

Mineral paragenesis and alteration of the Mt. Carbine tungsten deposit far north Queensland.

The late stage evolution of an S-type granite

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Abstract

The Mt. Carbine tungsten deposit represents a good example of granite related sheeted vein mineralization recording the late stages of granite cooling volatile differentiation and subsequent expulsion. The presence of 3 distinct mineralizing stages has been recognized through the study of the alteration and mineral paragenesis. These observations coupled with geochemical analysis have culminated in unraveling some of the physiochemical conditions under which the deposit formed and their dynamic evolution through time. Along with gaining important insights into the formation of the deposit analysis were conducted on individual minerals from different parts of the deposit as an investigation into their possible use as geochemical vectors to mineralization through trends in trace and REE chemistry. The findings of the study indicate that the deposit formed as a result of fluid expulsions from a single magmatic event forming a distinctive high to low temperature and reduced to oxidized fluid evolution. The study also found the presence of 2 distinct alteration assemblages which although containing some lithologically induced heterogeneities appear as a alkaline distal and potassic proximal alteration. The use of mineral geochemistry as an exploration tool in many of the tested cases have proven to either be of little potential use whereas others have not been tested adequately. Wolframite Fe/Mn ratios have proven as being potentially useful as a means of delineating vertical displacement from the source of the mineralizing fluids due to the telescoped nature of the vein fill minerals.

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Introduction

The Mt. Carbine tungsten deposit is located 80 km from Cairns (Figure 1) within the Hodgkinson- Barron sub-province of the complexly-deformed Siluro-Devonian Hodgkinson sedimentary province. The deposit is one of the best examples of sheeted vein granite-related tungsten mineralisation in Australia and, for protracted periods during its operation, was Australia's largest tungsten producer with one of the lowest recoverable grades of any operation of its kind in the world.

Mineralization is believed to have been discovered in 1883 with the first recorded production occurring in 1895 (Ball, 1915) with the wolframite and scheelite being won by the exploitation of eluvial and alluvial deposits and from surface mining of the vein material.

During the 1970s, the Queensland Wolfram Company drilled 33 holes into the deposit and confirmed the continuity of mineralisation to a depth of over 500 metres (Figure 1A). In 1974, with the successful introduction of photometric ore sorting, large scale open pit mining began which resulted in the production of some 13.5 million tonnes of ore and the sale of approximately 10,000 tonnes of scheelite and wolframite concentrates prior to the mine's closure in 1985 as a result of low metal prices.

With the renewal of interest in Mt. Carbine and the surrounding tungsten belt as a result of recent price increases, this study was designed to examine the mineral paragenesis and associated hydrothermal alteration. The aim is to determine vertical and horizontal trends and anomalies of ore and gangue mineral chemistry from the locus of mineralisation. If this can be achieved, regional and near mine exploration will have another targeting tool.

Methods

A number of sampling and analytical methods were designed to understand the characteristics of the evolving mineralising fluid and the subsequent wall rock-fluid interaction.

While in the field at Mt. Carbine, a series of drill holes (CB 18, CB6) along with selected intervals from CB3, CB4, CB5, CB12, CB 16 and CB 17 were logged and sampled for ore minerals and associated vein material in altered and unaltered host rocks. Half and quarter core samples were collected and photographed (Figures 2-65). A number of samples of vein material were taken from the open pit. Together these samples were chosen so as to represent both a lateral and vertical extent of the deposit.

Samples of the ore minerals were prepared by firstly identifying areas of interest followed by cutting the sample into a 5 - 10 mm slice. These slices were photographed and described to create a record of the macro scale relationships between the minerals to be sampled, their position in the vein and their relationship to the surrounding wall rock. The area of interest was cut out to form a circle 25 mm in diameter. These samples were set in epoxy resin and polished using initially a diamond zinc lapidary wheel followed by different grades of sand paper and finally a cloth lapidary polish which produced a polish good enough for electron microprobe (EMPA) and laser ablation induced coupled plasma mass spectrometry (LA-ICP-MS). Fifteen samples were sent to Pontifex and Associates for preparation of polished thin sections. The fifteen polished thin sections (Figures 66 to 76) were chosen as representative of the three major rock units and altered equivalents that host the Mt Carbine deposit.

Reflected light microscopy was undertaken to describe and photograph the minerals, textures and relationships. An assessment of the samples and the information that they could yield was undertaken and a plan was devised for the EMPA analysis of samples that contained minerals of interest.

Most samples contained wolframite and those chosen for EMPA analysis were primarily of fine crystal structure, nucleating from the wall rock and growing into the centre of the vein in the form of radiating rosettes. Epoxy block samples were selected to show a spread of early to late crystal growth throughout so they could be used to test the evolving chemistry of the growing crystals thereby allowing inferences about changes in the physiochemical environment of mineral deposition. Along with samples of fine crystal shape a number of brecciated and possibly remobilised samples were analysed to test the potential effects of secondary fluid pulses on the wolframite chemistry.

Fence lines of EMPA analysis were undertaken on wolframite crystals across and along the crystal growth direction at a point spacing of 200 μm and a line spacing of 2 mm. This method of analysis offered the easiest data acquisition to spatially map the internal chemistry of wolframite. Samples of remobilized and brecciated wolframite were not mapped as accurately as the identification of individual crystals and their growth habits and directions was commonly not possible.

The initial reflected light microscope analysis showed that most, if not all, of the wolframite sampled was overprinted by scheelite to some extent thereby allowing for the use of the same

samples for both wolframite and scheelite analysis. A number of scheelite only samples were prepared to compliment the mixed samples analysed.

The initial scheelite analysis was executed using much the same methods as employed for the wolframite but once several lines were done and no trends in the chemistry of the scheelite emerged, the methodology changed to an essentially random approach in order to improve sampling efficiency. The discretion between wolframite and scheelite which appeared almost identical under the backscatter monitor on the electron microprobe was aided by uniform sky blue cathodoluminescence of scheelite which stood out on the reflected light monitor.

A number of gangue minerals were also analysed by EMPA. Biotite, muscovite and tourmaline were analysed in polished blocks and polished thin sections. The silicate analyses were undertaken without any particular spatial context. However, it must be noted that all biotite samples examined were present on the wall rock vein contacts as these areas hosted grains large enough for analysis. Muscovite samples were all associated with Stage 2 mineralisation within enclaves and brittle fractures associated with zones of dilation.

Samples of tourmaline were collected from drill hole CB 18 to determine any lateral and vertical variations in chemistry. Composite samples were made up from the intervals 100-200 and 500-600 m, crushed, milled and sieved to minus 200 μm . The -200 μm fraction was then passed through a Franz magnetic separator three times under intensities of 1, 0.8 and 0.6. The tourmaline extract was then washed, set in epoxy resin and polished for EMPA of random grains. Apatite and fluorite were collected and prepared in much the same way from intervals 100-200, 300-400 and 500-600 m. The samples, exclusively of vein material were crushed, milled and the -1 mm to +500 μm fraction extracted periodically until the entire sample was less than 1 mm. Once all the samples were crushed to the chosen size fraction, the fluorescence of fluorite (purple) and apatite (orange) under UV light were used to identify and extract grains. The extracted apatite and fluorite were then mounted in a grid pattern in epoxy resin, polished and analysed by EMPA.

Four tourmaline-bearing polished thin sections were examined by the EMPA to ascertain the differences between the first and second generation tourmalines. Although Stage 1 tourmaline is common, Stage 2 tourmaline is rare. Boron and lithium have a low atomic weight and could not be accurately analysed and a range of heavier elements were determined (Figure 176).

Two 200 μm thick thin sections were made by Pontifex and Associates for fluid inclusion studies (Figures 172 and 173). Under plane polarised light, a few fluid inclusions large enough for analysis were observed but there were not sufficient numbers of adequately-sized fluid inclusions for a meaningful study.

After electron microprobe analyses of scheelite, wolframite, fluorite and apatite, the carbon coatings were removed from the samples using 1 micron diamond paste and a cloth lapidary to prepare samples for LA-ICP-MS. The NIST 610 standard was used for calibration and element concentrations determined by EMPA were used as an internal standard. In the case of scheelite, apatite and fluorite Ca was the internal standard and Mn was used for wolframite. Analysis by LA-ICP-MS was done on a largely random basis. Once a grain of the preferred mineral was located, one or two analyses would be conducted before moving onto the next sample. Instrument calibration was conducted prior to analysis by taking three standard readings followed by five sample readings, a standard reading and another five sample readings. The process was repeated throughout the analytical procedure.

The magnetic susceptibility, gamma ray emissions and specific gravity was tested on all of the samples collected from hole CB 18. At PIRSA's Glenside core library facility, the specific gravity and magnetic intensity were tested using a dry weight-wet weight apparatus and a magnetic susceptibility meter respectively. Gamma ray intensity measurements were taken using a scintillometer.

Geology

The Mt. Carbine tungsten deposit is hosted within the complexly-deformed Hodgkinson Formation consisting mostly of shallow marine sediments and volcanics (Zucchetto *et al.*, 1999). In the proximity of the Mt Carbine deposit, three deformational events were recognised and created favourable structural sites for the hydrothermal deposition of tungsten (de Roo, 1988).

The first deformational event (D_1) saw the formation of upright folds and the development of the S_1 fabric along axial planes which, during D_2 , experienced kink-style folding where this fabric was strongly developed (de Roo, 1988). Following D_2 , the area experienced granite emplacement of the Whypalla and Mt. Alto granitic super suites which have largely been recognised as the source of mineralising fluids. Finally synchronous with granite emplacement D_3 resulted in the recumbent folding of S_1 axial planes (de Roo, 1988).

The deposit as defined by drilling is contained within three distinct horizons of the Hodgkinson Formation with most of the mineralisation within a coarse-grained unit comprising conglomerate, arkose and turbidites. Deformation has elongated and shortened clasts, contorted beds and brittle fracturing has almost obliterated bedding. The associated basalt unit is commonly used as a marker between two sedimentary beds and has an abrupt decrease in the wolframite/scheelite ratio, most likely due to an increase in the bulk rock Ca content of the basalt compared to the sedimentary units. The third and furthest unit from the locus of mineralisation is essentially dark fine-grained shale.

The intrusion of the Mareeba Granite at 280 ± 7 Ma was determined from whole rock Rb-Sr dating (Black and McCulloch, 1990). The thermal aureole contains porphyroblastic andalusite crystals within the siliclastic units. The Mt Carbine deposit is probably to be underlain by a cupola of the Mareeba Granite although this has not been confirmed by drilling or geophysics.

Sheeted vein tungsten deposits

The group of hydrothermal deposits commonly known as sheeted vein deposits are important sources of tin and tungsten and are commonly associated with the ilmenite-group granites of (Ishihara, 1977). In such systems ore is commonly hosted in near vertical parallel veins exhibiting persistent thickness both along strike and depth.

Mineralisation is commonly associated with late stage granite crystallisation and volatile expulsion through explosive brecciation and the more subtle hydrofracturing at the top of granite cupolas (Figure 77). The mobilisation of metals such as tin and tungsten probably takes place during greisenation within the granite cupola. Deposits can form as endogreisen if the fluid pressure is not sufficient for escape from the granite. Mobilisation occurs during the conversion of K-feldspar to biotite and biotite to muscovite thereby releasing Sn and W locked into the crystal lattice of these minerals (Pollard, 1983).

Sheeted vein systems commonly contain several stages of mineralisation that reflect the evolution of the underlying granite. The first is most commonly an oxide stage comprising a mixture of wolframite and cassiterite \pm native bismuth \pm molybdenite overprinted by a sulphide phase containing pyrite \pm chalcopyrite \pm pyrrhotite \pm arsenopyrite \pm sphalerite. Stage 2 minerals commonly overprint and infill fractures within Stage 1 minerals and are followed by a low temperature carbonate mineralisation.

Mineral paragenesis and ore textures

Three stages of mineralisation are present at Mt. Carbine. The first is a high temperature oxide phase and associated potassic alteration followed by a lower temperature sulphide-alkali alteration overprint and lastly a minor low temperature carbonate phase.

Most tungsten mineralisation is contained within the NW-striking veins which show remarkable persistence in terms of thickness and continuity both along strike as well as depth (Figure 78, 79, 80). Most are between 10 and 40 cm wide and rarely can reach widths of up to 2 m. The veins strike roughly NW-SE and are present in zones of high vein density separated by areas of sparse to no vein occurrences. Vein zones show the longest length along strike in the centre of the deposit and decrease in length to the NE and SW creating a large scale en echelon pattern suggestive of a dilational jog. The quartz is milky white in appearance and, under the microscope, appears to be strained with the presence of at least one episode of fracturing and annealing present along with several differently oriented growth fabrics which have been interpreted as forming due to ductile deformation.

In places veins have been brecciated and dissected along low angle fault zones some of which display bi-directional slip suggesting a complex deformational episode. The void space in these crackle breccias (Figure 81) has been filled by a variety of Stage 2 minerals including chlorite, arsenopyrite, pyrrhotite, chalcopyrite and pyrite, sphalerite and fluorite along with being flanked by zones of scheelite where the fractures have transected grains of wolframite.

Along with the crackle breccia, a higher energy roll breccia is present (Figures 22, 74, 102, 102A, 103, 103A, 104, 104A, 105, 105A). This is a grey groundmass-supported breccia with rounded white to brown clasts of wall rocks. On closer inspection under the microscope, the clasts contain alteration minerals associated with the first and possibly second stage of mineralisation with the groundmass comprising extremely fine-grained quartz which is almost indiscernible under the microscope. The fine-grained quartz groundmass has cemented the clasts and may form by recrystallisation of the original siliclastic grains.

In deeper parts of the deposit, drilling has revealed thick accumulations of this type of breccia. Substantial amounts of scheelite are present as angular to sub-angular grains several mm to several centimetres in diameter.

Most of Mt. Carbine's tungsten endowment was formed during the initial high temperature stage of mineralisation. Stage 1 began with the deposition of sporadically distributed adularia

followed by muscovite and biotite at the wall vein contacts with the latter often containing elongate grains of ilmenite as inclusions and on the periphery of grains. Biotite is primarily iron rich with samples brandishing average compositions of annite_{71.8}-phlogopite_{20.6}-fluorphlogopite_{4.2}.

Muscovite often displays a pinkish tinge suggestive of elevated concentrations of Li (which can not be measured by electron microprobe analysis) and contains iron. Biotite and muscovite are closely associated with apatite, native bismuth and molybdenite. The largest concentrations and grain sizes of these three minerals are commonly present within thick pockets of muscovite.

Most veins only contain thin wall rock vein contacts of these minerals with the largest vein volume filled with quartz, K-feldspar and wolframite which appears to commonly nucleate from biotite grains forming inward-spreading rosettes. K-feldspar is commonly yellow in appearance and associated with the highest concentrations of wolframite. Where wolframite is present amongst large concentrations of K-feldspar, the average grain size of the wolframite is commonly smaller with the crystals commonly terminating at both ends and appearing to nucleate from grains of K-feldspar.

Stage 2 minerals appear to be a lower temperature assemblage and have significantly overprinted Stage 1 minerals. The fluid flowed both along the inner then open voids within the veins along with the vein wall rock contacts as indicated by the overprinting of wolframite by scheelite being most intense in these two areas as well as sub-horizontal slip planes which mark the change from Stage 1 mineralisation to Stage 2 (Figure 82).

Fluorite, cassiterite, scheelite, chalcopyrite, pyrite, pyrrhotite, arsenopyrite, sphalerite, schorl and chlorite comprise the Stage 2 mineralisation. Wolframite is extensively overprinted by scheelite which commonly contains equant grains of cassiterite, even in samples that appear to contain no overprinting. Only under the microscope is the intricate overprinting revealed. Although some isolated grains of scheelite are present, most are in direct contact with or have completely overprinted wolframite to form pseudomorphs. This observation poses the question as to whether the second mineralising pulse added any additional tungsten to the system.

Along with scheelite, a number of sulphides occur. The most abundant are chalcopyrite and arsenopyrite and minor pyrite and pyrrhotite infill fractures in wolframite along with crystallising on the wolframite grain boundaries (Figures 106-110 98-101).

Of the other Stage 1 minerals molybdenite has been overprinted by chlorite along its cleavage and has sustained substantial deformation in the form of folding and crenulations (Figure 94-97). Apatite has remained largely unchanged apart from a few places where an unidentified iron hydroxide species carrying from 2.5 to 5 percent W is present as fracture infill and equant crystals nucleating from the apatite. K-feldspar has been variably albitised during the second stage of mineralisation.

On the deposit scale, a zoning between the Stage 1 and 2 minerals exist along with a zoning between the K-feldspar and muscovite of Stage 1 and arsenopyrite and the cassiterite constituents of Stage 2. In the centre of the deposit, K-feldspar is abundant and is substituted by increasing amounts of muscovite to the north. Across much the transition from K-feldspar to muscovite, there is a decrease in the wolframite: scheelite ratio and an increase in the abundance of arsenopyrite. On the eastern side of the deposit there is an increase in the amount of cassiterite.

Stage 3 mineralisation is very minor and consists of small commonly light pink veinlets of fluorite and equally small veinlets of calcite and siderite.

Discussion

The mineral paragenesis at Mt. Carbine can be correlated to the empirical knowledge of the evolution of a sheeted vein tungsten system quite well and certain inferences can be made from the observation of the different stages of mineralisation and overprinting.

Molybdenite and native bismuth are species commonly encountered as accessory minerals with wolframite (Wood and Samson, 2000). Their subsequent overprinting by Stage 2 mineralisation implies a change in the physiochemical characteristics of the mineralising fluid.

The stability of native bismuth and its species was explored by Mikulski (2005) from which some temperature constraints can be derived. Other characteristics such as oxygen fugacity and fluid chemistry were not explored so a maximum temperature of mineralisation at Mt. Carbine is below 271°C (the melting point of bismuth) is purely speculative. The presence of

wolframite and molybdenite as early phases as opposed to the scheelite-powellite solid solution absorbing the constituent Mo and W could possibly be used as evidence for this temperature range as scheelite has been found by Wood and Samson (2000) to be more stable at higher temperatures. Limitations are presented to this logic by the findings in the same publication whereby increasing temperature under a constant Ca/Fe ratio will not result in the conversion of wolframite to scheelite.

The destabilisation and destruction of the molybdenite and its subsequent minor introduction and assimilation into scheelite is seen as synchronous with wolframite overprinting and, as such, must have been the result of the same physiochemical changes. Experimental studies by Hsu (1977) has shown that at a temperature of 577°C molybdenite is stable below the Mn₃O₄-MnO buffer at sulphur fugacities above the FeS-FeS₂ buffer in the presence of a Ca phase. With increasing oxygen and decreasing sulphur fugacities the stability of molybdenum gives way to powellite stability. The synchronous crystallization of cassiterite along with scheelite further constrains the oxygen fugacity as shown by the work of Patterson et al. (1981) where it was demonstrated that in conditions of low pH and low oxygen fugacity Sn is readily transported as a chloro complex. Increasing one or both of these constraints will result in the change of Sn²⁺ to Sn⁴⁺ and the subsequent deposition of cassiterite.

Taking this evidence into consideration along with the occurrence of numerous sulphide species within the Stage 2 assemblage, it would be reasonable to assume that although a temperature drop within the system is interpreted to have occurred it was not the primary change driving the overprint.

