008	0.0074	0.1	0	0.025	0.026	0.041	0.035	0.011	0.014	0.11	0.15	0.002	0.0029	0.019	0.037	0.052	0.09	60	230	14.7	7.2
BMB5933	Zircon_Sample-206.FIN2	Fe-rich	700000		0.021	0.023	0.12	0.96	0.016	0.034	0.3	0.44	19.9	5	0.56	0.11	0.84	0.63	0.63	0.16	0.2	0.3	0.052	0.063	0.015	0.012	0.03	0.027	0.109	0.02	0.0083	0.0033	0.092	0.088	0.018	0.012	0.0027	0.0035	0.02	0.068	-0.0018	0.0086	0.021	0	0.0004	0.0023	0.001	0.041	0.0008	0.0016	0.028	0.027	0.0048	0.0077	0.011	0.022	0.0006	0.0027	0	180	8.8	2.7
BMB5933	Zircon_Sample-207.FIN2	Fe-rich	700000		0.33	0.25	48	37	7.1	6	1.7	1	520	350	18	13	9.8	5.2	4.9	1.8	4	3.7	0.38	0.39	0.93	0.82	0.8	0.44	1.9	1.1	0.22	0.11	1.02	0.52	0.201	0.098	0.056	0.042	0.25	0.1	0.027	0.018	0.129	0	0.018	0.016	0.047	0.054	0.017	0.017	0.071	0.052	0.0094	0.0079	0.092	0.093	0.065	0.038	-20	110	38	17
BMB5933	Zircon_Sample-208.FIN2	Fe-rich	700000		0.073	0.019	0.15	0.62	-0.0023	0.0077	0.36	0.41	239	18	10.5	2.9	1.01	0.33	7.7	2.2	0.42	0.22	0.05	0.13	0.114	0.049	1.85	0.14	4.46	0.65	0.503	0.051	2.18	0.47	0.475	0.044	0.089	0.028	0.45	0.2	0.059	0.022	0.344	0	0.0488	0.0083	0.142	0.048	0.019	0.01	0.15	0.073	0.0135	0.009	0.014	0.012	0.006	0.0091	180	130	10.9	1.7
BMB5933	Zircon_Sample-215.FIN2	Fe-rich	700000		0.11	0.056	0.51	0.53	0.012	0.019	0.07	0.16	480	210	40	24	0.962	0.09	7.5	1.4	0.22	0.43	-0.001	0.052	0.081	0.025	0.77	0.14	1.69	0.31	0.179	0.043	0.77	0.16	0.2	0.13	0.04	0.018	0.26	0.19	0.027	0.015	0.113	0	0.018	0.01	0.074	0.021	0.0077	0.0065	0.104	0.056	0.0089	0.0046	0.021	0.021	0.0013	0.0039	100	170	5.33	0.55
BMB5933	Zircon_Sample-216.FIN2	Fe-rich	700000		0.232	0.043	0.38	0.9	-0.004	0.01	0.06	0.44	66	11	4.33	0.44	3.01	0.76	6.78	0.43	0.45	0.53	0.03	0.089	0.063	0.039	10.5	2.8	26.9	7.8	2.67	0.72	10.7	2.9	2.24	0.68	0.42	0.14	2.38	0.78	0.29	0.063	1.81	0	0.264	0.083	0.98	0.19	0.133	0.025	0.64	0.19	0.065	0.016	-0.007	0.015	0.0094	0.0088	10	210	1.62	0.59
BMB5933	Zircon_Sample-217.FIN2	Fe-rich	700000		0.67	0.21	40	73	2.3	4.2	1.2	1.2	140	170	6.63	0.14	6.6	5.1	8.3	5.5	1.9	3.4	0.19	0.26	0.4	0.69	6.87	0.69	25	4.5	3.26	0.6	14.9	2.8	4.21	0.85	0.61	0.15	2.76	0.37	0.317	0.057	1.87	0	0.252	0.076	1	0.19	0.127	0.03	0.8	0.16	0.092	0.019	0.05	0.11	0.019	0.011	90	180	46.6	3.2
BMB5933	Zircon_Sample-218.FIN2	Fe-rich	700000		0.273	0.096	0.25	0.96	0.009	0.015	-0.12	0.42	85	37	6.85	0.66	2.92	0.7	8.4	2.9	0.06	0.44	-0.019	0.075	0.022	0.022	3.77	0.61	12	2.2	1.53	0.31	6.4	1.6	1.81	0.54	0.272	0.072	1.3	0.27	0.16	0.028	0.87	0	0.129	0.016	0.42	0.11	0.049	0.012	0.341	0.082	0.038	0.014	0.007	0.016	0.01	0.011	0	160	33.8	8.2
BMB5933	Zircon_Sample-219.FIN2	Fe-rich	700000		0.268	0.065	0.8	1.3	0.001	0.02	0.03	0.16	130	11	13.9	1.5	2.51	0.67	10.2	2.3	0.04	0.43	0.117	0.08	0.1	0.063	3.1	1.1	9.9	3.5	1.24	0.33	5.9	2	1.73	0.61	0.24	0.06	0.97	0.3	0.14	0.045	0.75	0	0.115	0.034	0.36	0.11	0.045	0.015	0.27	0.1	0.032	0.011	0.02	0.018	0.0018	0.0032	146	85	23	11
BMB5933	Zircon_Sample-220.FIN2	Fe-rich	700000		0.38	0.23	76	59	4	3.3	1.46	0.82	176	6.2	10.45	0.32	4.6	2	12.3	7.5	0.67	0.7	0.22	0.15	0.41	0.38	4.45	0.63	14	3.1	1.54	0.32	6.9	1.3	1.46	0.35	0.25	0.079	1.47	0.52	0.142	0.031	0.89	0	0.136	0.058	0.5	0.11	0.063	0.032	0.37	0.11	0.0414	0.0096	0.043	0.056	0.022	0.016	10	110	8.7	3.3
BMB5933	Zircon_Sample-221.FIN2	Fe-rich	700000		0.062	0.055	17	34	0.29	0.57	1.6	2.6	99	23	9.76	0.45	3.59	0.54	36	43	-0.01	0.19	0.062	0.073	0.074	0.078	7.8	4.8	14	10	1.35	0.94	5.4	3.6	1.08	0.64	0.23	0.18	1.37	0.85	0.13	0.11	1.02	1	0.15	0.12	0.61	0.37	0.07	0.075	0.44	0.24	0.032	0.023	0.017	0.033	0.0075	0.0095	0	130	0.81	0.76