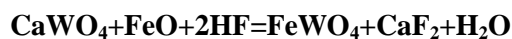
The observation that at lower temperatures the Ca/Fe ratio of a fluid is independent of the Cl activity and that at higher temperatures increasing Cl activity lowers the Ca/Fe ratio could be cited as evidence against a drop in temperature (Wood and Samson, 2000).

The creation of scheelite and fluorite during the second stage of mineralisation coupled with the crystallisation of ferroactinolite in the country rock offers some clues to the HF fugacity within the Stage 2 fluid. HF and K activities were found by Burt (1981) to be important factors affecting porphyry and greisen systems (Figure 82). He showed what the effects of different physical processes would have and the resultant physiochemical conditions which brought about the change from Stage 1 to Stage 2 mineralisation. This could possibly be explained by changing HF and KF concentrations and the physical processes accompanying them as the minerals involved are intrinsically sensitive to these changes. A clue to the

possible process responsible for such a change can be found in the roll breccias associated with the transition from Stage 1 to stage 2 mineralization. The rounded grains of wall rock are indicative of a gas explosion which could have been associated with boiling, increasing both the salinity and acidity of the remaining fluid.

In the same publication Burt showed that scheelite was stable at lower HF activities and wolframite at higher activities as shown in reaction (1). Reaction (2) could have been a possible mechanism for the overprinting of wolframite. A drop in HF activity down to a level of scheelite stability would also see the stabilisation of Fe-actinolite which in the presence of a high HF activity would otherwise decompose as proposed by Crocker (1985) as a result of work on the Fe-F deposits of South Africa.

Reaction 1-



Reaction 2-



Na-aluminosilicate and K-aluminosilicate stability data obtained by (Montoya and Hemley, 1975) as a function of changes in the Na^+/H^+ and K^+/H^+ ratios showed that at constant Na^+/H^+ levels lowering the H^+ activity or increasing the K concentration would result in K-feldspar stability. The reverse would result in muscovite stability and a drop in the K activity and increase in Na activity would lead to albite stability.

Changes in the concentration of the Stage 1 fluid composition as a reduction in K could explain the distinct zoning seen in the pit of high K-feldspar concentrations to that of high muscovite concentrations away from the centre of the deposit. Furthermore an increase in Na concentration coupled with a fall in H^+ activity would see the albitisation of K-feldspar.

The presence of a transitional zone from one K- rich phase to another within the centre of the deposit although not fully understood would appear to have played a significant role in the precipitation of ore minerals. Evidence cited for this conclusion is the association of higher grades of tungsten on the southern K-feldspar rich side of the deposit and lower grades

associated with the muscovite bearing side. It is possible that the physiochemical characteristic which brought about the change from K-feldspar stability to muscovite stability was also responsible for the precipitation of wolframite.

The observation that the initial stage one fluid carried significant K as witnessed by the presence of large amounts of K-feldspar, sericite and biotite would suggest KCl was a major component of the fluid and that CaCl₂ had only a minor part to play. Alternatively the CaCl₂ could have been present but, due to a high HF activity, the stability range of any Ca-bearing phases was not achieved. The HF sensitivity of feldspars has been documented by (Burt, 1981) who found a correlation between a reduction in the anorthite content of feldspars and a increase in HF.

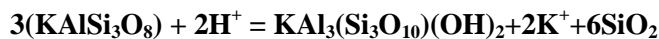
The model put forward for the evolution of tin tungsten greisen-vein systems by (Pollard, 1983) proposed the presence of an early alkaline fluid from an evolving underlying granite cupola whereby during cooling and crystallisation the melt and solid phase would quickly consume K from the system with the crystallisation of microcline leading to the expulsion of an alkali enriched fluid phase. The abundance of K associated with stage one fluids at Mt. Carbine does not agree with this theory although the general evolution model would suggest that fluids were expelled before the cooling and differentiation of the granite had sufficient time to fractionate a fluid of an alkali affinity. Alternately the K-feldspar abundance could be attributed to a preference of this mineral to crystallise at temperatures experienced at the time of deposition although the abundance of other K- bearing species is contradictory.

The presence of an alkali stage in the form of Stage 2 mineralisation did affect the system possibly indicating that the processes of K removal from the melt did occur and subsequently enrich the fluid in Na. The fluids theorized enrichment in Na during stage 2 mineralization could also be attributed to boiling as evidenced by the presence of roll breccias.

Staying with the evolution of the underlying pluton (Pollard, 1983) further suggested that the high alkaline stage would be followed by greisenisation in the granite cupola via the conversion of feldspars and biotite to muscovite possibly via reactions 3, 4 and 5. Although greisenisation was not observed within the Mt. Carbine veins in the form of the destruction of originally deposited feldspars their destruction within the underlying granite could be the source of the liberated free silica which affected the system during the late stages of alkali alteration. It is quite possible that greisenisation has taken place at the top of an unexposed

cupola, as is the case in many W-Sn deposits. A further drop in HF activity and temperature would have resulted in the stabilization and deposition of Stage 3 fluorite, calcite and siderite.

Reaction 3



Reaction 4



Reaction 5



Attributing major changes in mineralogy to HF activity and deducting physical and chemical processes from them to explain the history of mineralization at Mt. Carbine loses some traction when compared to other similar Sn-W systems. A high HF activity coupled with aluminosilicate host rocks as described herein would result in topaz occurring as an alteration and vein fill product (Wood and Samson, 2000).

Systems such as those found around the Krusne Hory and Erzgebirge mountains in the Czech Republic and Germany respectfully have extremely fractionated P rich S-type granites associated with Sn-W deposits. These deposits have a similar mineralogy to that of Mt. Carbine with the exception of large amounts of topaz and zinnwaldite being present in the central European deposits such as Zinnwald. One particularly F rich system known as the Podlesi stock has given insight into the late stages of granite differentiation between a parental melt and a further enriched residual volatile rich melt where phases such as Li, F and P are present in concentrations of up to 1 wt% P and 1.5 wt% F (Breiter *et al.*, 1997). The dewatering of these residual melts resulted in the creation of the many local Sn-W deposits. Fluid inclusion data by (Webster *et al.*, 2004) has shown that the fluids expelled from the residual melt contain high amounts of F with average compositions of 3 wt% with some as high as 5 wt %.

The Mole Granite (NSW, Australia) is the source of Sn-W deposits in the pressure-quench carapace of the granite, overlying volcanics and associated metasediments. Mineralisation associated with the Mole Granite is attributed to the multiple intrusions of granites of similar chemistry but differing textural characteristics. Inward crystallisation from an upper porphyritic pressure quench carapace into a coarse grained seriate granite occurred. Five stages of mineralisation were recognised associated with granite cooling with a rejuvenation of systems resulting from late stage intrusion of microgranite in the carapace and metasediments (Plimer *et al.*, 1991; Audtát *et al.* 2000). The Mole Granite was F-rich and the Stage 1 and Stage 4 fluorine-rich mineralisation events precipitated wolframite. This influenced biotite crystallisation with high F resulting in late stage interstitial biotite in both the pressure quench carapace and microgranite. In some places, the microgranite has been totally replaced to form a quartz-topaz rock (silexite) with up to 30% topaz. This rock represents one of the world's largest topaz greisens (Audtát *et al.* 2000).

Both the Krusne Hory-Erzgebirge and Mole Granite mineralisation and related intrusive complexes show characteristics of the interplay between incompatible element-enriched geochemical heritage and late magmatic to post magmatic volatile enrichment and expulsion. In both cases perhaps to a greater extent in that of the Krusne Hory-Erzgebirge area these processes have resulted in the creation of extremely F enriched fluids posing the question of why the same did not occur in respect to the Mt. Carbine deposit.

Possible explanations for this may lie in the dewatering and expulsion of fluids from the granite into earlier-formed structural sites as suggested by (de Roo, 1988) whereby the late magmatic process could have been cut short or alternatively the granite was differentiated but was not endowed with the same volatile enriched geochemistry. Until the underlying granite is intersected in drilling and detailed geochemical work is conducted these possible answers remain largely speculative.

Although no quantitative data has been presented in this Chapter, the observations made on the mineral paragenesis of the system and the numerous lines of evidence presented have outlined the following fluid evolution.

The initial fluid at Mt Carbine was high in K, had a high HF content and possibly a low Ca/Fe ratio. Evidence supporting these conclusions is the crystallisation of wolframite and

molybdenite as opposed to scheelite and powellite, the lack of a Ca phase other than apatite and the abundance of K-feldspar as well as K-bearing alteration minerals.

As time progressed the fluid evolved possibly due to a drop in temperature although evidence for this is not strong. The changes experienced by the fluid were a drop in HF as seen by the stabilisation Ca-bearing phases such as ferro-actinolite, fluorite and scheelite, a increase in the Na content as seen by widespread alkaline alteration, an increase in the Cl concentration as witnessed by the chlorite overprint of biotite and a increase in the oxygen fugacity due to the stabilisation of cassiterite.

Further drops in HF and T occurred with the crystallisation of Stage 3 minerals.

Alteration

Two distinct alteration assemblages along with an episode of intense quartz flooding or silicification have been observed at the Mt. Carbine tungsten deposit. An initial high temperature potassic assemblage derived from Stage 1 fluids (Figures 66, 67, 70, 71, 72, 73, 86-89A) is overprinted by an alkaline alteration assemblage derived from Stage 2 fluids (Figures 66-68, 71, 72. 90-93A). These alteration assemblages are associated with the two major mineralising events recognised here. Many of the alteration minerals are both vein fill and present in the wall rocks as an overprint on the primary mineralogy. Due to three different rock types hosting the deposit, the alteration minerals are slightly different resulting from the reaction between three different bulk rock compositions and hydrothermal fluids.

The potassic alteration is associated with the initial high temperature phase of mineralisation. This produced a biotite-tourmaline-sericite assemblage. This alteration is most evident in the coarse-grained interbedded sand and silt unit. This unit was originally porous, permeable and brittle. It is the locus for the tungsten deposit, hosts most of the mineralisation and veins extend into this unit. Around veins is a selvage of tourmaline with some wall rocks almost completely altered to tourmalinite. In the literature, a tourmalinite is a rock containing more than 15% tourmaline. Some of the tourmalinites at Mt Carbine contain up to 90% tourmaline. Where wall rocks are intensely tourmalinised, there is an abundance of muscovite, apatite, wolframite and K-feldspar as vein fill minerals and there appears to be a positive correlation between the volume of wall rock tourmalinisation and these vein fill minerals.

Beyond these zones of tourmalinite proximal to wolframite-bearing veins, biotite and sericite along with minor tourmaline occur. The original sedimentary structural and textural

characteristics of the rock have been preserved. The more aluminous wall rocks (pelites) have an abundance of aluminous alteration phases (sericite and biotite) and the coarser more quartzose and less aluminous wall rocks contain smaller abundances of alteration phyllosilicates. Biotite and sericite are commonly present in their highest concentrations in areas where unoriented phyllosilicate crystals have overprinted andalusite derived from thermal metamorphism by granite.

Within the adjacent interbedded basalt and chert members, the potassic alteration has propagated in much the same way as the clastic metasedimentary unit although the homogeneous nature of the basalt has not resulted in any of the heterogeneities seen in the interbedded unit. Because the chert lenses and horizons are composed of quartz, a major mineral precipitated from the hydrothermal system, they remain a quartz-rich rock and only with only small amounts of biotite are present along micro fractures. Tourmaline from the basalt has a higher content of Mg (i.e. more dravitic) compared to those found in the siliclastic units. This demonstrates the role of host rock chemistry of the wall rocks on the alteration assemblage derived from fluid-rock interactions.

The fine-grained metamorphosed silt unit furthest from the centre of the ore body has been affected by Stage 1 fluids in much the same way as the interbedded sand and silt unit. The compositionally homogeneous nature of this unit has resulted in fluids penetrating from the veins into the wall rock largely unabated although the presence of a few small veins which pre date the mineralisation have in places acted as barriers.

Disregarding the differing composition and internal structure of the three units, the centre of the deposit hosting the highest tungsten grade, K-feldspar concentration and highest wolframite/scheelite ratio is also the locus for the most intense tourmalinisation. There is a prominent trend wherein Stage 1 alteration becomes less intense towards the basalt-chert-silt unit. The biotite-sericite alteration appears to be more pervasive than the tourmalinisation although its effects dissipate a certain distance from the centre of the deposit as is marked by the presence of unaltered andalusite. The Stage 2 alteration assemblage of albite-chlorite-actinolite-epidote-arsenopyrite has not destroyed the texture of Stage 1 tourmalinisation or potassic alteration, despite overprinting. Stage 2 alteration is more widespread and distal to the ore zone and is termed alkali alteration as it is similar to the low temperature peripheral alkali or propylitic alteration of porphyry copper systems.

In its most distal reaches, Stage 2 alteration is commonly present around small 2 mm to 1 cm Stage 2 veins that are commonly filled with arsenopyrite. The general appearance of the alteration is green (Figure 83) contrasting against the white of the quartz and surrounding brown grey rock. Where the Stage 2 fluid has filled previously formed Stage 1 veins, its penetration or replacement of the Stage 1 tourmalinised rocks is minimal to non-existent. Exceptions to this rule are contained proximal to the South Wall Fault where the Stage 2 alteration is most intense. Here areas of the country rock have been completely replaced by stage 2 minerals.

Within the centre of the deposit, Stage 2 alteration is deficient perhaps due to the inability of the fluid to alter and percolate through the tourmalinite although in places it has been intersected through drilling, particularly near the South and East Wall Faults that are thought to be synchronous with the fluid release from granite. Along with the South Wall Fault, many of the synchronous low angle faults have also acted as fluid conduits and, where they have displaced the tourmalinite against the biotite-sericite altered wall rock, overprinting has occurred.

The overprinting of Stage 1 alteration has occurred via the replacement of biotite and sericite by chlorite and the growth of actinolite, arsenopyrite and epidote. Within the siliclastic units in the mine succession, albite is only rarely present. Conversely where the deposition of earlier K-feldspar occurred, primarily as vein fill but seldom in the wall rock, albitisation has been present. By contrast, the basalt member commonly displays albite as flanking small and intermediate sized veins where it has changed colour from black grey to a whitish yellow (Figure 84a and 84b).

The second stage of mineralisation and its associated faulting saw the creation of crackle breccias. These breccias have commonly been affected by the alkali alteration assemblage to a great extent and have a light green appearance. In areas of high amounts of brecciation intense quartz flooding which is interpreted as occurring during the waning periods of Stage 2 mineralisation has recrystallised and cemented the breccia giving the clasts a rounded appearance as the constituent grains were recrystallised (Figure page 102-105A). However, rounded clasts may have formed from a vapour-dominated hydrothermal fluid with rounding occurring during collapse of overlying material. Where veinlets and enclaves of chlorite occur the structural competency of the rock has been greatly weakened as present in the south

wall of the open pit close to the south wall fault. Here the rock has been completely replaced by the chlorite, probably related to fluid circulation along the fault.

Within the Stage 2 assemblage some constituents appear to be more pervasive than others. For example, apatite is commonly in close proximity to tourmaline as well formed crystals within small veins containing Stage 2 fill minerals.

On the deposit scale the effects and zoning of the alteration assemblages have affected the physical characteristics of host rocks in differing ways. Perhaps the most prominent physical manifestation of alteration is the silicification and subsequent erosion-resistant characteristics of the wall rock.

Discussion

The three alteration assemblages recognised at Mt. Carbine are chemically distinct and at the same time can be attributed to a single evolving fluid source exsolved from the Mareeba Granite. Evidence presented in this and other Chapters such as mineral overprinting relationships, rare earth data and the evolving mineral chemistry all point to the input of fluid from a single magma pulse whose emplacement, volatile differentiation, dewatering and synchronous cooling and crystallization has resulted in the change and spatial variation of the alteration types.

The postulated decrease in temperature and acidity along with a possible slight increase in the oxygen fugacity of the system has been interpreted as a manifestation of both the evolving magmatic fluid chemistry and an increase in meteoric fluid input by mixing.

Perhaps the most convincing line of evidence supporting these conclusions and relating specifically to a drop in acidity particularly that caused by HF activity would have to be the stabilisation of Ca-bearing phases such as actinolite and epidote as alteration products as evidenced by (Crocker, 1985) where it was shown that high levels of HF would result in the destabilization of actinolite.

Mineral Chemistry

Wolframite

EMPA was conducted on grains of wolframite with the selection and sampling processes described in above. The samples examined include both highly deformed and altered samples

PBS8 as well as lightly altered samples PBS19, PBS22, PBS20, PBS4, PBS9, PBS15, PBS16, and PBS17.

Electron microprobe analysis conducted on *in situ* grains of wolframite yielded an average composition 4.77% Mn, 12.37% Fe, 59.62% W and O, calculated by difference, 20.61%. Other elements were either minor trace concentrations (e.g. 0.1% Mg). Wolframite is a solid solution between the Mn (hübnerite) and Fe (ferberite) end members. Although sphalerite was observed in the Mt Carbine ore, the lack of the sanmartinite (Zn,Fe^{3+}) WO_4 molecule in wolframite suggests that conditions were far too oxidising for sanmartinite. At Mt Carbine, all wolframite is ferberite. In statistical terms the average composition of wolframite has been determined to be hübnerite_{27.86} ferberite_{72.13} with maximum compositions of ferberite_{82.69} and minimums of ferberite_{20.99}. Of the 938 wolframite analysis undertaken, only 15 of the analyses had higher Mn than Fe. Early wolframite is slightly more hübneritic than later wolframite (Figure 154). LA-ICP-MS analyses showed an enrichment in Nb and Ta with average concentrations of 761 and 25.8 ppm respectively. All other elements were found to be either not anomalous or below the limit of detection. Three traverses were conducted over sample PBS4 (Figures 155-157). It exhibited weak and erratic hübnerite-ferberite zoning towards crystal termination whereas, in the centre of the sample, a zone of Mn>Fe wolframite was detected which appears to correspond to weaker hübneritic highs above and below this traverse. This central anomaly is interpreted as being the core of an outwardly-growing wolframite rosette.

In samples PBS8, PBS16, PBS17, PBS19 and PBS22, random EMPA analyses were conducted to add to the data set for statistical analysis of wolframite chemistry. No zoning was detected in these samples.

In sample PBS9, five traverses were conducted over this sample (Figure 158-162). Relatively uniform Fe/Mn values were measured from this sample. A high Mn core was not detected on the first and fifth traverse and was detected in the other three traverses. Three analytical traverses (Figures 163-165) were undertaken in sample PBS15, a wolframite rosette that nucleated from the vein wall. All traverses show early hübneritic wolframite with an ferberitic overgrowth. In the first traverse, three points of higher than average Mn values were encountered and at two points Mn>Fe was measured. In the second traverse, a Mn>Fe core was detected and the rest of the grain was ferberitic. The third traverse only showed ferberite.

Discussion

Numerous studies have attempted to correlate changes and trends in the uptake of Fe and Mn to the physiochemical conditions in which it formed (e.g. Amossé, 1981; Hsu, 1976). The data from other studies suggests a correlation between Mn-rich wolframites and hydrothermal systems that have high oxygen fugacities. This is due to the higher resistance of Mn^{2+} to conditions of oxidation compared to that of Fe^{2+} . Increasing the $\text{Fe}^{3+}/\text{Fe}^{2+}$ ratio would result in the reduction in the amount of iron available for wolframite formation and its substitution by Mn and hence Zn, suggesting the presence of the sanmartinite $(\text{Zn},\text{Fe}^{3+})\text{WO}_4$ molecule, was not detected in analyses.