BMB5933	Zircon_Sample-228.FIN2	Fe-rich	700000		0.002	0.071	-0.9	1.1	-0.0107	0.0047	-0.15	0.44	15.1	2	0.214	0.096	0.054	0.054	2.15	0.39	0.02	0.12	0.023	0.045	0.015	0.012	0.031	0.012	0.103	0.05	0.0128	0.0088	0.056	0.042	0.009	0.023	0.0028	0.0041	-0.067	0.06	0.003	0.011	0.038	0	0.0052	0.0074	0.006	0.023	0.0027	0.0033	0.026	0.032	0.0031	0.0028	0.013	0.02	0.0025	0.004	90	170	0.0167	0.0092
BMB5933	Zircon_Sample-229.FIN2	Fe-rich	700000		0.073	0.076	0.71	0.65	0.001	0.016	0.07	0.25	16.9	4	0.22	0.047	0.025	0.09	2.52	0.61	-0.16	0.23	-0.02	0.042	0.0059	0.0079	0.017	0.021	0.032	0.035	0.0083	0.0081	0.0011	0.00042	0.009	0.027	0.0016	0.0032	-0.05	0.11	0.006	0.012	0	0	0.0042	0.0048	0.025	0.011	0.0027	0.0036	0.028	0.012	0.0085	0.0074	0.009	0.023	0.0036	0.0087	10	140	0.008	0.01
BMB5933	Zircon_Sample-230.FIN2	Fe-rich	700000		0.105	0.035	0.24	0.91	-0.011	0.021	-0.05	0.31	12	3.5	0.15	0.2	0.037	0.038	2.31	0.9	0.07	0.077	0.036	0.045	0.009	0.0087	0.03	0.02	0.027	0.016	0.0017	0.0047	0.016	0.032	0.005	0.023	0.0032	0.0032	0.051	0.077	-0.0001	0.0045	0.019	0	0.0068	0.0038	0.005	0.025	0.0008	0.0016	0.012	0.014	0.0012	0.0016	-0.007	0.017	0.0027	0.0048	-57	84	0.034	0.012
BMB5933	Zircon_Sample-231.FIN2	Fe-rich	700000		0.054	0.034	-0.45	0.72	0.012	0.023	0.26	0.24	5.6	1.1	0.074	0.094	0.09	0.1	1.57	0.41	0.18	0.36	0.022	0.035	0.008	0.014	0.0114	0.0087	0.029	0.013	0.0064	0.0034	0.034	0.031	0.008	0.022	0.0014	0.0017	-0.043	0.046	0.0047	0.0096	0.001	0	0.0009	0.0033	0.026	0.043	-0.000031	0.00001	0.041	0.033	0.0019	0.0026	-0.009	0.016	0.0084	0.0077	90	150	0.038	0.021
BMB5933	Zircon_Sample-232.FIN2	Fe-rich	700000		0.15	0.11	15	30	1.2	2.4	0.62	0.6	15.4	4.9	0.16	0.15	1	1.8	1.65	0.44	0.11	0.28	0.1	0.18	0.027	0.037	0.2	0.21	0.45	0.27	0.061	0.037	0.226	0.067	0.026	0.043	0.0091	0.0073	0.05	0.1	0.01	0.011	0.061	0	0.0036	0.0029	-0.003	0.01	-0.0000312	0.0000099	0.017	0.026	0.0007	0.0015	0.018	0.046	0.01	0.018	100	140	3.4	5.1
BMB5933	Zircon_Sample-233.FIN2	Fe-rich	700000		0.062	0.024	0.46	0.79	0.023	0.032	0.21	0.66	10.5	1.7	0.11	0.11	0.072	0.07	2.81	0.55	-0.06	0.14	0.028	0.086	0.003	0.0043	0.07	0.12	0.24	0.41	0.024	0.038	0.13	0.23	0.017	0.025	0.0085	0.0092	0.062	0.095	0.0112	0.0092	0.041	0	0.0045	0.0042	0.009	0.044	0.0058	0.0072	0.035	0.038	0.0033	0.0023	-0.007	0.019	0.0046	0.0083	80	140	0.112	0.041
BMB5933	Zircon_Sample-234.FIN2	Fe-rich	700000		0.022	0.032	0.5	1.4	-0.002	0.011	0.61	0.53	7.1	1.9	0.03	0.14	0.051	0.024	1.76	0.22	0.05	0.18	0.088	0.06	0.0031	0.0071	0.03	0.011	0.031	0.02	0.0049	0.0063	0.012	0.021	0.028	0.039	0.0027	0.0041	-0.04	0.14	-0.0054	0.0033	0.025	0	0.0037	0.004	0.012	0.025	0.0032	0.0049	0.02	0.019	0.0011	0.0023	0.009	0.032	0.007	0.012	119	68	0.063	0.036
BMB5933	Zircon_Sample-241.FIN2	Fe-rich	700000		2.72	0.73	1130	360	49	12	19.8	4.8	58	19	3.05	0.75	14.7	4.2	11.2	2.3	0.68	0.35	4.13	0.67	0.212	0.03	4.5	1.2	9.7	4.3	1.2	1	4.5	3.6	1.4	1.8	0.11	0.14	0.65	0.63	0.065	0.028	0.42	0	0.074	0.029	0.18	0.094	0.043	0.01	0.35	0.12	0.041	0.027	0.78	0.27	0.223	0.042	-20	160	39.5	4.2
BMB5933	Zircon_Sample-242.FIN2	Fe-rich	700000		1.56	0.37	870	440	28	2.6	10.2	1.3	21.2	1.7	1.597	0.068	12.7	1.5	6.01	0.64	0.31	0.22	2.41	0.3	0.18	0.053	2.11	0.78	4.4	1.8	0.4	0.16	1.82	0.92	0.303	0.079	0.052	0.02	0.39	0.15	0.042	0.017	0.23	0	0.04	0.02	0.114	0.056	0.027	0.016	0.24	0.15	0.029	0.014	0.419	0.099	0.23	0.16	130	140	50.1	1.5