Although this suggestion has been rigorously tested and proven as feasible in the case of other minerals such as the almandine-spessartine pair, (Hsu, 1976) discovered that wolframite ratios had a remarkable resistance to increases in oxidation as well as changes in temperature and sulphur fugacity. A stability range under most hydrothermal conditions for wolframite suggests that the variability in the Fe/Mn ratio is largely dependant on the chemistry of the fluid source.

The work of Nakashima *et al.* (1986) on tungsten occurrences in SW Japan indentified two distinct groups of wolframite. One group was associated with magnetite series granites and the other with ilmenite series granites. Wolframite associated with magnetite series granite showed consistently higher Mn:Fe whereas those associated the ilmenite series granites showed $\text{Fe} > \text{Mn}$. The compositions of the granites were further investigated with the conclusion that both had relatively high Mn contents and that the heterogeneities must have been due to differing oxygen fugacities. Magnetite series granites contain higher concentrations of oxygen than those of ilmenite affinities and as a result the associated wolframite was hubernitic. Although quite convincing, Nakashima *et al.* (1986) did not suggest a mechanism for this pattern. One possibility could have been an increase in the $\text{Fe}^{2+}/\text{Fe}^{3+}$ ratio where the amount of Fe available for wolframite formation would have been reduced. Another possibility could have been the reduced iron content of the orthomagmatic fluids due to the assimilation of the granites iron budget into magnetite. The reverse would then apply to the ilmenite granites whose iron budget would be higher as an iron oxide species had not crystallised.

In the case of Mt. Carbine, the wolframite zoning needs to be addressed by another finding of this publication whereby on the deposit scale it was discovered that pH is the primary control

of the Fe/Mn ratio. Wolframite can precipitate from acid fluids and the increase in pH results in an increase in Fe: Mn in wolframite Nakashima *et al.* (1986). By analogy with the Japanese ilmenite-bearing granites, the Mareeba Granite is an ilmenite series granite (Davis and Henderson, 1999) hence the chemical evolution of wolframite composition at Mt Carbine may be due to the original oxygen fugacity and pH of fluids released from the melt.

Scheelite

Scheelite (CaWO₄) is present as a common product of the interaction between Stage 1 wolframite and Stage 2 hydrothermal fluids at Mt. Carbine. Electron microprobe analysis was conducted on scheelite pseudomorphs after wolframite and isolated grains where there was no evidence of pseudomorphing (unless there had been total replacement). Scheelite pseudomorphs are common whereas isolated scheelite grains with no wolframite were only observed in two samples. The samples were analysed for F, Na, Mg, Al, Si, P, Cl, K, Ca, Ti, Cr, Mn, Fe, Mo and W. Oxygen was calculated by difference. Samples show weak anomalism in Fe and Mn and very low Mo contents giving scheelite chemistry as scheelite_{99.952}powellite_{0.048}.

Along with trace and major element *in situ* LA-ICP-MS analyses were performed on four of the purest samples of scheelite as determined by reflected light microscopy. The samples were analysed for Na, Mg, Al, Si, K, Ca, Sc, Ti, V, Cr, Mn, Fe, As, Se, Sr, Y, Zr, Nb, Ba, Hf, Ta, W, Ir, Au, Pb, Bi, REE, Th and U.

The results showed that the Mt Carbine scheelite is enriched in light REE and Lu (Figure 166). A pronounced positive Eu anomaly exists with the greater chondrite normalised REE plot showing an overall convex down shape. This is in accord with fluids that have derived from an ilmenite series granite. The scheelite samples contain elevated concentrations of REE with values ranging from no apparent enrichment in the case of Sm and Gd to LREE enrichments of up to 600 000 times chondrite values.

The scheelite contains very low amounts of Na ranging from 9.65 to 47.79 ppm and average compositions of 20.161 ppm. Nb occurs at an average composition of 46.344 ppm with a minimum of 20.47 and maximum of 83.43 ppm and the Ta/Nb ratio was 76.37. A direct relationship exists between Nb and total REE (Figure 167).

Discussion

Scheelite forms a complete solid solution between CaWO_4 (scheelite) and CaMoWO_4 (powellite). Although a complete solid solution exists, there are few examples of the solid solution series of $\text{Mo} > \text{W}$ and most analyses show $\text{W} > \text{Mo}$ (Hsu, 1977). In order for Mo to substitute for W in the scheelite lattice, it must be present in the hexivalent state which is tightly constrained by oxygen fugacity. The low Mo content of the Mt. Carbine scheelite deposit indicates an oxygen fugacity where the Mo present in the fluid changes from Mo^{6+} to Mo^{4+} . This is in accord with the presence of cassiterite inclusions in scheelite where the most common mechanism of deposition derives from a change from Sn^{4+} to Sn^{2+} .

The transition from wolframite to scheelite also potentially signals a change in HF activity as Mt. Carbine. Since wolframite is stable at higher HF activities it can be interpreted that the change to scheelite stability is associated with a drop in HF.

Scheelite is commonly enriched in REE because REE readily substitute for Ca (Raimbault *et al.* 1993). Due to the simple structure of scheelite, its large partitioning coefficient and its presence in a variety of hydrothermal systems, scheelite has been used by several authors as a means of gaining insights into the physiochemical characteristics and evolution of some mineral deposits e.g. Archean gold (Brugger *et al.*, 2000a; Brugger *et al.*, 2008; Ghaderi *et al.*, 1999), Fe-Mn (Brugger *et al.*, 1998) and W (Raimbault *et al.*, 1993) systems.

The substitution of REE^{3+} for divalent Ca requires a charge compensation mechanism. For this charge compensation to occur, one and or more of three mechanisms described by Ghaderi *et al.* (1999) can be described by equations 6, 7 and 8.

Equation 6-



Equation 7-



Equation 8-

In order to ascertain what mechanism and or mechanisms are in operation the concentrations of elements such as Na and Nb must be taken into consideration. Knowing which mechanism is in operation is crucial to the meaningful interpretation of any REE data obtained because not knowing the REE partitioning coefficient of scheelite leaves the fluid concentration and species of REE unknown.

The effect of differences in charge compensation mechanism was discussed in detail by Ghaderi *et al.* (1999) as the authors dealt with two different types of scheelite REE trends. Key findings of this paper showed that when applied to the scheelite of the west Australian Archean Yilgarn Craton, increasing the Na activity of a fluid increases the Na content of scheelite as well as creating a preference for the substitution of REE of a certain atomic size i.e. medium light REE. Conversely, substitution of the trivalent REE through a charge compensation leaves the Ca site vacant and creates a diversity of substitution sites in the scheelite crystal lattice thereby allowing substitution of REE of greater atomic size range, albeit at lower concentrations.

The characteristics of scheelite REE concentrations incorporated with the aid of Nb were not explored by Ghaderi *et al.* (1999) as their samples did not contain substantial amounts of Nb. Due to the strong correlation between total REE and Nb concentrations in the Mt Carbine scheelite, it is suggested that Nb would increase the capacity of scheelite to concentrate REE because of the charge and structural imbalance created by the substitution of a large highly-charged ion.

When plotted individually or as total REE against Nb concentrations (Figure 168), all of the REE show strong positive correlations apart from Eu, Yb and Lu (Figure 168). In the case of Eu, a negative correlation is interpreted as a charge balance between pentavalent Nb, trivalent REE and Eu^{2+} . La and Yb do not exhibit the same correlation to Nb as it appears that their atomic size surpasses some crystallographic characteristic created through the substitution of Nb into scheelite. Similar but weaker correlations exist between Na and REE (Figure 169).

These relationships between Nb, Na and the REE suggest that there is an interplay of coupled substitution mechanisms. The substitution of Na for Ca and Nb for W would create room for the assimilation of a REE atom. Using these values as a guide to the total concentration of REE and excluding those which did not show a positive correlation with Nb, only an average of approximately 18% of the REE are accounted for indicating that most of the scheelite's REE budget has been substituted through mechanism (Formula 8). Although expected, a variation of Ca as a function of REE concentrations was not established due to Ca in scheelite being a major element hence the correlations between per cent Ca and ppm REE are difficult. A possible means of overcoming this problem could be with the use of Sr which readily substitutes into Ca bearing phases for Ca. This would, however, require the assumption that with increasing Ca concentrations there would be an increase in Sr. Regardless of whether this Ca-Sr correlation is present; Eu shows a weak positive correlation with Sr hence there may be a correlation between Ca and Eu if an analysis can be down to ppm accuracy. Taking these replacement mechanisms into consideration and their negative impact on Eu concentrations, it would be reasonable to suggest that the assimilation of Eu is taking place by the direct replacement of Eu for Ca and that Eu is present in its reduced form of Eu^{2+} to produce the strongly positive Eu anomaly. Eu anomalies and the variation of the $\text{Eu}^{2+}/\text{Eu}^{3+}$ ratio have been used as a means of semi-quantitatively determining the oxygen fugacity of many hydrothermal fluids (e.g. Brugger *et al.*, 2008; Ghaderi *et al.*, 1999; Brugger *et al.*, 2000b; Brugger *et al.* 2008; Dostal *et al.*, 2009). Taking into consideration the strength of the Eu anomaly in the Mt. Carbine scheelite, the conclusion can be drawn that this mineral had crystallised from a fluid of very low oxygen fugacity.

Fluorite

Two generations of fluorite are present at Mt Carbine. The first generation is associated with Stage 2 mineralization and occurs in a variety of colours ranging from very pale blue, transparent, milky white, purple and green. Stage 3 fluorite was present only as pale pink grains. EMPA and LA-ICP-MS analyses were only conducted on Stage 1 fluorite.

The fluorite electron microprobe analyses showed that the samples had very consistent compositions the average of which were 51.91 % F and 49.22% Ca by weight with barely detectable levels of other elements. The LA-ICP-MS analyses showed that the fluorite is slightly anomalous in Sn with an average content of 171.8 ppm and Zn with an average content of 8.84 ppm.

In respect to rare earths, the fluorite was not as enriched as some of the other Ca-bearing phases that show enrichments of approximately 25 times chondritic values across the light, middle and heavy REE and an extremely strong positive Eu anomaly (figure 171).

Moller *et al.* (1998) suggested the substitution of REE³⁺ via charge compensation mechanisms. These mechanisms, although important for the substitution of trivalent REE, do not appear to show any correlation with Eu (Figure 172) suggesting that, like scheelite, the fluorite derived its strong Eu positive anomaly from the overwhelming presence of Eu²⁺ which has allowed for its direct substitution for Ca. The implications of a strong positive Eu anomaly in yet another Stage 2 mineral validate the proposed low oxygen fugacity of Stage 2 fluids.

As a function of proximity to the epicentre of the deposit the fluorite did not exhibit any compositional variation.

Apatite

Electron microprobe analyses on *is situ* apatite grains and mineral concentrates showed average compositions of 4.684% F, 18.82% P and 39.41 % Ca weight percent with 42.25% O (by difference). There were no concentrations of other elements. Mineral concentrates mounted in epoxy resin showed trace element concentrations by LA-ICP-MS analyses with anomalous Sr and Y (averages of 422 and 792.5 ppm respectively). Apatite was enriched in light REE with concentrations of up to 1000 times chondrite values and slight enrichments in heavy REE (Figure 173). In respect to Eu some samples examined showed relatively strong positive Eu anomalies whereas others exhibited weak negative anomalies. The concentrations of other elements were not anomalous. No spatial heterogeneities were found.

Tourmaline

Due to the nature in which the tourmaline samples were prepared substantial impurities remained within the mineral concentrates. These impurities coupled with the extremely fine grained nature of the tourmaline made it impossible to distinguish between tourmaline and impurity. These problems were only discovered once the data was examined and huge fluctuations were found in many of the elements tested for. This issue was further compounded by the inability of the Cameca EMP to test for B making it difficult to discern between valid and invalid data points rendering the data unusable. Only approximately 20

data points taken from thin sections one from the periphery of a stage 1 vein within the basalt unit and another from the coarse grained unit were deemed as valid.

Biotite

Approximately 40 electron microprobe analyses were conducted on *in situ* biotite grains that were annite_{71.8}-phlogopite_{20.6}-fluorophlogopite_{4.2}. Trace elements were found in very small concentrations.

Fluid inclusions

An attempt was made to perform fluid inclusion analysis on two samples (Figure 174 and 175) of quartz vein. Although the samples contained large numbers of fluid inclusions, they were not large enough for freezing-cooling stage analysis and were between 1 and 3 microns in diameter with some up to 8 microns.

Although no inclusion analyses were conducted, the samples did prove to offer some insight into the mineralising conditions and fluids. However, without quantitative data observations and conclusions are only speculative. Inclusions were two phase liquid-vapour inclusions. No daughter minerals were present. Quartz hosting the fluid inclusion exhibited multidirectional growth fabrics and multiple episodes of fracturing and annealing. Therefore, the fluid inclusions present may be secondary inclusions that would have no bearing on the chemistry of the original ore fluid.

Conclusion

Reflecting back to the original aims of this study and taking into consideration the results some of which have been placed into a spatial context directly and others as a result of association to empirical knowledge a number of conclusions have arisen. These conclusions can be subdivided into those which appear to carry intrinsic value as exploration tools whereas others without disregarding their potential usefulness in future have proven to show no spatial variation in respect to the epicentre of mineralisation. Some in the latter category have not proven themselves as viable aids in future exploration due to insufficient data collected and inadequate sampling methods whereas other thoroughly tested chemical and mineralogical characteristics have been found to be either lacking in temporal variability or such a trend has not been discovered.

Notwithstanding the usefulness of any of the pursued mineralogical characteristics for mineral exploration numerous important pieces of information have been obtained from which a model for the formation of Mt. Carbine can be proposed.

The conclusions that can be made are as follows.

1. The mineral paragenesis and alteration types reflect the presence of a single intrusive pulse cooling and dewatering during the post-magmatic stage to form the mineral deposit. The evolution of the fluid can be tracked through the initial high temperature stage followed by later stages which show through their chemistry along with other evidence put forward that over time the fluid experienced drops in temperature, acidity along with an increase in oxygen fugacity most probably due to the input of meteoric fluids.
2. A drop in acidity over time is proposed due to the stabilisation of Ca bearing phases and carbonates in latter stages of mineralisation.
3. An early volatile rich fluid is proposed due to an initially high HF content and the precipitation of large amount of tourmaline.
4. The deposit although influenced over time by the presence of F when compared to other deposits of its type appears to be very F poor.
5. The presence of wolframite completely as ferbenite when compared to other deposits of this type indicates that the source of fluids was an ilmenite series granite.
6. The presence of a very strong positive Eu anomaly in scheelite, fluorite and apatite indicates that the mineralising fluids were very reduced.
7. Due to the telescoped nature of the deposit with increasing depth an increase in the average Mn content of wolframite is predicted along with an increase in the wolframite to scheelite ratio.
8. The two alteration assemblages have been found to form a proximal and distal assemblage with the core of the deposit consisting of the potassic alteration zone which is surrounded by a zone of sodic or alkaline alteration.
9. The differences between the two alteration assemblages have been interpreted as existing due to a change in temperature whereby the potassic alteration is considered to be the early high temperature proximal alteration and the alkaline alteration assemblage as the distal cool assemblage. Attributing this difference to temperature also accounts for the presence of the stage two alteration assemblage being present in

the centre of the deposit as a result of the eventual granite cooling and collapse of the isotherms.

10. There appears to be no change in apatite or fluorite chemistry as a function of proximity to the deposit.
11. Tourmaline compositions may show a change in chemistry as has been demonstrated in other deposits although this has not been adequately tested here.

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Figure explanations

Figure 1- Showing the location and local geology of the Mt. Carbine tungsten deposit after Forsythe & Higgins (1980).

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Figure 24- Unaltered siltstone unit

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Figure 139-Sample PBS29-A number of small wolframite crystals in quartz which have not been overprinted

Figure 140-Sample PBS30-A sample containing a large fracture filled by chlorite adjacent to 2 crystals of wolframite one of which has been completely overprinted by scheelite and the other only slightly altered by scheelite but extensively fractured and the fractures filled by

arsenopyrite. The scheelite contains inclusions of cassiterite as well as having cassiterite growing on its periphery.

Figure 141-Sample PBS31-Much like the last sample. Here we see a large grain of wolframite overprinted by scheelite and flanked by chlorite which has further filled a fracture adjacent to the scheelite. A grain of wolframite is located adjacent to the scheelite and has been significantly fractured and filled by arsenopyrite and chalcopyrite. The scheelite contains dome inclusions of cassiterite.

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Figure 143- PBS33-A sample containing numerous grains of apatite along with substantial chlorite which has overprinted early molybdenite some of which still remains. Arsenopyrite has also been introduced into some of the fractures.

Figure 144-Sample PBS34 -A sample of vein material which has been highly altered by the stage 2 mineralization including the overprinting of molybdenite by chlorite. Some of the molybdenite still remains.

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Figure 146-Sample PBS36-A sample of chlorite altered molybdenite and fracture fill arsenopyrite along with a piece of remnant molybdenite.

Figure 147-Sample PBS37-A sample of vein material which has been highly altered by the stage 2 mineralization including the overprinting of molybdenite by chlorite. Some of the molybdenite still remains.

Figure 148-Sample PBS38-A sample containing numerous grains of apatite along with substantial chlorite which has overprinted early molybdenite some of which still remains. Arsenopyrite has also been introduced into some of the fractures.

Figure 149-Sample PBS39-A sample of chlorite altered molybdenite.

Figure 150-Sample PBS40-A sample of chlorite altered molybdenite.

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Figure 154- Graph showing the relative proportions of Fe and Mn within sampled wolframite grains. Also shown are the ideal compositions of Hüberrite and Ferberite.

Figure 155- Sample PBS4 line 1

Figure 156- Sample PBS4 line 2

Figure 157- Sample PBS4 line 3

Figure 158- Sample PBS9 line 1

Figure 159- Sample PBS9 Line 2

Figure 160- Sample PBS9 Line 3

Figure 161- Sample PBS9 Line 4

Figure 162- Sample PBS9 Line 5

Figure 163- Sample PBS 15 line 1

Figure 164- Sample PBS 15 line 2

Figure 165- Sample PBS 15 line 3

Figure 166-Scheelite rare earth plot normalized to chondrite using values from Boynton (1985). Note log y axis.

Figure 167-Graph showing Nb ppm VS. total REE in scheelite. Note log y axis.

Figure 168-Graphs showing correlations between Nb and individual REE.

Figure 169-Graph showing Na VS. total REE in scheelite.

Figure 170-Graph showing Na VS. total REE+Y in fluorite.

Figure 171- Fluorite REE plot normalized to chondrite. Log y axis

Figure 172- Graph showing Na VS. Eu in fluorite

Figure 173-Apatite REE plot normalized to chondrite. Log y axis

Figure 174-200 micron fluid inclusion polished sample FI-1

Figure 175- 200 micron fluid inclusion polished sample FI-2

Figure 176- Table showing elements examined for in respect to the mineral analyzed.