BMB5933	Zircon_Sample-243.FIN2	Fe-rich	700000		2.78	0.25	2200	2100	33.3	5.4	14.5	2	40	21	2.78	0.88	12.88	0.5	9.78	0.74	0.11	0.52	3.17	0.42	0.173	0.093	3.2	1.6	4.6	1.6	0.44	0.11	1.77	0.54	0.34	0.2	0.048	0.026	0.54	0.25	0.045	0.025	0.22	0	0.068	0.023	0.16	0.18	0.033	0.027	0.49	0.3	0.039	0.046	0.98	0.59	0.218	0.04	30	100	56.1	2.8
BMB5933	Zircon_Sample-244.FIN2	Fe-rich	700000		2.63	0.63	950	350	25	1.8	12.1	1.9	32.3	8.4	2.25	0.3	25.91	0.87	9.1	1.3	0.02	0.68	2.85	0.32	0.145	0.083	2.16	0.43	4.2	1.2	0.41	0.12	1.6	0.7	0.35	0.18	0.039	0.02	-0.11	0.2	0.017	0.041	0.2	0	0.044	0.03	0.086	0.093	0.025	0.022	0.154	0.044	0.021	0.014	0.323	0.084	0.167	0.091	270	250	67.4	2.6
BMB5933	Zircon_Sample-245.FIN2	Fe-rich	700000		2.28	0.14	890	120	30.2	2.9	12.6	1.6	29.6	2.1	1.86	0.15	26.1	0.57	9.1	0.9	0.32	0.17	2.75	0.18	0.22	0.027	2.59	0.92	10.2	9.3	0.9	0.74	2.5	1.2	0.53	0.31	0.053	0.019	0.37	0.36	0.059	0.043	0.35	0	0.081	0.059	0.34	0.33	0.042	0.042	0.39	0.31	0.043	0.037	0.72	0.43	0.337	0.075	169	72	53.3	5.7
BMB5933	Zircon_Sample-246.FIN2	Fe-rich	700000		1.56	0.66	155	87	23.8	2.8	3.85	0.43	23.2	1.6	0.843	0.041	15.02	0.4	4.23	0.49	0.91	0.45	1.01	0.1	0.28	0.036	1.2	0.41	2.92	0.79	0.48	0.31	1.58	0.42	0.346	0.097	0.056	0.015	0.25	0.12	0.074	0.087	0.19	0	0.026	0.025	0.18	0.18	0.0137	0.0076	0.104	0.017	0.0129	0.0082	0.222	0.061	0.049	0.015	210	180	49.4	2.9
BMB5933	Zircon_Sample-247.FIN2	Fe-rich	700000		3.1	1.8	660	180	22.9	4.2	8.8	6.4	24.3	4.1	1.76	0.51	21.8	6	22.2	8	3.2	4.1	2.7	0.97	0.107	0.081	2.7	1.3	4.9	2.6	0.54	0.27	1.4	1.2	0.4	0.59	0.077	0.061	0.1	0.5	0.04	0.12	-0.07	0	0.043	0.029	0.1	0.15	0.08	0.11	0.19	0.2	0.06	0.038	1.05	0.72	0.3	0.2	0	190	44.8	6.1
BMB5933	Zircon_Sample-254.FIN2	Fe-rich	700000		2.33	0.58	800	160	27.4	3.5	13.3	3.4	51	33	3.04	0.87	14.4	8.3	18.1	6.8	-0.44	0.74	2.86	0.7	0.112	0.026	2.72	0.9	6.4	3	0.68	0.21	3.1	2.3	0.84	0.49	0.065	0.021	0.82	0.7	0.066	0.072	0.29	0	0.16	0.21	0.1	0.17	0.031	0.03	0.31	0.17	0.041	0.025	0.42	0.2	0.133	0.025	290	330	44	14
BMB5933	Zircon_Sample-255.FIN2	Fe-rich	700000		2.9	1.1	2800	3000	28.6	5.1	17.1	5.8	46	22	4.3	1.6	6.47	0.41	10.6	3.6	0.26	0.72	3.23	0.54	0.21	0.2	4.1	1.7	6.3	2.2	0.51	0.15	2.33	0.6	0.47	0.22	0.059	0.031	0.44	0.29	0.078	0.023	0.35	0	0.072	0.027	0.29	0.21	0.048	0.015	0.25	0.11	0.035	0.021	0.92	0.38	0.51	0.49	240	250	46	3.6
BMB5933	Zircon_Sample-256.FIN2	Fe-rich	700000		2.76	0.7	2400	1600	28.8	6.1	14.2	4.3	47	12	3.13	0.41	6.4	1.9	9.3	3.2	1.02	0.34	3.45	0.38	0.084	0.042	20	29	49	77	3.4	5.1	12	17	1.5	1.5	0.14	0.12	0.38	0.22	0.064	0.036	0.28	0	0.063	0.033	0.146	0.048	0.03	0.019	0.31	0.28	0.032	0.013	0.76	0.64	0.35	0.25	110	190	32.8	2.7
BMB5933	Zircon_Sample-257.FIN2	Fe-rich	700000		190	250	1500	1300	14.3	7.9	-250	480	139	54	52	91	-13	64	-9	36	-70	170	21	42	2.5	4.2	4.4	5.5	-4	12	1	1.6	0.3	2.9	-5	18	1.7	3.4	-3.5	9.8	3.4	6.6	18	33	7	15	0.9	8.8	2	4	-0.9	4.7	3.5	7	3.4	9.4	-0.33	0.69	40	170	46	29
BMB5933	Zircon_Sample-258.FIN2	Fe-rich	700000		27	47	1040	710	27	25	22	24	375	90	17	11	11	7.2	32	18	-11	24	5.5	8.3	0.22	0.28	4.4	2.8	14.2	7	1.74	0.95	8.2	4.5	1.28	0.89	0.51	0.65	7	12	0.158	0.061	1.2	1	0.52	0.79	-1	2.8	0.2	0.25	0.32	0.67	0.7	1.2	1.6	2.3	0.43	0.35	170	280	162	81