Appendix

Figure 1

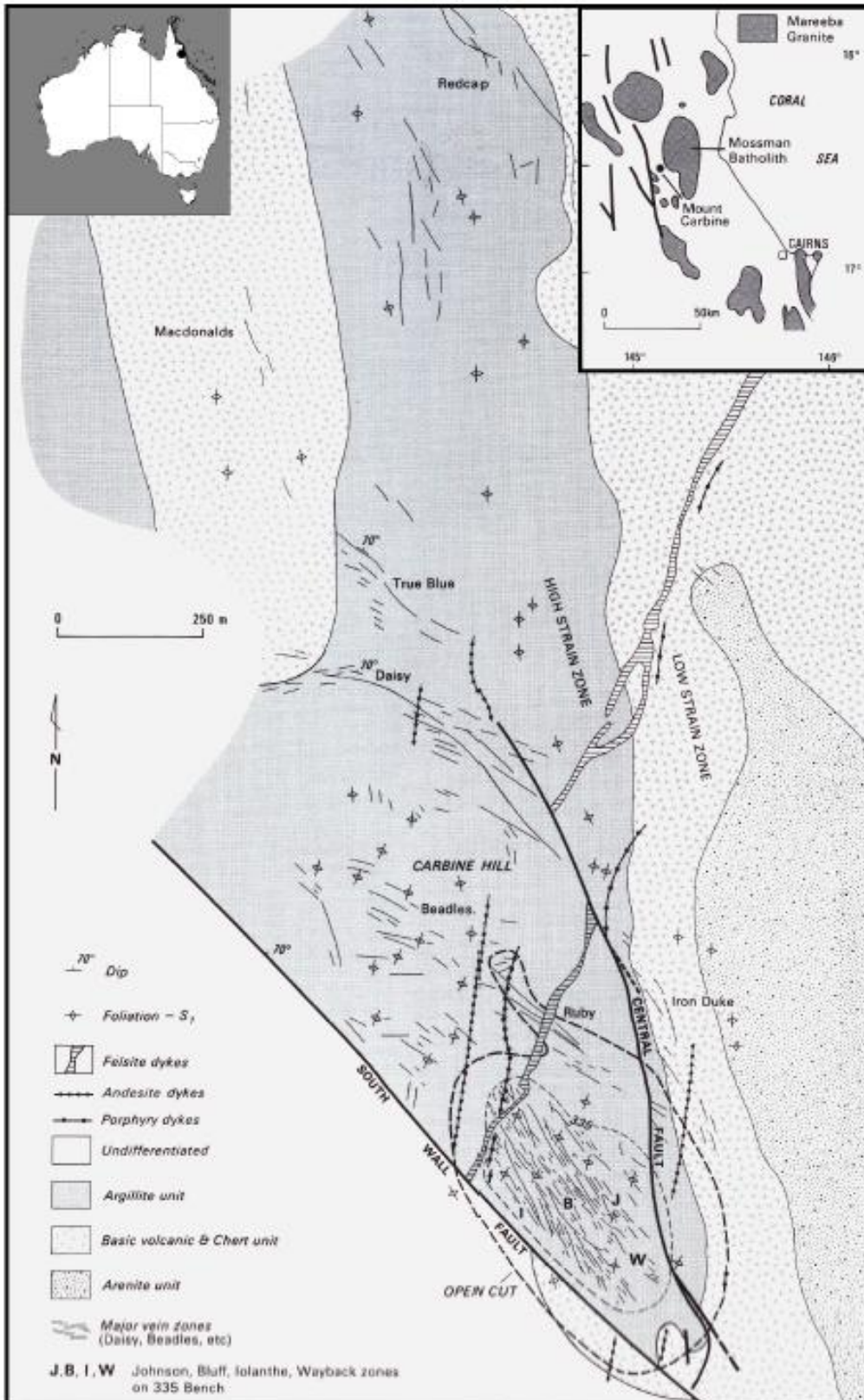


Figure 1A

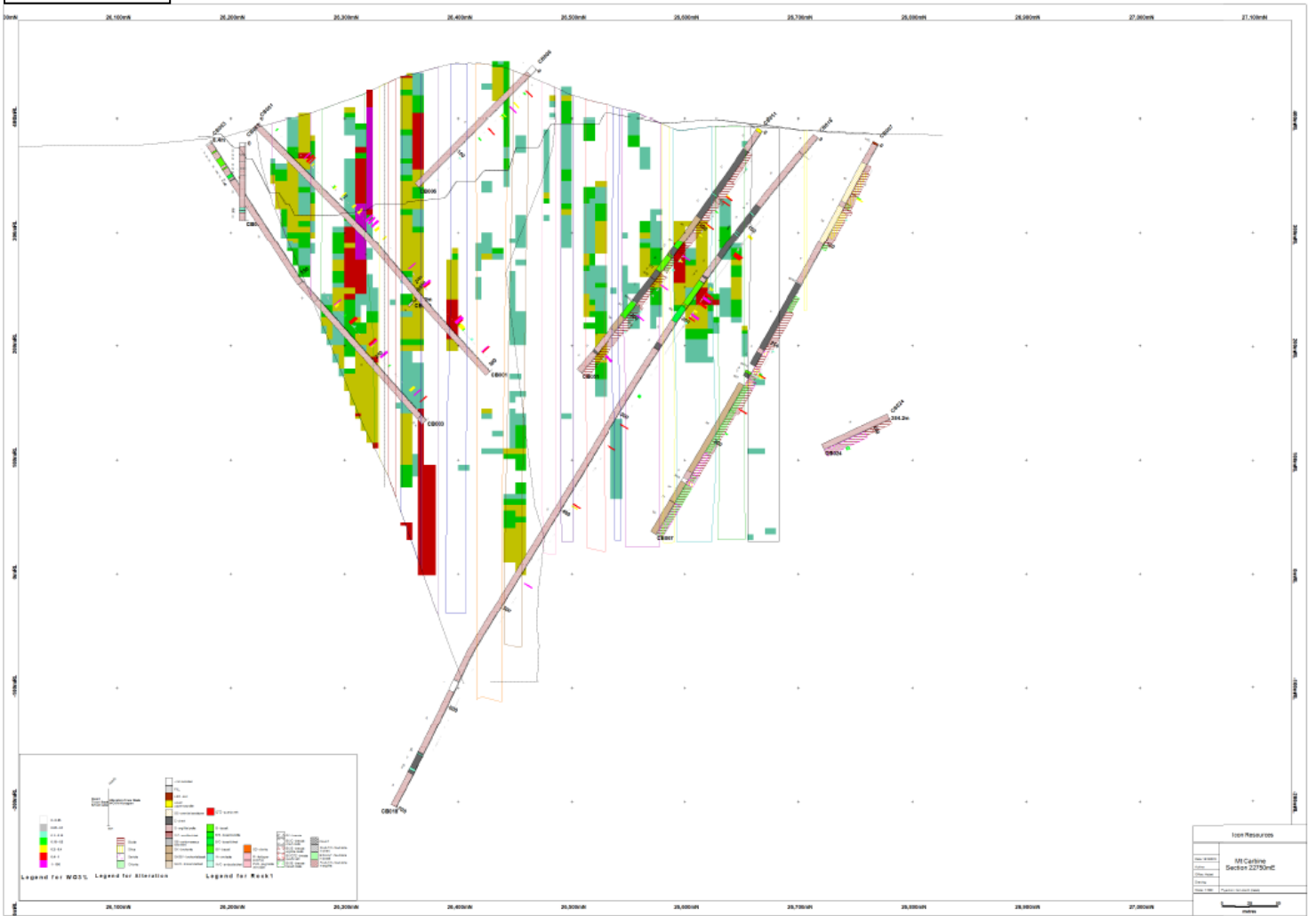




Figure 2

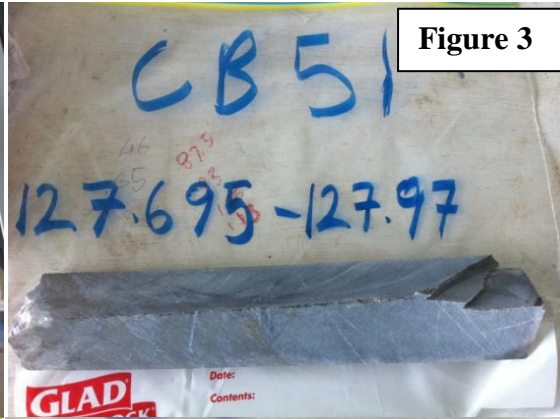


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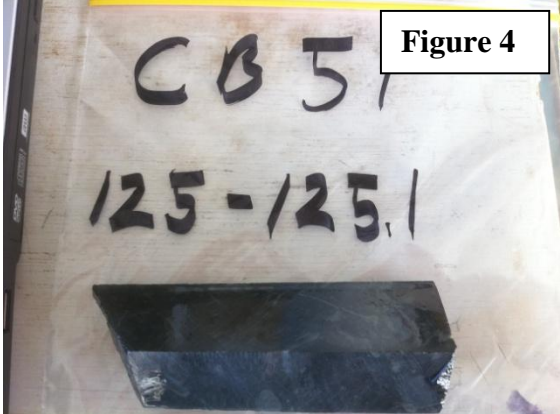


Figure 4



Figure 5

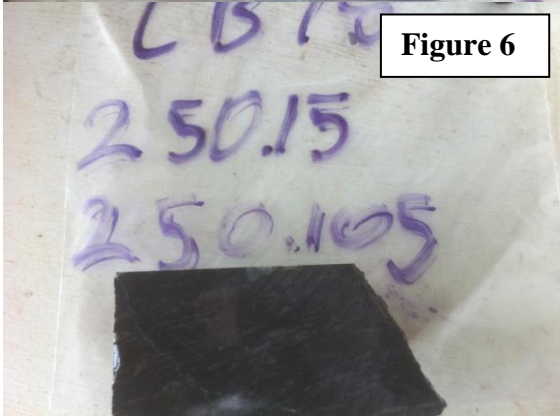


Figure 6

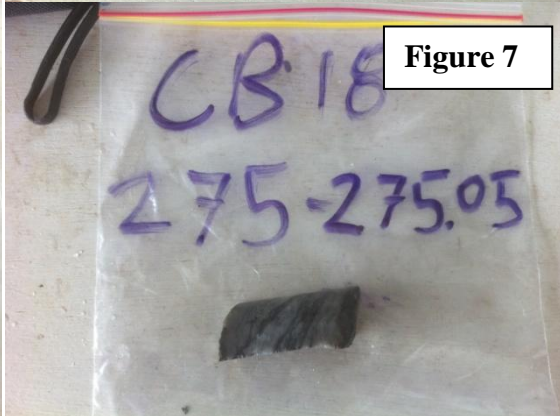


Figure 7

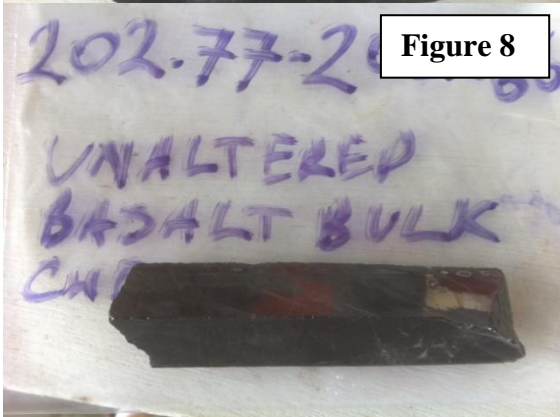


Figure 8

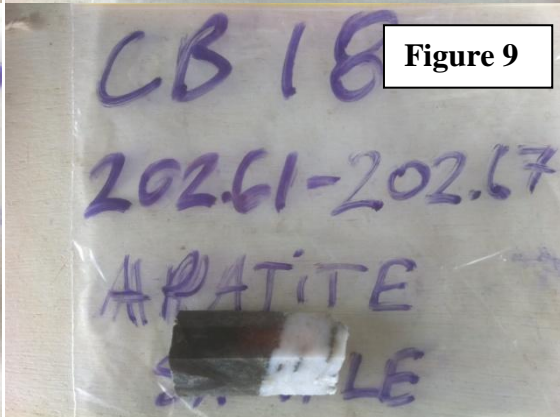


Figure 9



Figure 10



Figure 11

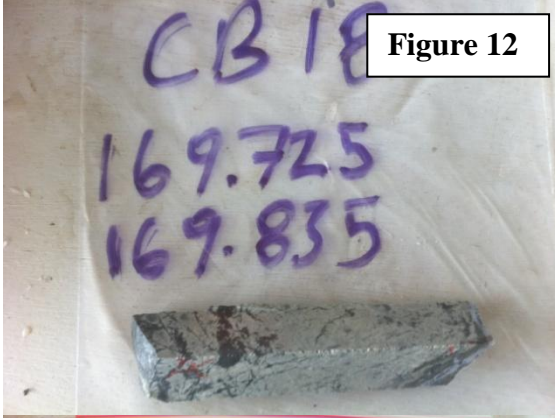


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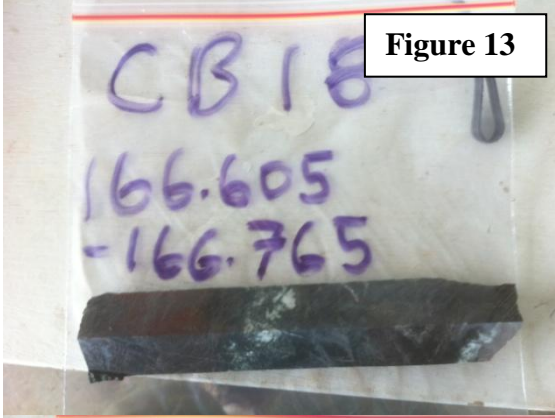


Figure 13

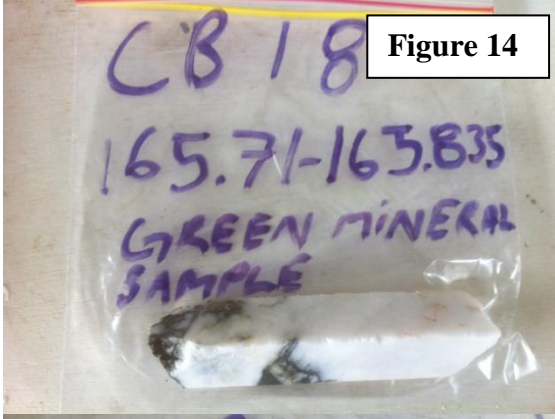


Figure 14



Figure 15



Figure 16



Figure 17



Figure 18



Figure 19



Figure 20

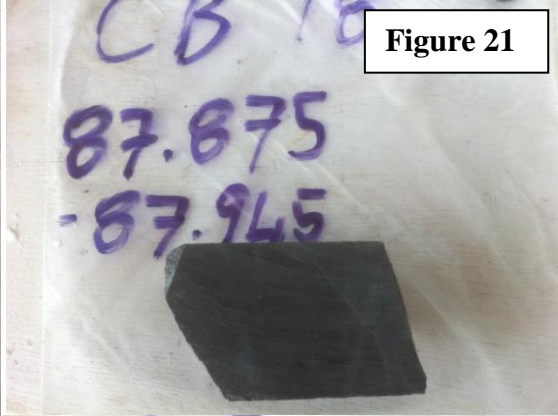


Figure 21



Figure 22

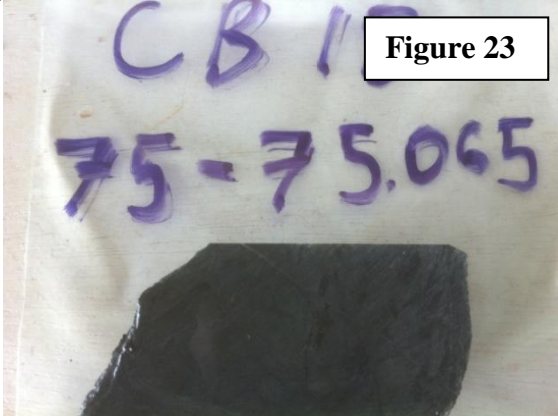


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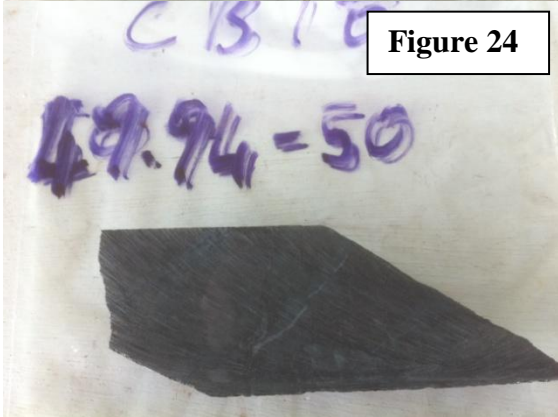


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Figure 25

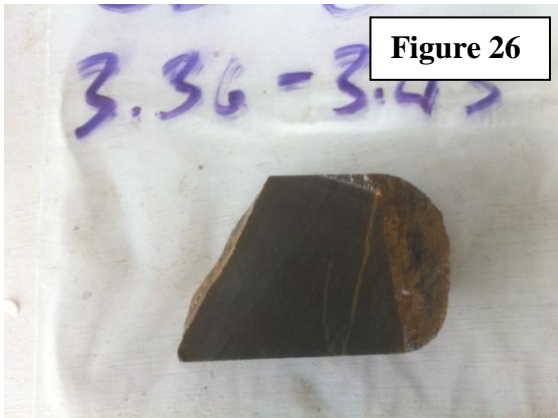


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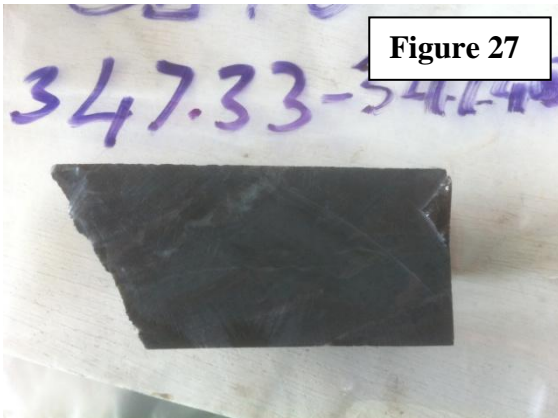


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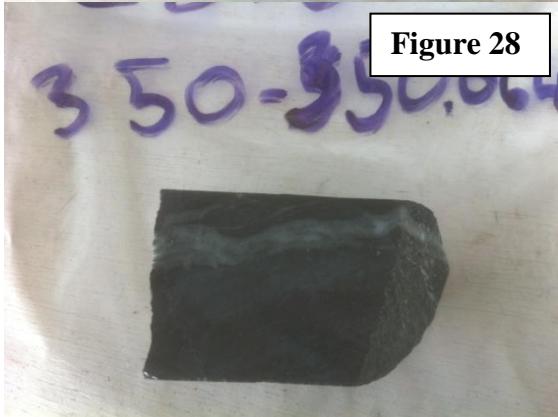


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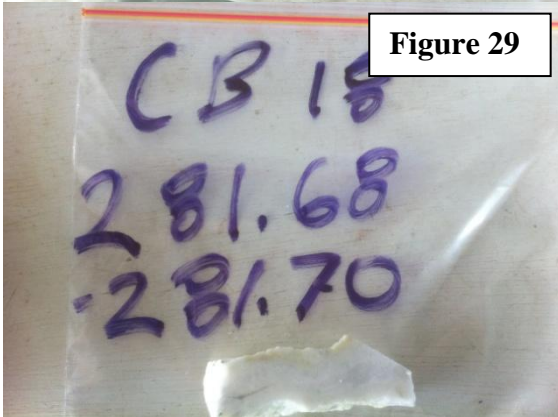