BMB5933	Zircon_Sample-259.FIN2	Fe-rich	700000		-0.0042	0.0088	-0.08	0.58	0.0001	0.0084	0.14	0.4	17.63	0.85	1.17	0.14	0.015	0.04	3.84	0.68	0.03	0.19	0.072	0.061	-0.000198	0.00006	0.054	0.03	0.124	0.053	0.0126	0.006	0.049	0.02	0.009	0.023	0.0021	0.0017	0.003	0.06	0.0089	0.0088	0.006	0	0.0073	0.0052	-0.007	0.015	0.0077	0.0085	0.04	0.035	0.0046	0.0049	-0.0174	0.0088	0.026	0.023	90	170	0.61	0.11
BMB5933	Zircon_Sample-260.FIN2	Fe-rich	700000		0.011	0.015	-0.02	0.66	-0.0109	0.0078	0.33	0.37	126	15	1.45	0.25	0.055	0.08	2.74	0.28	0.21	0.13	0.032	0.061	0.0026	0.0038	0.3	0.065	0.451	0.029	0.0275	0.0095	0.144	0.037	0.026	0.014	0.0007	0.0014	-0.035	0.086	0.006	0.01	0.021	0	0.0106	0.0059	0.012	0.036	0.0033	0.003	0.014	0.024	0.0031	0.003	-0.0185	0.0093	0.0029	0.0048	-60	120	0.016	0.018
BMB5933	Zircon_Sample-267.FIN2	Fe-rich	700000		0.004	0.028	-0.28	0.81	-0.0068	0.0063	0.35	0.29	183	36	2.97	0.87	0.091	0.043	2.66	0.27	-0.12	0.15	0.034	0.047	0.0021	0.003	0.261	0.025	0.416	0.016	0.0359	0.0081	0.208	0.089	0.039	0.026	0.0089	0.0059	-0.012	0.034	0.006	0.01	0.013	0	0.009	0.0054	0.0063	0.009	0.003	0.0028	0.017	0.014	0.002	0.0026	0.02	0.035	0.023	0.032	170	310	0.014	0.018
BMB5933	Zircon_Sample-268.FIN2	Fe-rich	700000		0.042	0.032	0.95	0.76	-0.006	0.019	0.3	0.38	468	45	5.41	0.59	0.04	0.13	1.87	0.4	0.22	0.41	0.04	0.097	0.0022	0.0047	0.254	0.036	0.439	0.021	0.0264	0.0063	0.182	0.036	0.038	0.02	0.0088	0.0026	0.07	0.11	0.0023	0.0077	-0.005	0	0.0037	0.0044	0.014	0.025	0.0025	0.0021	0.014	0.016	0.0028	0.0024	0.006	0.029	0.011	0.0066	100	160	0.034	0.017
BMB5933	Zircon_Sample-269.FIN2	Fe-rich	700000		0.051	0.029	0.3	0.76	-0.013	0.021	0.31	0.51	98	15	1.18	0.2	-0.005	0.039	3.93	0.53	-0.29	0.2	0.066	0.069	0.0054	0.0032	0.656	0.029	1.35	0.22	0.114	0.01	0.427	0.076	0.101	0.03	0.0186	0.0079	0.06	0.1	0.0119	0.0088	0.119	0	0.0081	0.0057	0.046	0.042	0.0104	0.0054	0.033	0.033	0.0059	0.0046	0.01	0.029	0.0017	0.0032	130	140	0.149	0.023
BMB5933	Zircon_Sample-270.FIN2	Fe-rich	700000		0.053	0.017	-0.41	0.89	-0.0029	0.0064	0.17	0.46	7.2	0.71	0.421	0.065	0.09	0.11	3.6	1.2	0.04	0.33	0.057	0.049	0.0044	0.0029	0.0174	0.008	0.074	0.037	0.0074	0.0048	0.041	0.052	0.03	0.03	0.0007	0.0013	0.019	0.055	0.005	0.0033	0.028	0	0.0067	0.0025	-0.008	0.0063	0.0036	0.0039	0.017	0.014	0.0027	0.0025	0.013	0.029	0.0039	0.0026	70	250	0.83	0.18
BMB5933	Zircon_Sample-271.FIN2	Fe-rich	700000		0.06	0.035	0.72	0.7	0.005	0.024	-0.1	0.64	260	150	3.1	1.6	0.038	0.036	6.06	0.41	-0.22	0.25	0.05	0.053	0.0042	0.0064	1.49	0.39	3	1.1	0.235	0.094	0.83	0.2	0.122	0.042	0.036	0.031	0.28	0.19	0.022	0.012	0.202	0	0.03	0.018	0.042	0.033	0.0177	0.0049	0.076	0.057	0.0071	0.009	0.02	0.047	0.0026	0.0069	80	270	0.18	0.27
BMB5933	Zircon_Sample-272.FIN2	Fe-rich	700000		0.05	0.023	0.4	0.86	-0.0118	0.0097	0.29	0.16	310	95	3.5	1.3	0.154	0.093	8.7	1.9	-0.16	0.37	0.036	0.09	0.0043	0.0067	1.43	0.81	2.8	1.9	0.25	0.16	0.99	0.46	0.25	0.22	0.022	0.02	0.34	0.31	0.027	0.024	0.163	0	0.03	0.033	0.066	0.035	0.016	0.016	0.082	0.024	0.0063	0.0024	-0.007	0.011	0.0047	0.0042	-90	170	17.4	3.1
BMB5933	Zircon_Sample-273.FIN2	Fe-rich	700000		0.52	0.22	0.05	0.26	-0.003	0.017	0.17	0.25	193	36	2.51	0.63	1.58	0.39	9.9	1.5	0.05	0.14	0.09	0.15	0.0075	0.0032	2.53	0.26	7.1	1	0.768	0.088	3.52	0.43	0.86	0.28	0.1	0.031	0.77	0.23	0.061	0.016	0.436	0	0.056	0.015	0.154	0.052	0.028	0.013	0.275	0.071	0.0238	0.0072	0.007	0.023	0.0061	0.0084	50	150	83	14

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.

BMB 5934			CONCENTRATIONS																																																											
Sample	Analysis #	Phase	Fe [ppm]*	2 s	Sc [ppm]	2 s	Ti [ppm]	2 s	V [ppm]	2 s	Cr [ppm]	2 s	Mn [ppm]	2 s	Co [ppm]	2 s	Cu [ppm]	2 s	Zn [ppm]	2 s	Mo [ppm]	2 s	Sn [ppm]	2 s	Sb[ppm]	2 s	La [ppm]	2 s	Ce [ppm]	2 s	Pr [ppm]	2 s	Nd [ppm]	2 s	Sm [ppm]	2 s	Eu [ppm]	2 s	Gd [ppm]	2 s	Tb [ppm]	2 s	Dy [ppm]	2 s	Ho [ppm]	2 s	Er [ppm]	2 s	Tm [ppm]	2 s	Yb [ppm]	2 s	Lu [ppm]	2 s	Hf [ppm]	2 s	W [ppm]	2 s	Hg [cps]	2 s	Pb [ppm]	2 s
BMB5934	Zircon_Sample-150.FIN2	Fe-rich	700000		0.127	0.029	3.6	9	6.7	1	88.9	4	5360	470	123.2	7.4	300	19	6.14	0.98	22.4	4.6	134	14	11.1	1.6	0.002	0.074	-0.029	0.021	0.03	0.013	0.08	0.14	0.063	0.023	-0.00067	0.0001	-0.08	0.45	0.01	0.04	-0.03	0	0.0159	0.0063	0.06	0.12	0.019	0.018	-0.001	0.046	0.02	0.028	0.044	0.066	0.79	0.25	230	230	0.665	0.08
BMB5934	Zircon_Sample-151.FIN2	Fe-rich	700000		0.103	0.082	0.9	7.5	7.09	0.53	92.7	8.7	5240	370	128.8	6.1	321	24	4.9	1.5	22.8	5.4	134	16	12	1.9	0.04	0.14	-0.008	0.062	-0.009	0.024	0.18	0.12	0.12	0.094	-0.00073	0.00014	-0.29	0.41	-0.008	0.037	0.06	0	0.022	0.018	0.1	0.091	0.012	0.025	0.146	0.056	0.016	0.02	0.066	0.062	0.92	0.21	160	150	0.78	0.2
BMB5934	Zircon_Sample-152.FIN2	Fe-rich	700000		0.16	0.13	5.2	2.5	6.11	0.37	82.5	4	4600	300	106	11	290	45	4	1.1	18.4	1.7	122	14	9.5	2.2	-0.013	0.069	-0.034	0.02	-0.006	0.025	-0.064	0.082	0.131	0.041	-0.000663	0.000098	0.19	0.36	0.033	0.041	-0.02	0	0.015	0.027	-0.026	0.064	0.0077	0.0097	0.05	0.11	0.015	0.014	0.092	0.092	0.74	0.23	280	100	0.78	0.2
BMB5934	Zircon_Sample-153.FIN2	Fe-rich	700000		0.1	0.14	4.1	2.8	6.78	0.5	89	8.1	5850	810	129	13	301	25	6.3	2.2	20.1	2.1	113	10	10.9	1.8	-0.007	0.066	0.006	0.019	-0.001	0.02	0.06	0.16	0.08	0.11	0.013	0.027	-0.01	0.27	0.044	0.058	0.08	0	0.007	0.018	-0.05	0.13	0.019	0.022	0.05	0.085	0.017	0.015	0.058	0.066	1.05	0.17	40	150	0.81	0.23
BMB5934	Zircon_Sample-154.FIN2	Fe-rich	700000		-0.02	0.16	5.7	3.3	6.81	0.54	85.6	7.9	4710	280	117.5	4.3	276	16	22	31	20.4	2.9	117	14	11.3	1	-0.004	0.065	-0.026	0.042	0.007	0.017	0.09	0.35	0.18	0.06	0.022	0.026	-0.12	0.26	0.019	0.086	0.29	0	0.006	0.016	0.16	0.18	0.008	0.011	0.11	0.17	-0.00056	0.00013	0.081	0.037	0.91	0.17	200	330	0.76	0.089
BMB5934	Zircon_Sample-155.FIN2	Fe-rich	700000		-0.063	0.086	3.2	6.5	6.09	0.52	89.8	3.8	5200	450	120.6	7.5	300	29	9.3	2.3	18.1	2.7	118	26	12.2	3.2	-0.017	0.069	-0.012	0.05	-0.0249	0.0093	0.08	0.16	0.15	0.1	-0.00071	0.00011	0	0.33	0.035	0.066	-0.06	0	0.032	0.021	0.007	0.057	-0.00026	0.000041	-0.017	0.084	0.0073	0.0096	0.057	0.067	0.88	0.22	-30	110	0.9	0.57
BMB5934	Zircon_Sample-156.FIN2	Fe-rich	700000		-0.05	0.12	4.6	2.6	6.46	0.6	82.7	9.1	4350	280	103.2	5	289	15	5.36	0.32	21.7	1.8	126	10	10.7	1.4	0.022	0.053	-0.037	0.019	-0.004	0.015	0.07	0.15	0.032	0.05	0.013	0.017	0.03	0.23	0.002	0.022	0.047	0	0.021	0.015	0.1	0.15	0.0068	0.0086	0.016	0.052	0.0051	0.0068	0.035	0.057	0.75	0.14	155	74	0.73	0.059
BMB5934	Zircon_Sample-163.FIN2	Fe-rich	700000		-0.01	0.17	6.9	2.9	6.75	0.76	79.9	3	5070	310	112.7	5	294	20	4.8	1.8	19.7	2.1	115	11	11.9	1.4	0.05	0.13	-0.012	0.022	0.001	0.032	0.08	0.1	0.21	0.19	0.005	0.011	0.12	0.51	0.001	0.027	0.02	0	0.021	0.025	0.08	0.1	0.015	0.014	0.052	0.097	0.008	0.01	0.064	0.064	0.95	0.15	10	120	0.77	0.2