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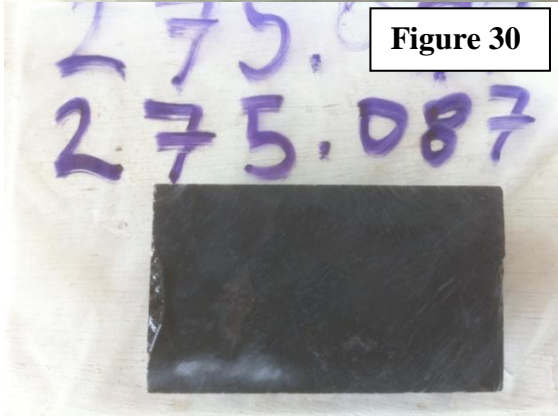


Figure 30



Figure 31

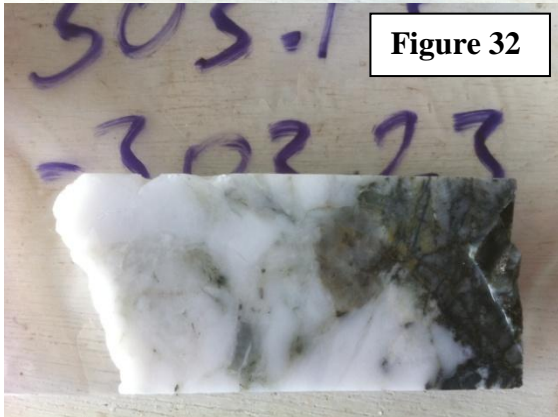


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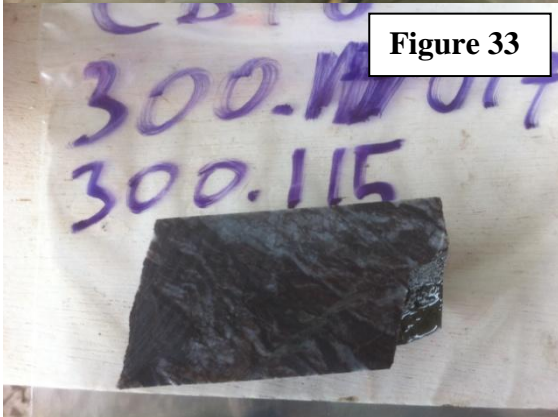


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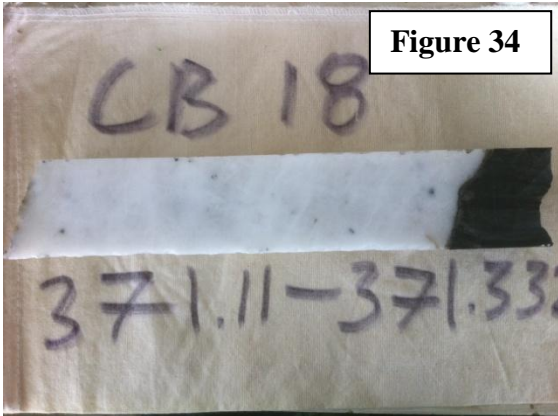


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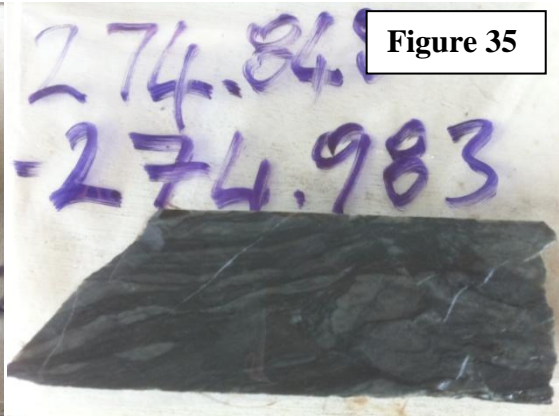


Figure 35



Figure 36



Figure 37

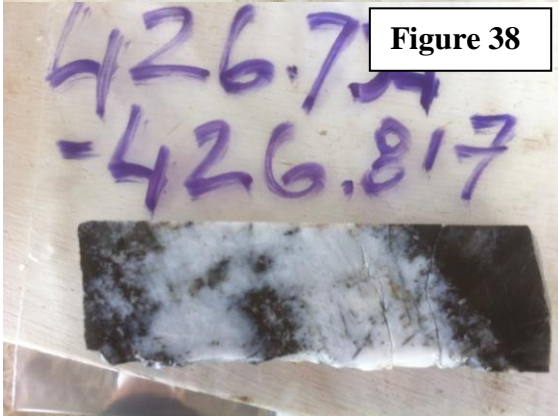


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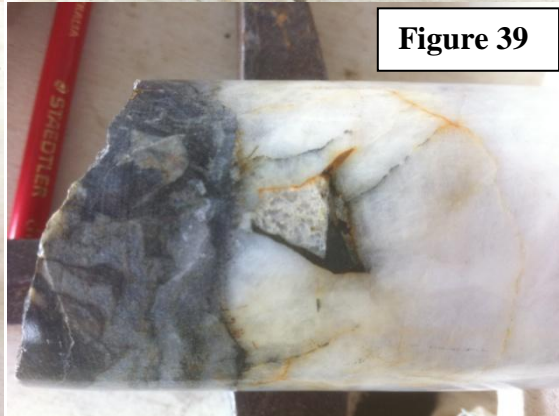


Figure 39



Figure 40

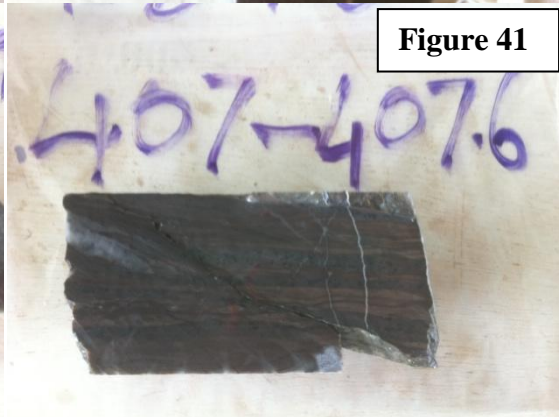
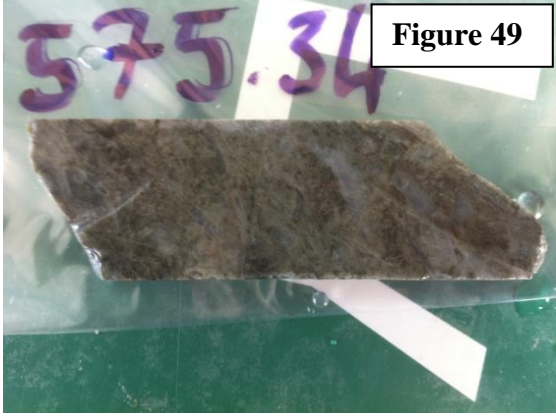
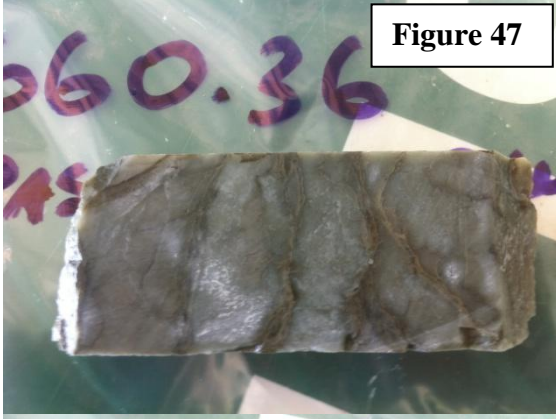
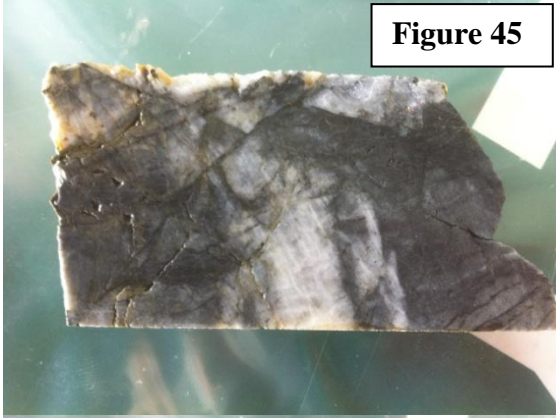
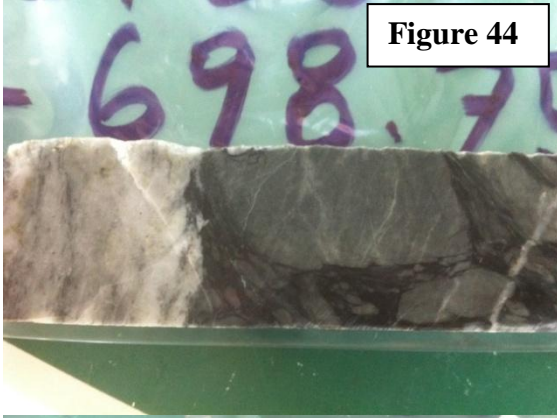
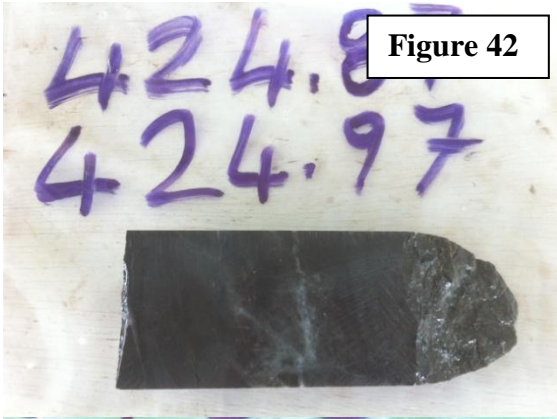


Figure 41



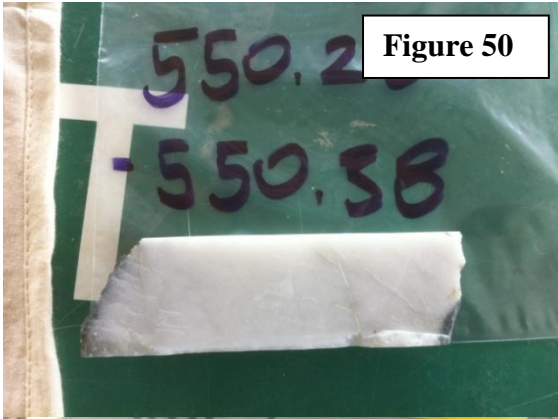


Figure 50



Figure 51

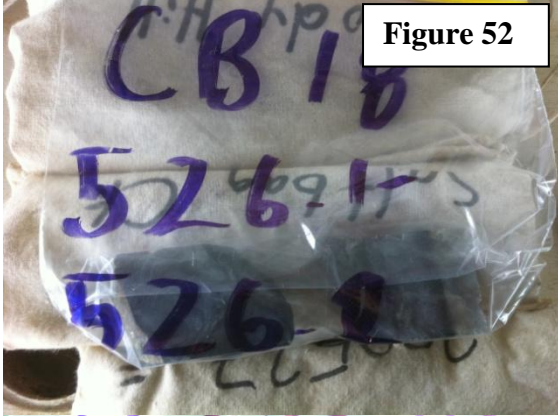


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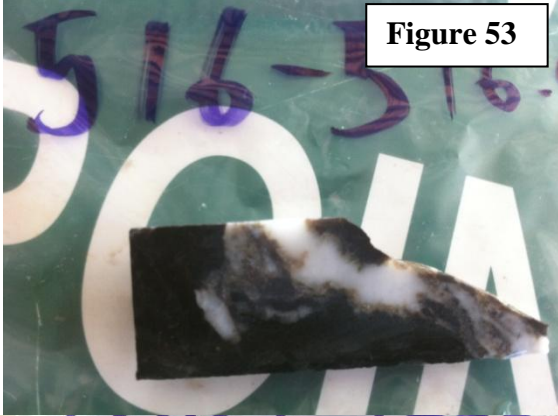


Figure 53



Figure 54



Figure 55



Figure 56

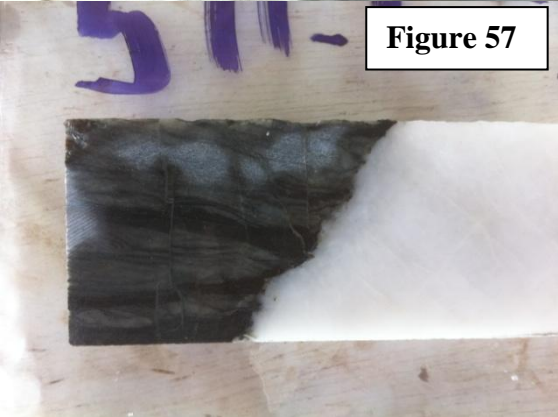


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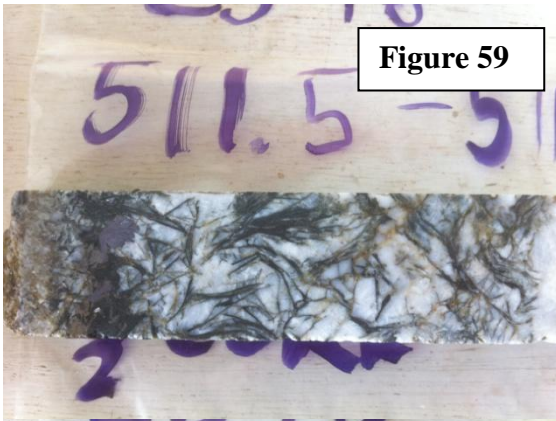


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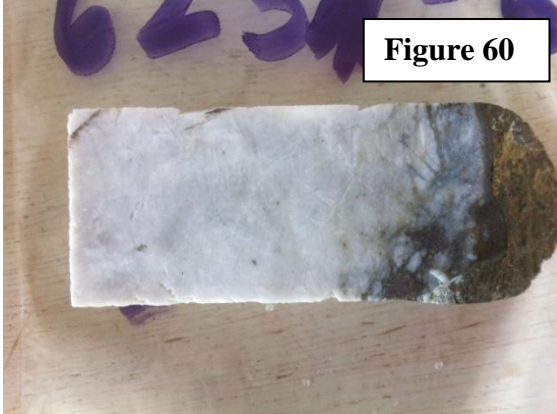


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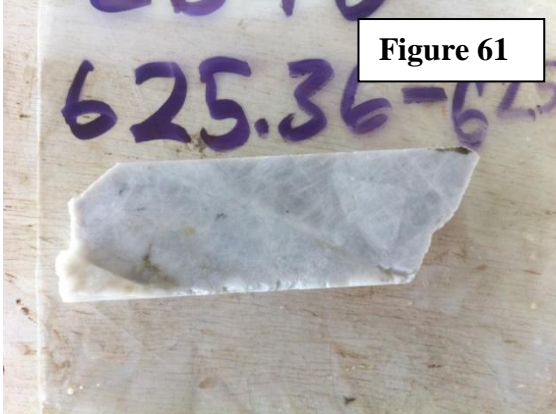


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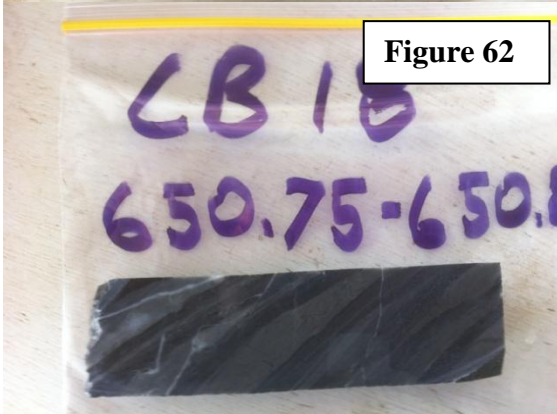


Figure 62



Figure 63

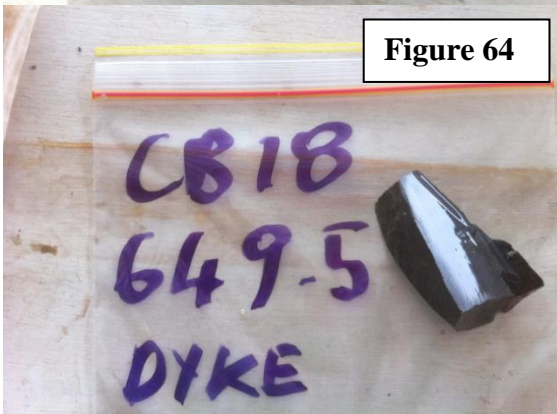


Figure 64

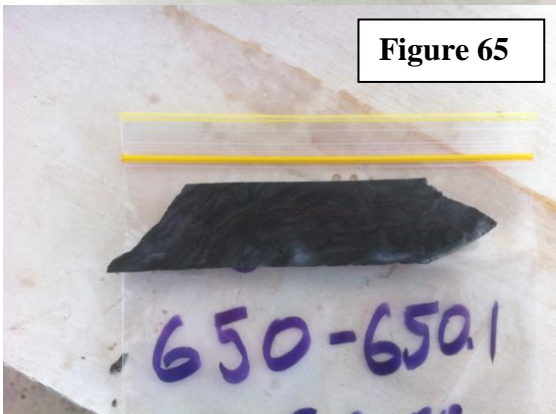


Figure 65

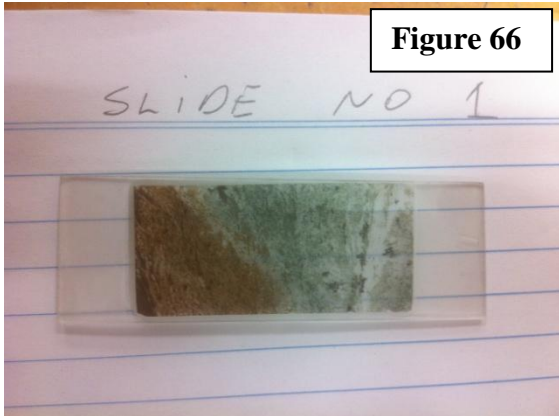


Figure 66

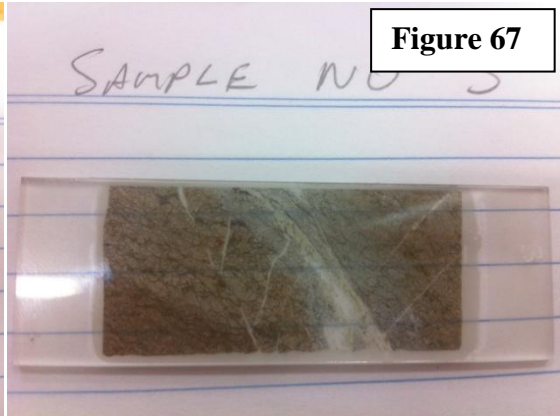


Figure 67



Figure 68

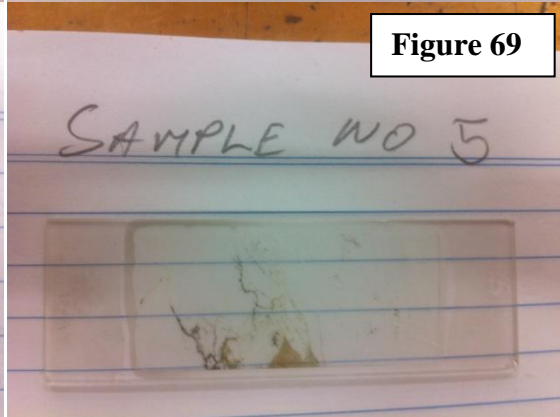


Figure 69

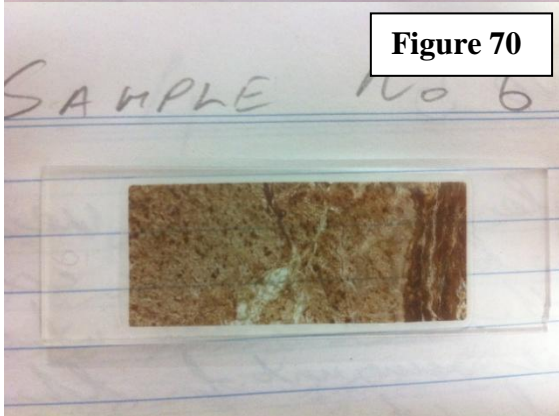


Figure 70

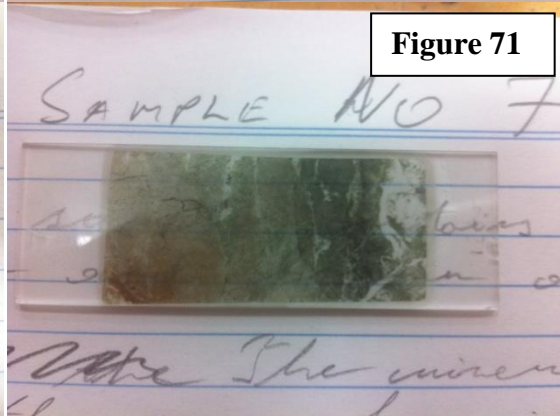


Figure 71

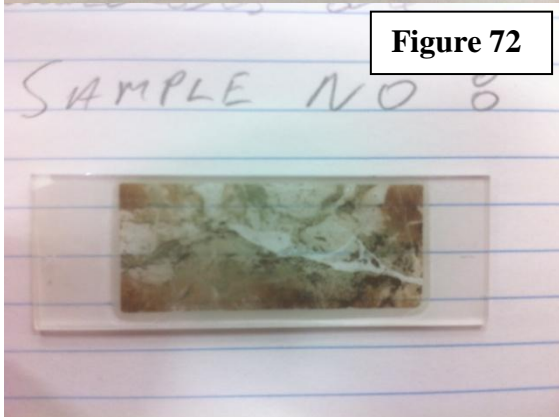


Figure 72

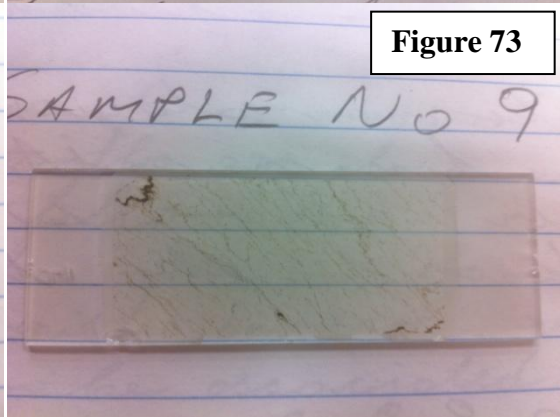


Figure 73

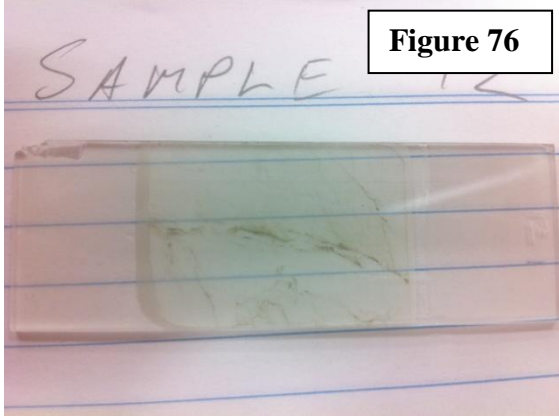
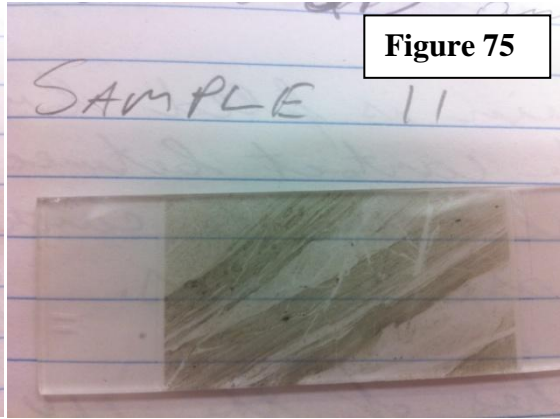
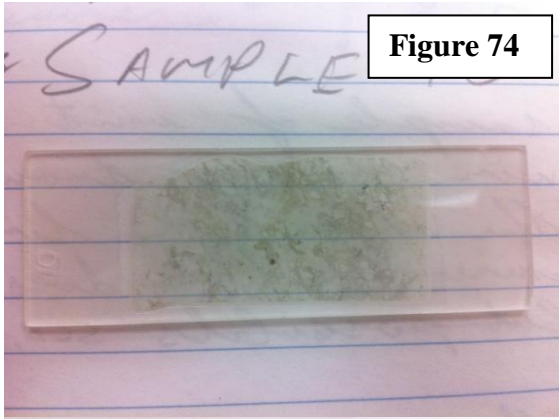