BMB5934	Zircon_Sample-164.FIN2	Fe-rich	700000		-0.02	0.21	2.2	1.8	6.26	0.27	83.1	5.7	5040	340	110.3	6.4	293	23	4.9	1.4	18.6	2.4	107.9	4.9	11.88	0.64	-0.069	0.042	-0.053	0.021	-0.002	0.035	0.08	0.12	0.14	0.12	0.024	0.026	-0.19	0.38	0.007	0.028	-0.01	0	0.019	0.019	0.08	0.11	0.008	0.01	0.05	0.14	0.0036	0.0082	0.053	0.023	0.79	0.24	0	140	0.78	0.32
BMB5934	Zircon_Sample-165.FIN2	Fe-rich	700000		0.069	0.062	5.1	4.6	5.68	0.58	80.6	4.8	5220	550	106.7	4	299	40	7.7	2.7	18.6	2.3	103	10	10	1.3	0.001	0.084	-0.042	0.026	-0.002	0.021	-0.01	0.2	0.06	0.11	0.008	0.011	0	0.4	-0.036	0.046	-0.063	0	0.011	0.0027	0.07	0.31	-0.000242	0.00006	0.036	0.089	0.012	0.016	0.037	0.055	1.19	0.35	127	63	1.99	0.6
BMB5934	Zircon_Sample-166.FIN2	Fe-rich	700000		-0.01	0.21	13	20	8.5	1.2	75.9	8.3	6180	360	130.2	7	280.9	9.8	5.06	0.68	25.1	1.3	92.1	7	10.21	0.54	-0.021	0.023	-0.017	0.03	0.015	0.045	0.05	0.11	0.103	0.077	-0.00079	0.00021	0.29	0.47	-0.041	0.038	-0.03	0	0.022	0.015	-0.01	0.12	0.03	0.038	-0.04	0.055	0.009	0.012	0.17	0.12	1.14	0.35	100	160	0.75	0.23
BMB5934	Zircon_Sample-167.FIN2	Fe-rich	700000		0.18	0.16	4.9	6.3	8.08	0.5	81.4	5.2	5730	580	130.8	8.4	294	14	7.25	0.67	25.9	1.6	99.9	8	10.4	1.2	-0.02	0.1	0.006	0.037	0.016	0.037	0.12	0.13	0.046	0.08	0.021	0.018	-0.09	0.34	0.007	0.04	-0.021	0	0.0107	0.0096	0.01	0.1	0.017	0.024	0.08	0.21	0.014	0.022	0.08	0.14	1.18	0.21	40	130	0.85	0.3
BMB5934	Zircon_Sample-168.FIN2	Fe-rich	700000		0.06	0.22	4.8	5.5	6.99	0.33	80.9	5.5	5180	580	119.8	4.8	279	14	7.7	1.8	19.3	1.6	92.8	5.5	11.16	0.82	0.033	0.062	-0.023	0.04	0.003	0.03	-0.009	0.085	0.069	0.089	-0.000797	0.000079	-0.06	0.18	0.055	0.059	-0.06	0	0.01	0.018	-0.033	0.099	0.013	0.019	0.04	0.12	0.017	0.021	0.078	0.07	0.93	0.27	20	130	0.67	0.24
BMB5934	Zircon_Sample-169.FIN2	Fe-rich	700000		0.13	0.15	14.3	6.5	8.6	1	89	3.9	7100	1500	126	12	293	31	39	16	23.4	3.8	113.6	7.6	14.5	1.8	0.01	0.088	0.014	0.032	0.004	0.016	0.22	0.21	0.12	0.11	0.01	0.013	0.38	0.43	0.045	0.064	-0.04	0	0.016	0.017	-0.03	0.16	0.027	0.024	-0.029	0.056	0.017	0.018	0.08	0.15	0.94	0.2	-80	110	0.56	0.17
BMB5934	Zircon_Sample-176.FIN2	Fe-rich	700000		0.12	0.22	1.3	5	7.09	0.55	105	32	5500	690	117.8	5.9	300	23	110	190	20.3	3.5	92	11	12.1	1.2	-0.014	0.055	0.003	0.033	0.002	0.025	0.02	0.12	0.24	0.28	-0.0009	0.00033	0.29	0.19	0.047	0.035	0.18	0	0.014	0.02	-0.06	0.14	0.013	0.018	0.1	0.19	0.0025	0.0061	0.015	0.051	0.99	0.22	210	150	0.94	0.21
BMB5934	Zircon_Sample-177.FIN2	Fe-rich	700000		0.23	0.15	-1.2	6.1	7.7	1.4	100	13	5600	430	112	11	322	28	110	170	23.6	2.3	102	11	11.5	2.4	0.12	0.063	0.06	0.1	0.007	0.037	-0.05	0.22	0.17	0.29	-0.00138	0.0007	0.6	1.5	0.026	0.063	-0.06	0	0.037	0.043	-0.09	0.18	0.011	0.014	0.1	0.22	0.025	0.032	0.09	0.14	1.25	0.27	170	130	1.09	0.22
BMB5934	Zircon_Sample-178.FIN2	Fe-rich	700000		0.28	0.27	3.7	4.9	6.6	1.2	97	13	5500	1100	114	11	325	51	640	330	18.1	3.3	103	24	11.9	2.6	0.049	0.077	-0.08	0.13	0.018	0.036	0.18	0.11	0.16	0.14	0.024	0.029	0.54	0.69	-0.02	0.058	-0.1	0	0.058	0.046	0.1	0.31	-0.0003	0.00018	0.17	0.21	0.008	0.018	0.074	0.061	0.95	0.45	270	200	3.3	2.6