Figure 77

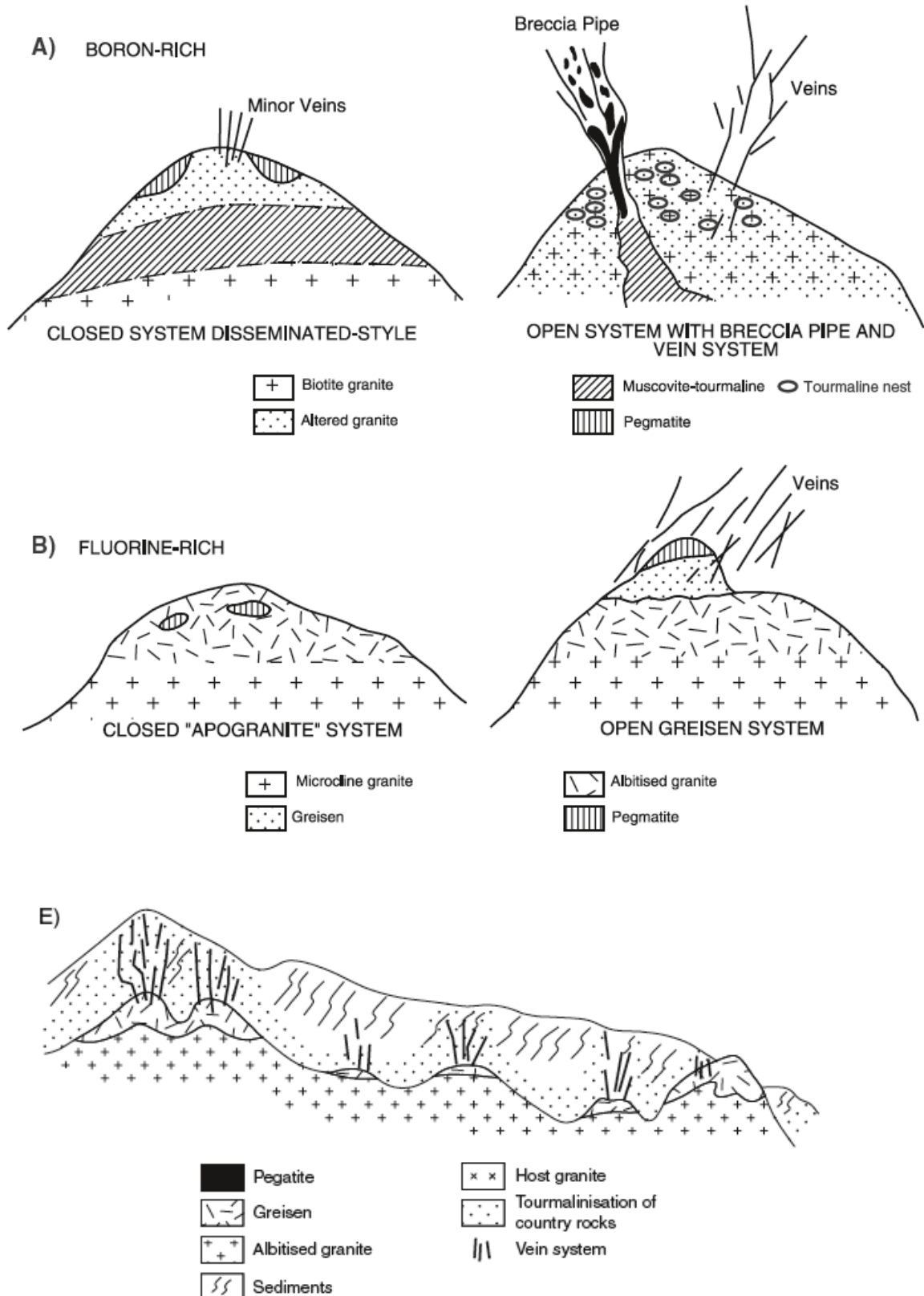


Figure 78



Figure 79 and 80



Figure 81



Figure 82



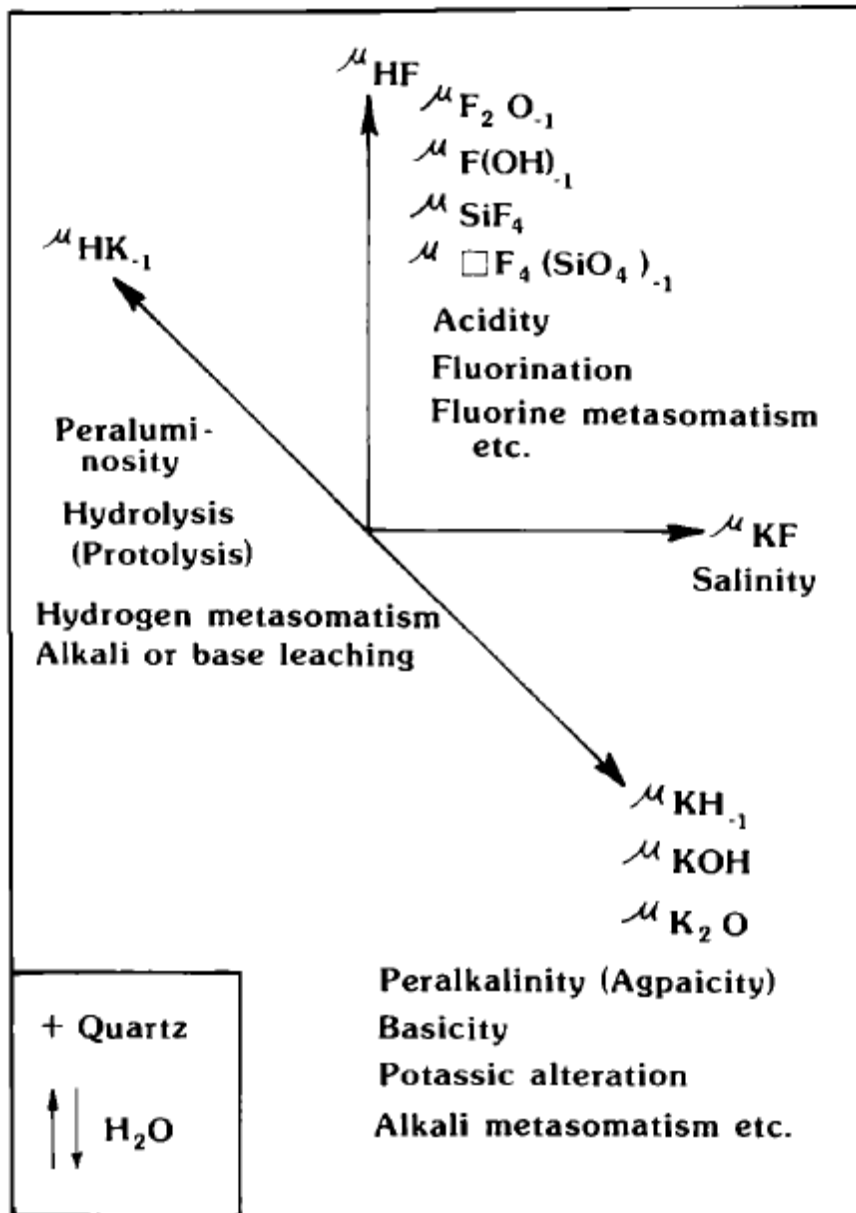
Figure 83

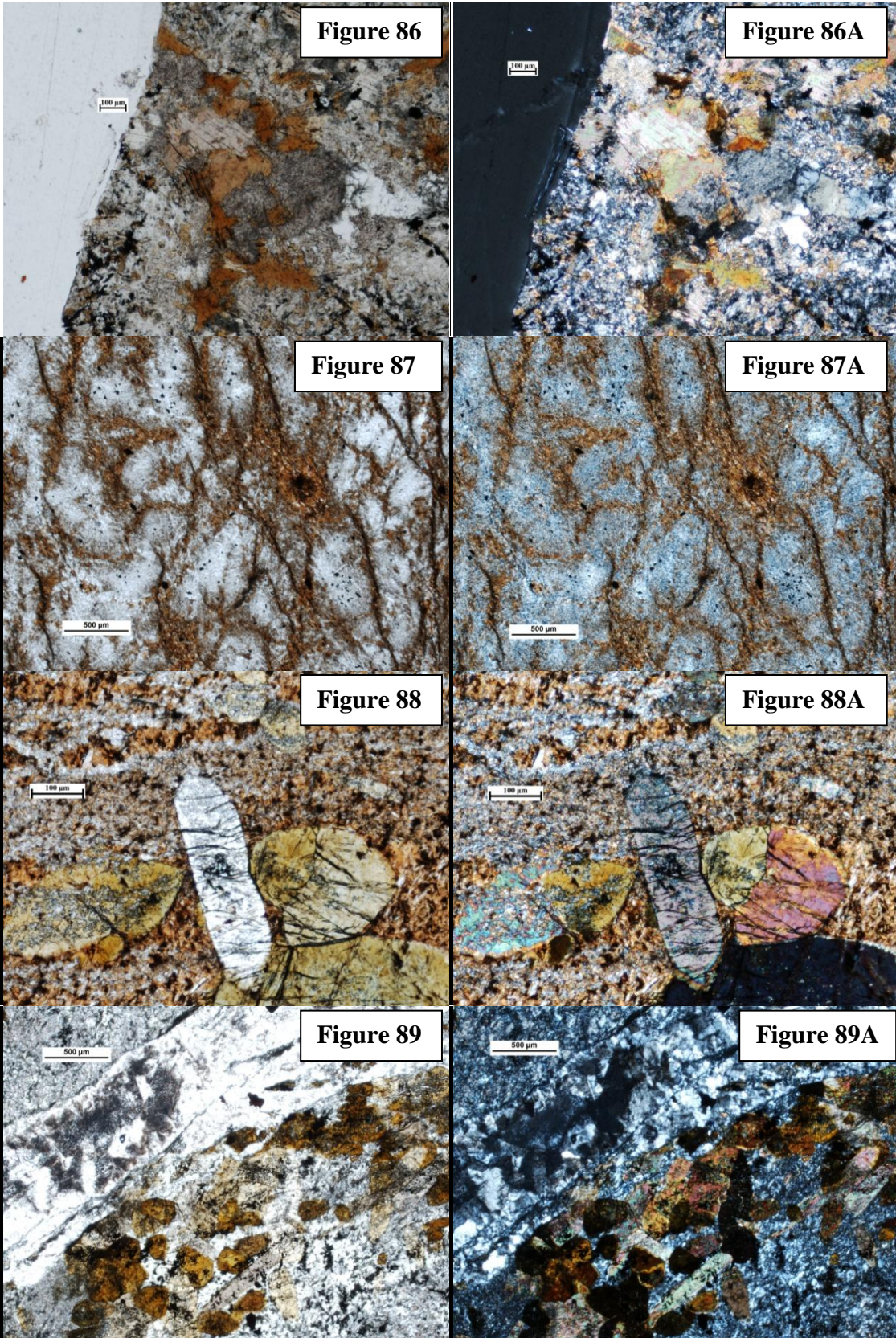


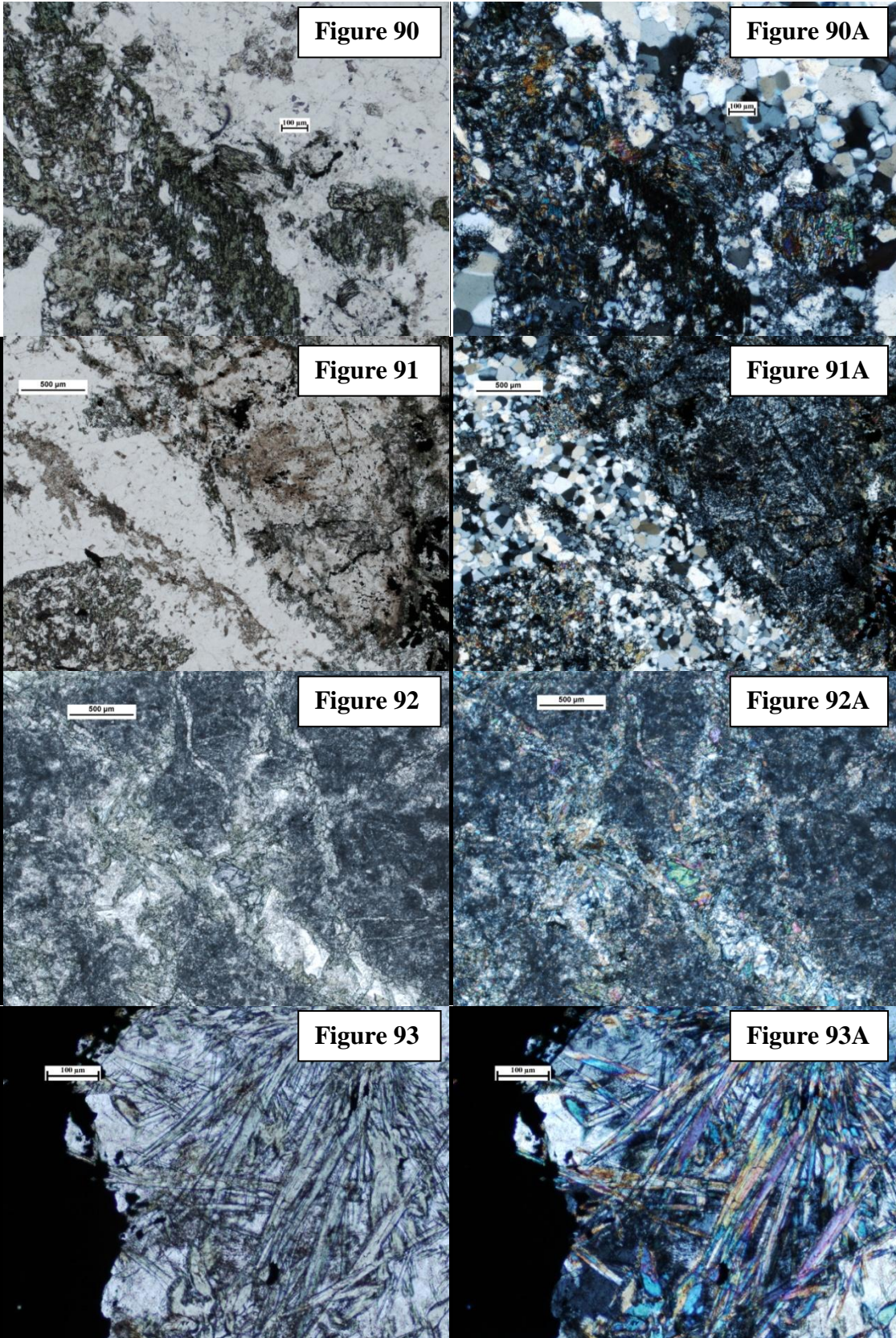
Figure 84a and 84b

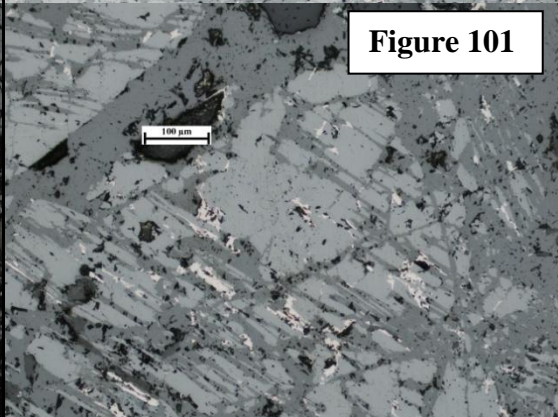
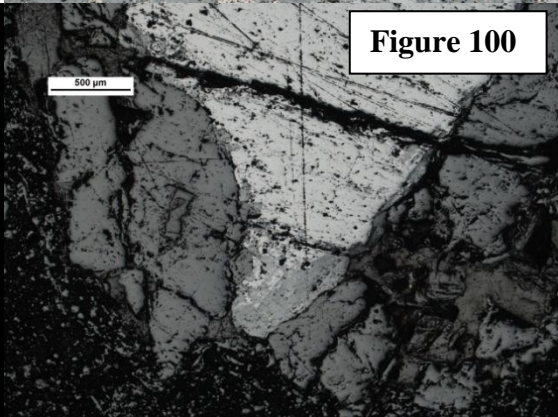
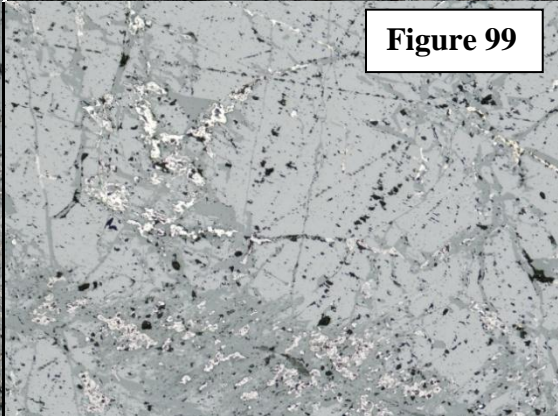
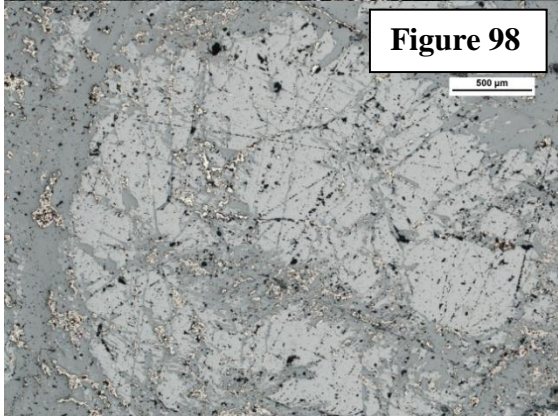
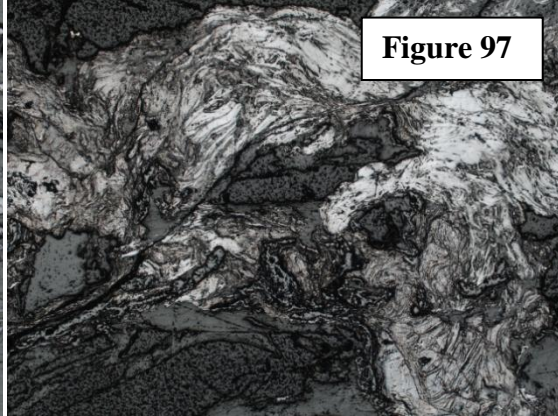
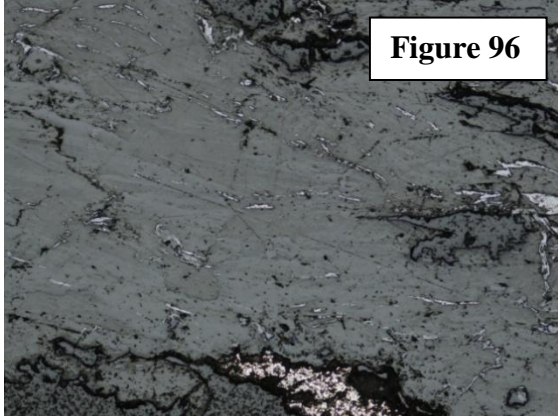
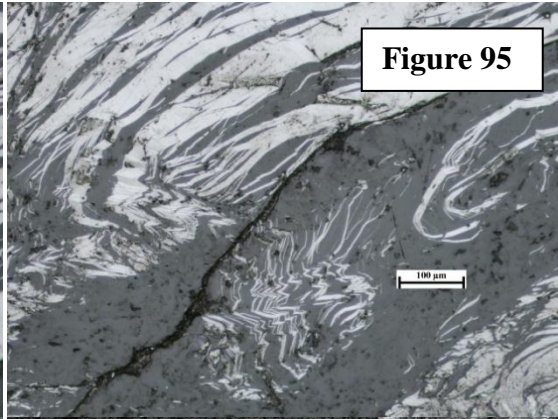
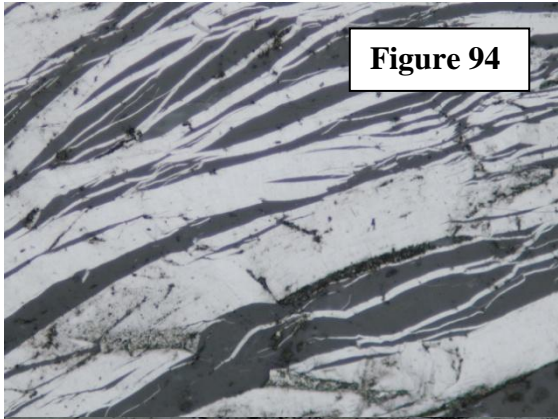


Figure 85









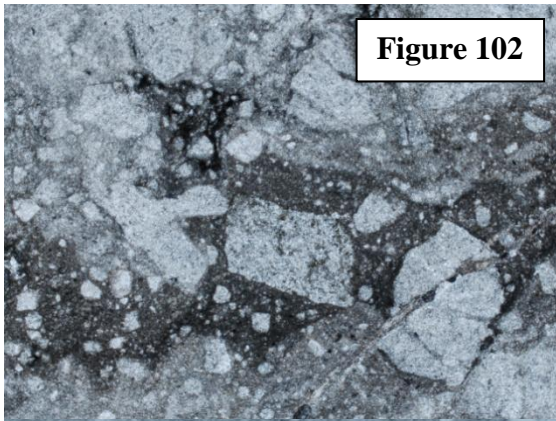


Figure 102

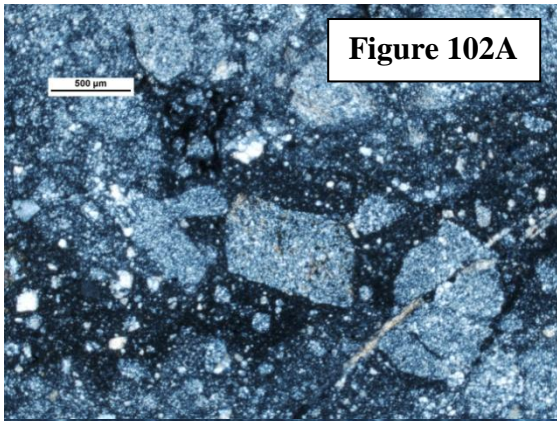


Figure 102A

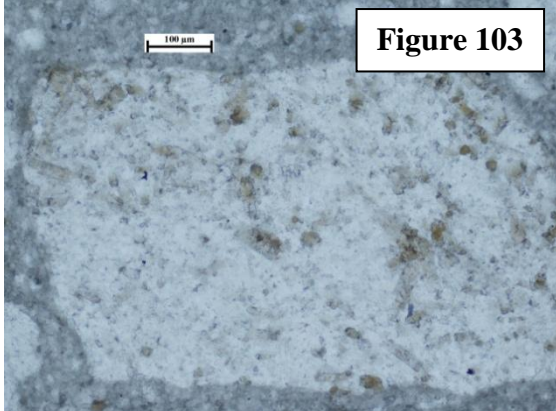


Figure 103

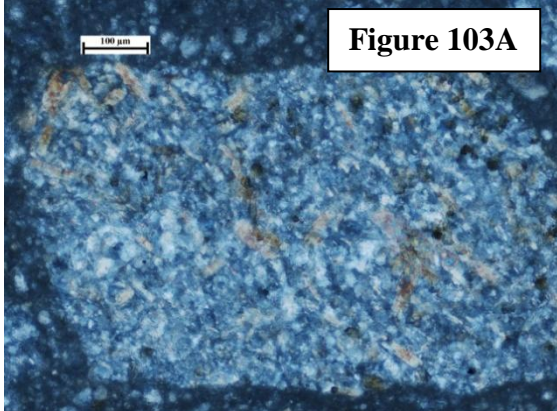


Figure 103A

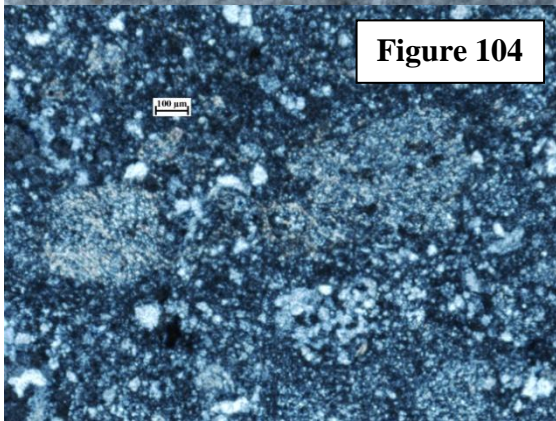


Figure 104

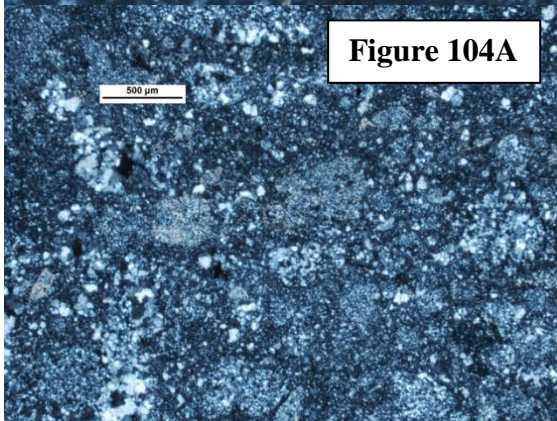


Figure 104A

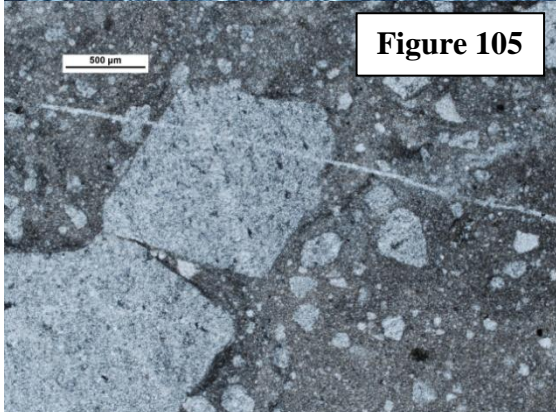


Figure 105

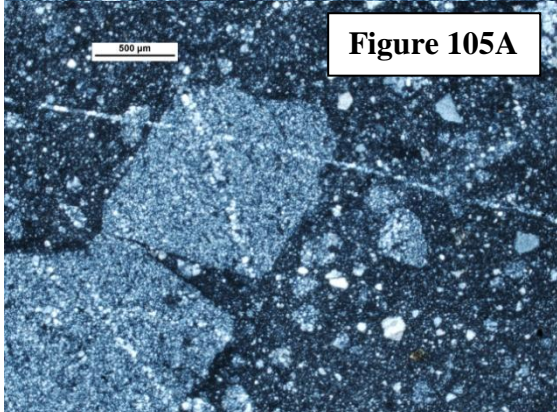
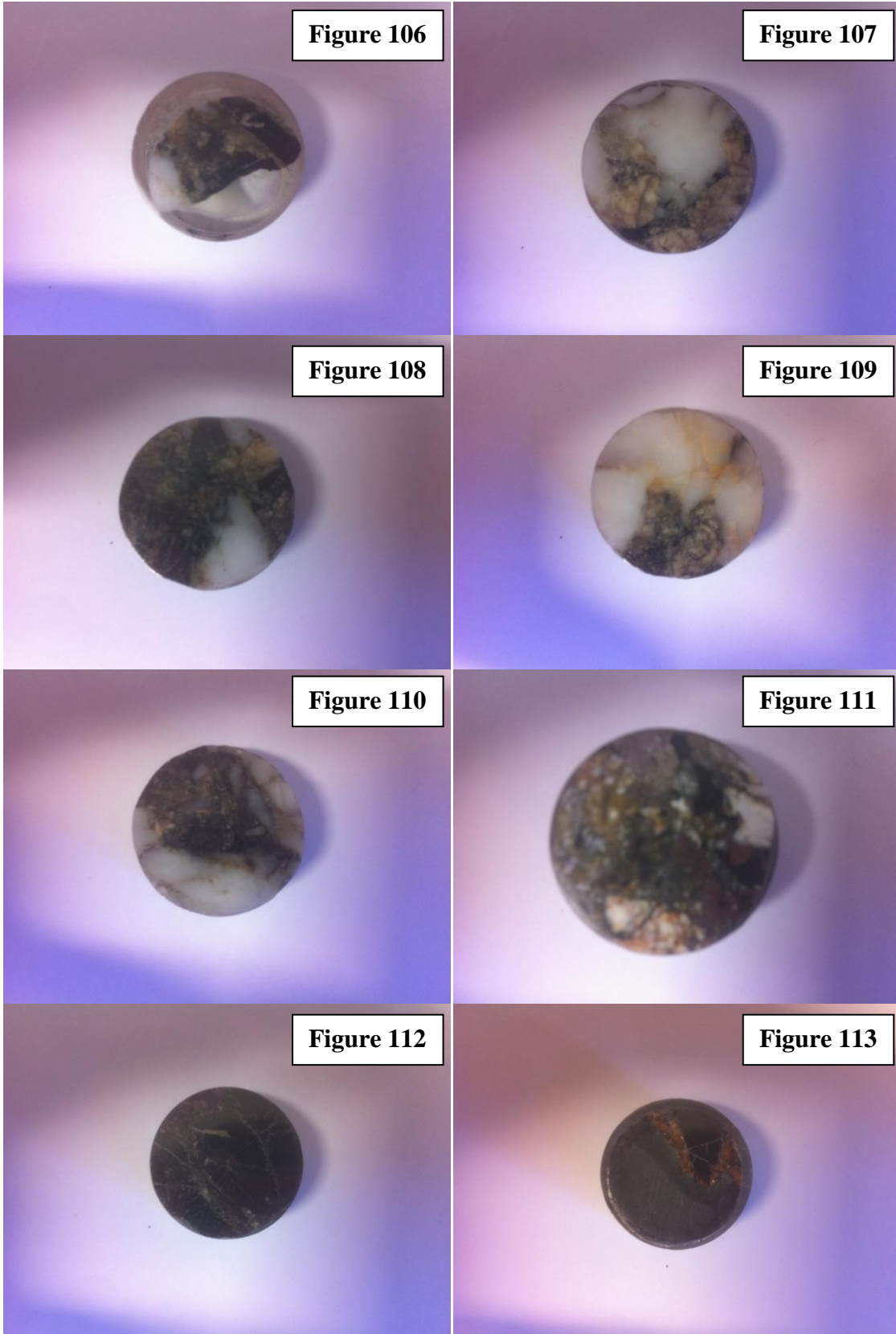
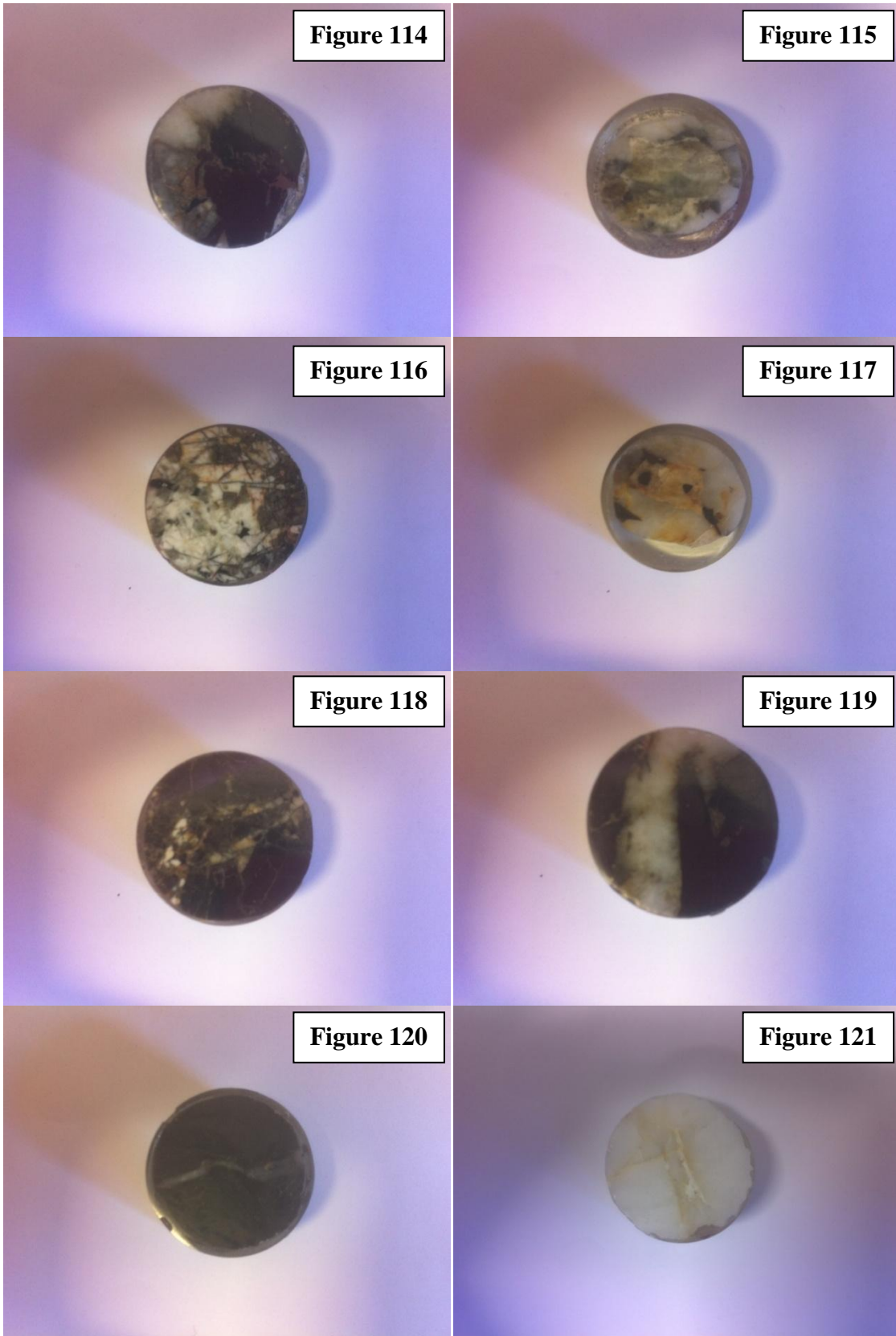