BMB5934	Zircon_Sample-179.FIN2	Fe-rich	700000		-0.08	0.16	3.9	2.7	7.8	1.1	85	3.6	4670	350	111	9.5	301	19	7.7	1.9	22.6	2.6	82	10	10.5	1.8	0.011	0.052	0.015	0.063	-0.008	0.031	-0.11	0.11	0.039	0.091	0.023	0.032	-0.19	0.68	0	0.063	0.19	0	0.026	0.027	0.1	0.14	0.026	0.016	0.19	0.059	0.0058	0.0083	0.03	0.04	0.88	0.29	180	180	0.62	0.13
BMB5934	Zircon_Sample-180.FIN2	Fe-rich	700000		0.1	0.15	3.4	4	7.8	1	97.2	8.2	5240	180	120	10	277	20	8.2	2.9	22.2	5.4	75.8	5.2	12.03	0.94	-0.049	0.07	-0.001	0.044	-0.004	0.021	0.022	0.082	0.004	0.04	0.022	0.025	0.23	0.71	-0.004	0.027	0.09	0	0.02	0.03	0.09	0.21	0.034	0.042	0.13	0.11	0.009	0.012	0.06	0.061	1.15	0.1	240	150	0.72	0.2
BMB5934	Zircon_Sample-181.FIN2	Fe-rich	700000		0.09	0.12	18	23	6.43	0.44	98.1	3.8	5200	1500	117	15	286	28	12.8	9.9	21.3	4.3	84.5	9.7	12.8	2.4	0.03	0.07	0.017	0.053	0.005	0.022	0.035	0.08	0.09	0.12	0.012	0.025	-0.05	0.43	-0.013	0.037	0.06	0	0.0078	0.0068	-0.05	0.13	0.013	0.011	-0.025	0.05	0.009	0.019	0.08	0.13	0.92	0.16	81	79	0.7	0.25
BMB5934	Zircon_Sample-182.FIN2	Fe-rich	700000		0.13	0.11	3.4	1.2	8.3	1.6	91.1	6	4880	640	110	14	276	19	3.96	0.27	26	2.7	79.3	4.3	11.2	1.1	-0.014	0.069	-0.01	0.046	-0.017	0.014	0.07	0.15	0.058	0.048	0.019	0.019	0	0.57	-0.001	0.065	-0.057	0	0.0045	0.0098	0.11	0.14	0.0107	0.0095	0.09	0.13	0.014	0.012	0.11	0.1	0.89	0.28	118	82	0.563	0.097
BMB5934	Zircon_Sample-189.FIN2	Fe-rich	700000		0.13	0.11	3.4	3.5	7.55	0.81	107.6	3.3	4870	400	118.8	7	272	26	6.3	2	21	4.9	70	13	12.2	1.5	0.001	0.077	-0.01	0.064	-0.021	0.035	0.107	0.063	0.11	0.19	0.025	0.025	-0.35	0.9	-0.03	0.024	0.07	0	0.016	0.031	0.01	0.12	0.013	0.021	0.12	0.17	0.019	0.017	0.117	0.03	0.93	0.29	-10	140	0.74	0.21
BMB5934	Zircon_Sample-190.FIN2	Fe-rich	700000		-0.05	0.13	1.5	4.3	7.85	0.65	116.1	9.2	5150	490	133	6.2	300	34	6	1.1	24.6	4	76	13	14.3	2	0.065	0.028	0.001	0.038	0.021	0.06	0.24	0.17	0.065	0.058	0.015	0.024	-0.6	1.2	0.034	0.061	0.013	0	0.017	0.026	-0.02	0.24	0.006	0.012	0.09	0.14	0.009	0.02	0.06	0.078	1.1	0.3	-128	96	0.87	0.23
BMB5934	Zircon_Sample-191.FIN2	Fe-rich	700000		0.23	0.11	9.5	4.7	7.7	1.3	96	18	4830	710	110.2	9.6	262	25	5	1.1	25.6	3.6	69	7.3	11.97	0.78	-0.022	0.034	-0.017	0.029	-0.008	0.018	-0.05	0.12	0.05	0.093	0.026	0.041	0.28	0.98	0.009	0.045	0.067	0	0.007	0.014	-0.063	0.035	0.0032	0.0067	-0.019	0.085	0.009	0.012	0.064	0.086	0.91	0.35	16	73	0.75	0.27
BMB5934	Zircon_Sample-192.FIN2	Fe-rich	700000		0.14	0.18	3.2	7	7.86	0.94	104.9	7.4	6290	480	130.7	8	260	14	6.9	1.2	23.25	0.76	56.3	5.5	9.59	0.92	0.028	0.072	0.011	0.061	0.031	0.038	0.1	0.21	0.07	0.11	0.018	0.015	-0.87	0.61	0.018	0.042	-0.074	0	0.0077	0.0082	-0.098	0.091	-0.000108	0.000028	0.09	0.17	0.0045	0.0097	0.028	0.07	1.11	0.17	60	130	0.87	0.28
BMB5934	Zircon_Sample-193.FIN2	Fe-rich	700000		0.04	0.21	22	37	7.04	0.47	108.6	5.8	5730	980	131.7	5.7	285	44	6.3	2	22.2	7.7	67	14	12.9	2.2	-0.048	0.081	0.001	0.036	-0.013	0.027	-0.06	0.12	0.073	0.09	0.02	0.017	1.1	1.1	0.014	0.036	-0.123	0	0.019	0.026	0.05	0.16	0.011	0.022	0.11	0.28	0.019	0.022	0.033	0.085	1.12	0.36	-10	130	0.71	0.31
BMB5934	Zircon_Sample-194.FIN2	Fe-rich	700000		-0.131	0.082	0.9	2.9	7.41	0.76	108	12	4700	410	118.4	6.3	283	37	5.67	0.67	22.1	1.8	46.7	3.9	8.9	1	-0.013	0.093	-0.011	0.027	-0.005	0.029	0.07	0.19	0.032	0.032	0.013	0.027	-0.49	0.83	0.006	0.046	-0.065	0	0.006	0.013	0.07	0.11	0.011	0.016	0.035	0.096	0.008	0.011	0.064	0.08	0.72	0.2	170	160	0.62	0.17
BMB5934	Zircon_Sample-195.FIN2	Fe-rich	700000		-0.14	0.14	3.5	4.2	7.12	0.97	117.4	5.4	5640	700	125	8.3	285	30	6.5	2.6	21.7	1.7	51.7	4.8	10.7	1.2	0	0.022	0.006	0.022	0.02	0.032	0.007	0.099	0.16	0.19	-0.00076	0.00025	0.2	1.2	0.008	0.023	-0.01	0	0.0136	0.0093	0.06	0.24	0.0059	0.0074	0.05	0.11	-0.00031	0.0001	0.071	0.098	0.86	0.26	130	180	0.73	0.18
BMB5934	Zircon_Sample-202.FIN2	Fe-rich	700000		0.1	0.21	6	4.8	7.4	0.67	148	12	6400	2300	123	4.1	267	10	9.21	0.3	25.8	2.4	62	16	13.1	2.3	0.018	0.081	0.04	0.1	0.006	0.014	-0.11	0.12	0.067	0.079	0.02	0.018	0.1	1.3	-0.022	0.049	-0.006	0	-0.0036	0.0076	0.13	0.23	0.016	0.014	0.24	0.21	0.0032	0.007	0.048	0.064	1.04	0.22	190	150	0.46	0.13
BMB5934	Zircon_Sample-203.FIN2	Fe-rich	700000		-0.16	0.1	3.2	4.6	9.17	0.83	141	13	5230	370	137.3	9.1	271	12	8.14	0.69	24.5	3.4	52.2	4.9	11.9	1.3	0.003	0.062	-0.01	0.065	0.033	0.025	0.13	0.13	0.078	0.072	-0.00094	0.00018	0.7	1.9	0.007	0.038	0.04	0	-0.0043	0.0074	0.07	0.12	0.0036	0.0073	-0.046	0.062	0.036	0.015	0.106	0.088	0.884	0.068	70	170	0.94	0.43
BMB5934	Zircon_Sample-204.FIN2	Fe-rich	700000		0.04	0.19	0.9	3	8.05	0.72	145.3	7.7	4340	240	121.1	1.8	266.4	9.3	6.4	1.4	21.1	5	44.3	5.3	9.83	0.81	0.017	0.059	-0.029	0.046	0.021	0.022	0.018	0.099	0.1	0.12	0.005	0.012	0.5	1.5	0.015	0.036	0.12	0	0.019	0.019	0.04	0.27	0.012	0.013	-0.037	0.053	0.022	0.016	0.11	0.071	0.994	0.074	-49	30	0.62	0.15
BMB5934	Zircon_Sample-205.FIN2	Fe-rich	700000		0.19	0.16	2.5	4.6	6.7	1.3	145	15	5610	300	134.2	5.9	291	27	34	18	20.1	2.1	52.2	4.5	12.1	2.1	0.049	0.092	0	0.058	0.021	0.022	0.08	0.13	0.065	0.09	0.0036	0.009	-0.1	0.66	0.021	0.032	0.06	0	0.022	0.024	0.07	0.14	0.012	0.01	-0.007	0.081	0.014	0.017	0.079	0.079	0.74	0.19	110	100	0.95	0.47
BMB5934	Zircon_Sample-206.FIN2	Fe-rich	700000		0.15	0.42	4.6	5.3	5.86	0.39	150	10	4900	1400	115.1	9	262.6	8.7	1430	840	15.3	6.3	36.4	6	7.9	1.1	0.068	0.043	0.06	0.15	-0.009	0.012	-0.038	0.094	0.011	0.074	0.011	0.024	0.8	0.4	0.063	0.07	-0.042	0	0.019	0.022	-0.04	0.13	0.0167	0.0049	0.073	0.094	0.034	0.014	0.076	0.089	2.1	2.6	450	760	3.9	4.8
BMB5934	Zircon_Sample-207.FIN2	Fe-rich	700000		0.12	0.16	6.2	4	7.36	0.38	184	15	5080	530	127	3.5	271	15	31	32	23.6	3.8	50.8	3.6	11.7	1.4	0.008	0.035	0.021	0.041	0.008	0.037	0.02	0.18	0.115	0.075	0.019	0.018	0.28	0.7	-0.017	0.039	0.05	0	0.006	0.015	0.01	0.15	0.0171	0.0094	-0.01	0.12	0.044	0.03	0.093	0.061	0.99	0.18	130	120	1.14	0.55
BMB5934	Zircon_Sample-208.FIN2	Fe-rich	700000		0.124	0.089	1	4.5	5.79	0.48	158.3	5.5	4840	290	126	10	268	22	8.9	2.6	20.2	1.8	51.9	6.1	13.8	3.4	-0.015	0.078	-0.013	0.061	0.03	0.034	0.044	0.093	0.18	0.13	0.018	0.016	0.77	0.65	-0.019	0.045	0.038	0	0.023	0.019	0.06	0.17	0.0024	0.0049	0.054	0.09	0.009	0.012	0.026	0.048	0.62	0.25	60	170	0.86	0.18

* Fe is used as internal standard reference, thus of assumed abundance, here set to FeO = 96 wt% FeO for Fe90-100 phases, and then use FeO = Fe2O3 x 0.89981.