Figure 105A





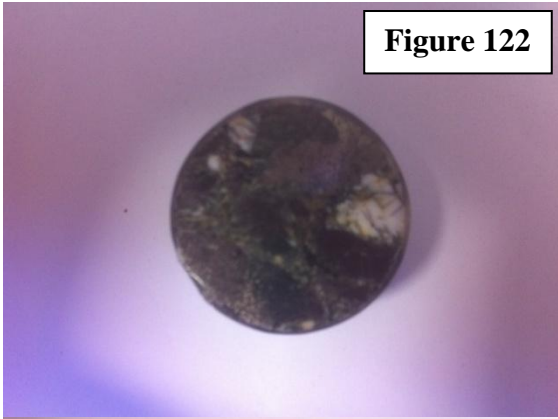


Figure 122

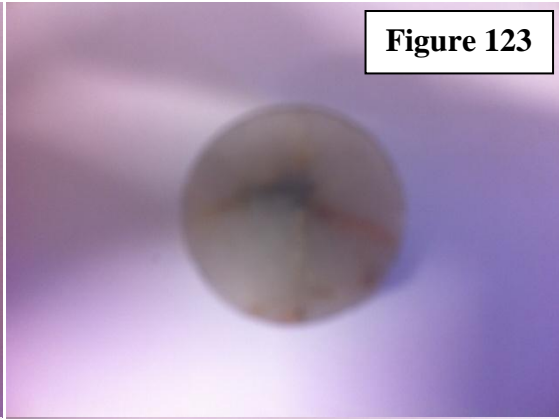


Figure 123



Figure 124

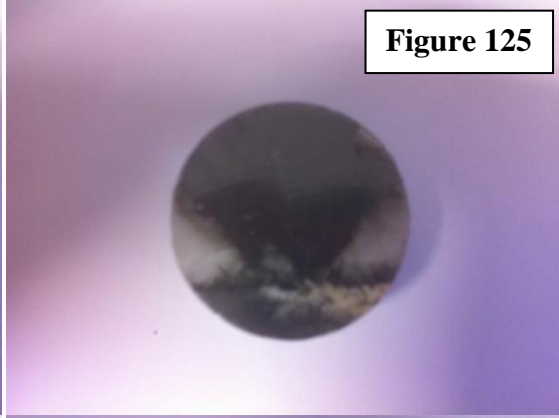


Figure 125



Figure 126



Figure 127



Figure 128



Figure 129



Figure 130



Figure 131

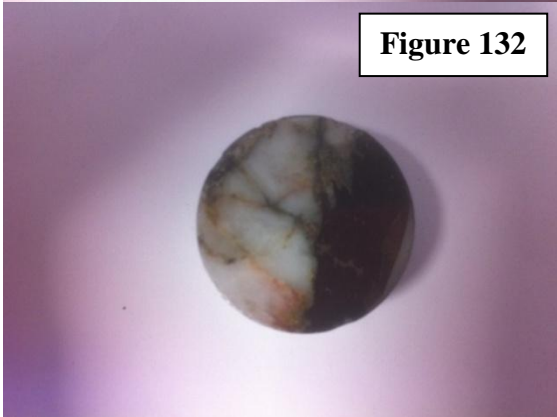


Figure 132



Figure 133



Figure 134



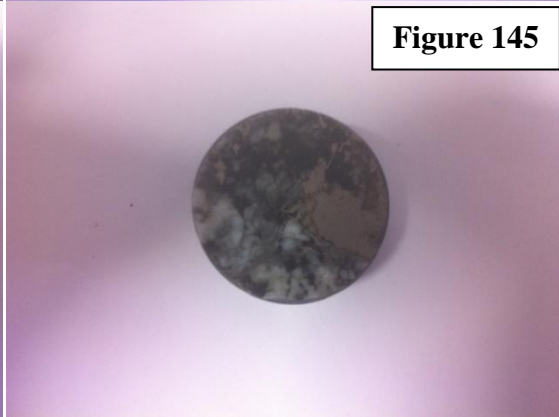
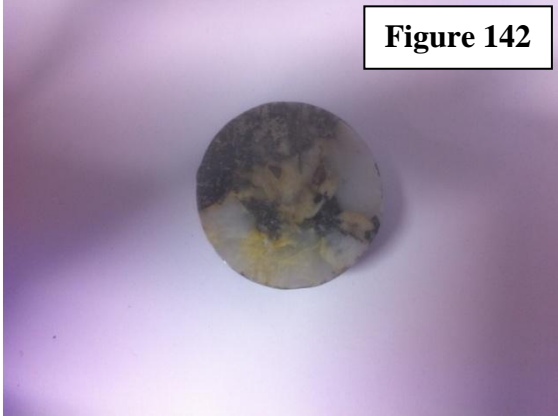
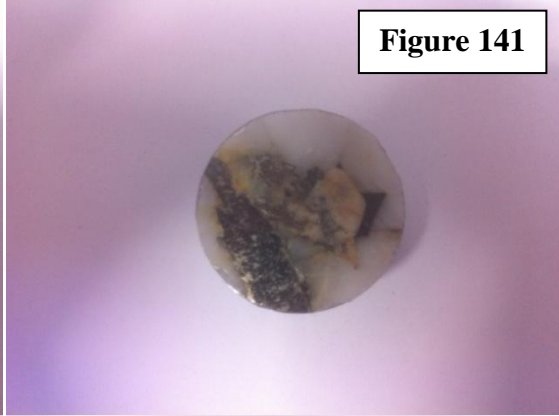
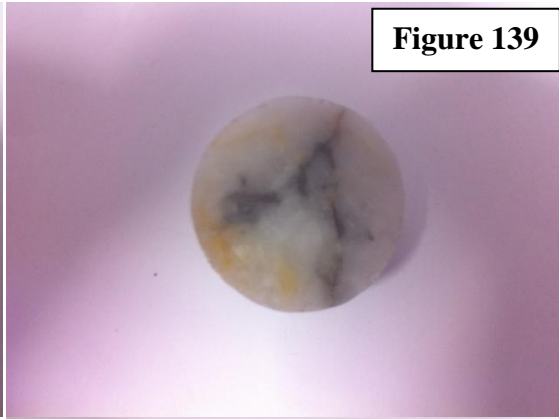
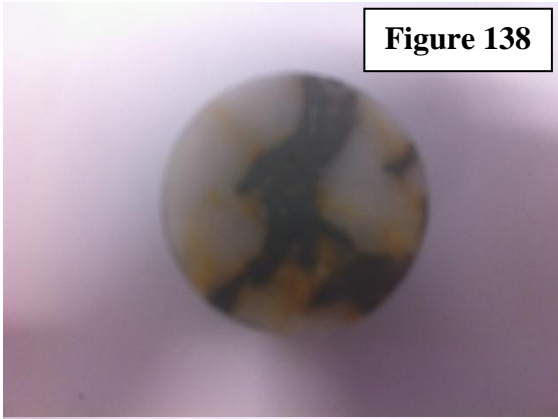
Figure 135



Figure 136



Figure 137



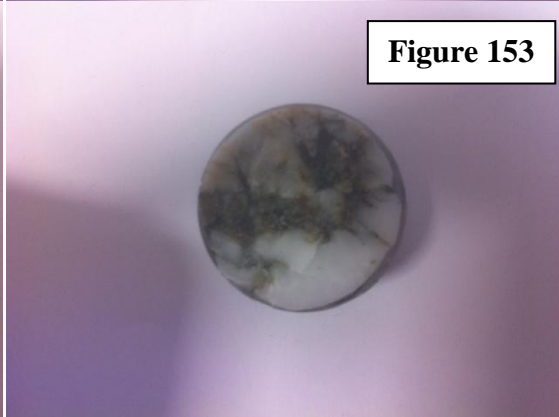
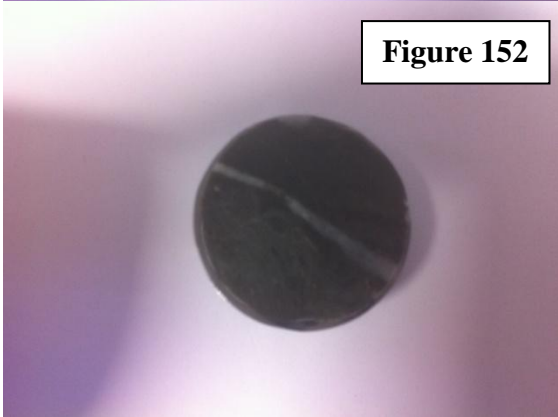
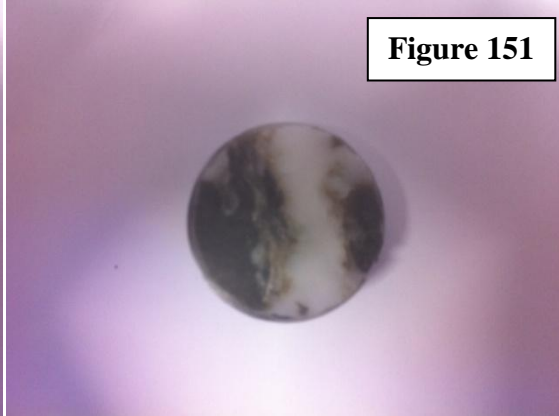


Figure 154

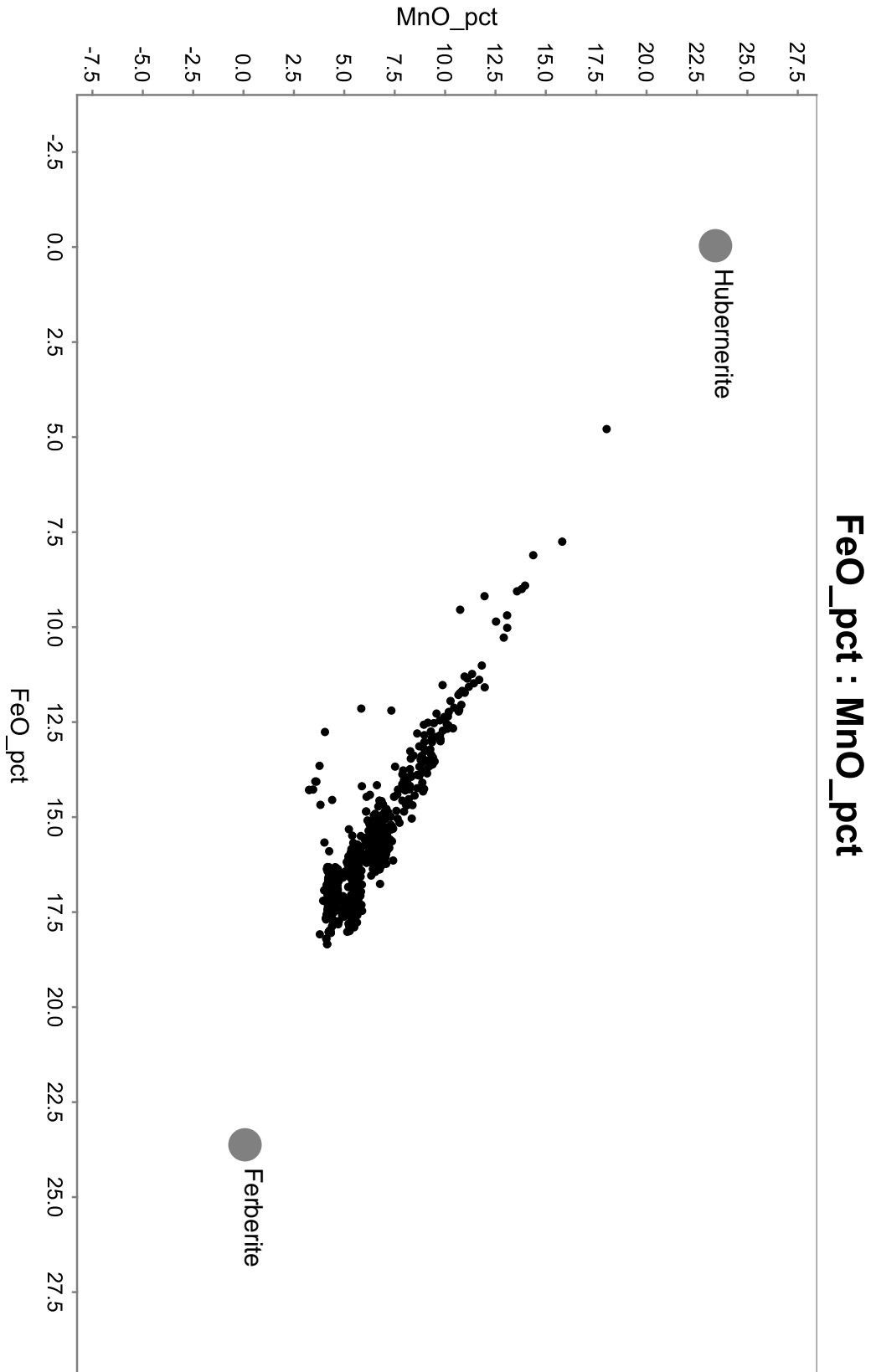


Figure 155

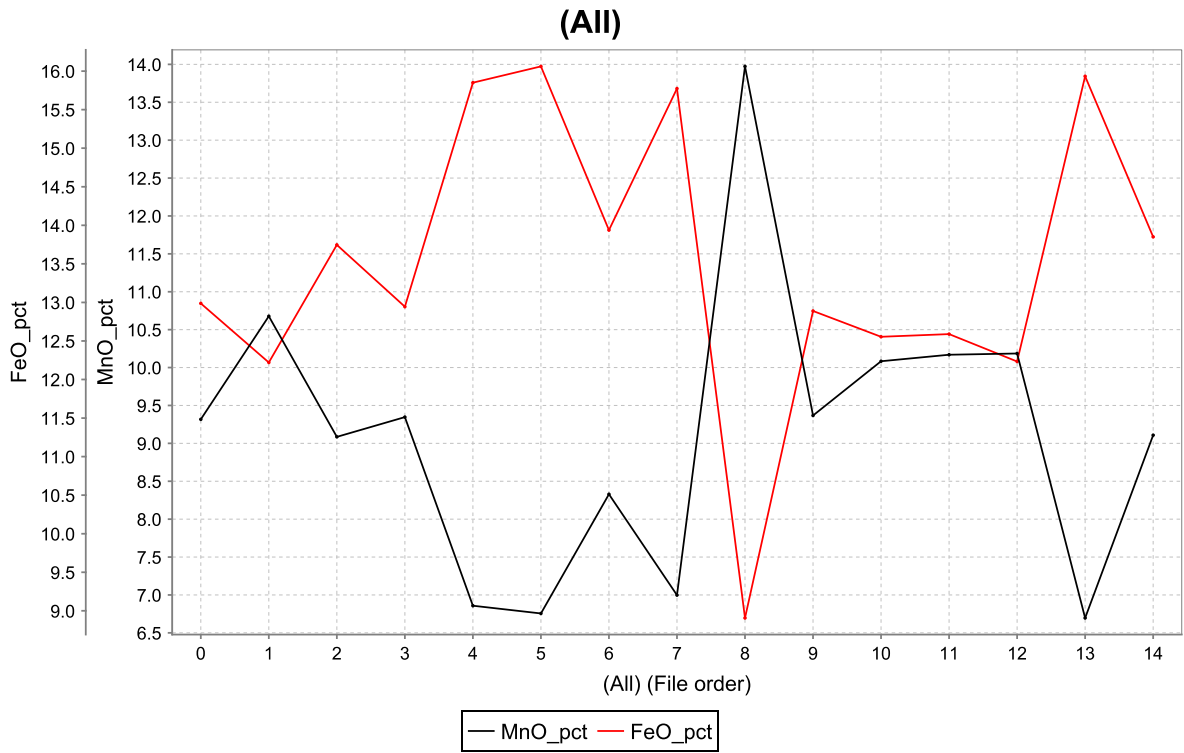


Figure 156

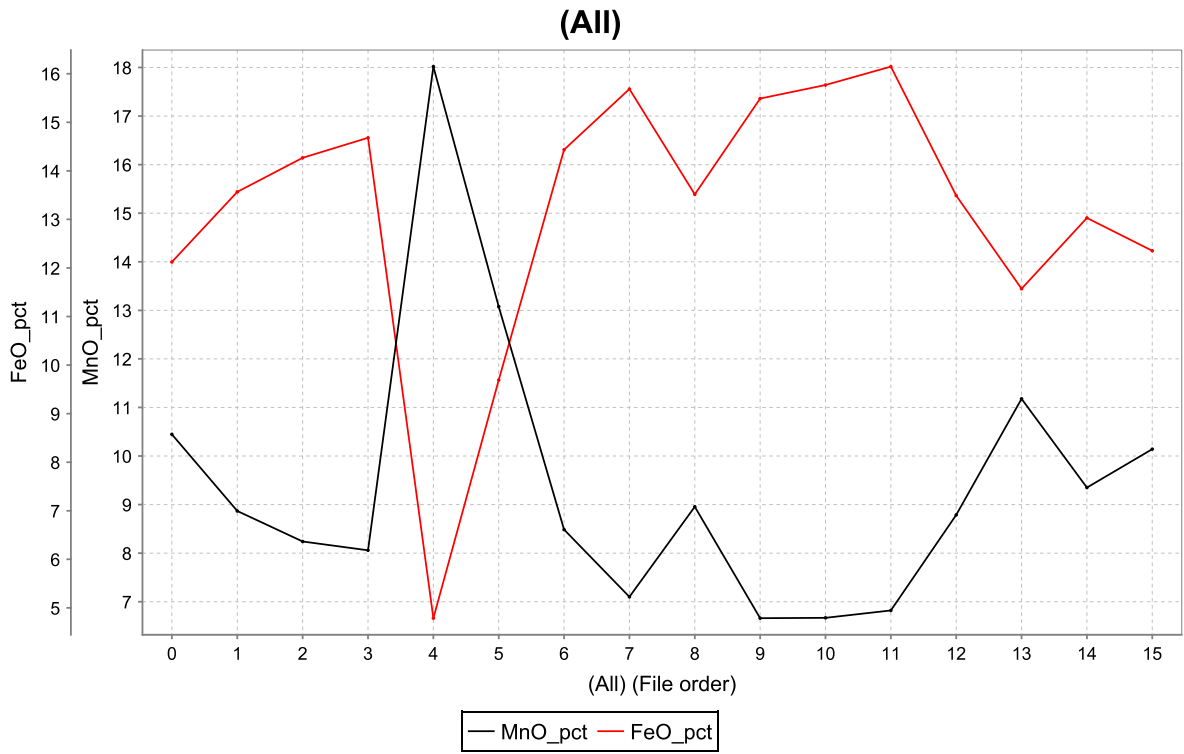


Figure 157

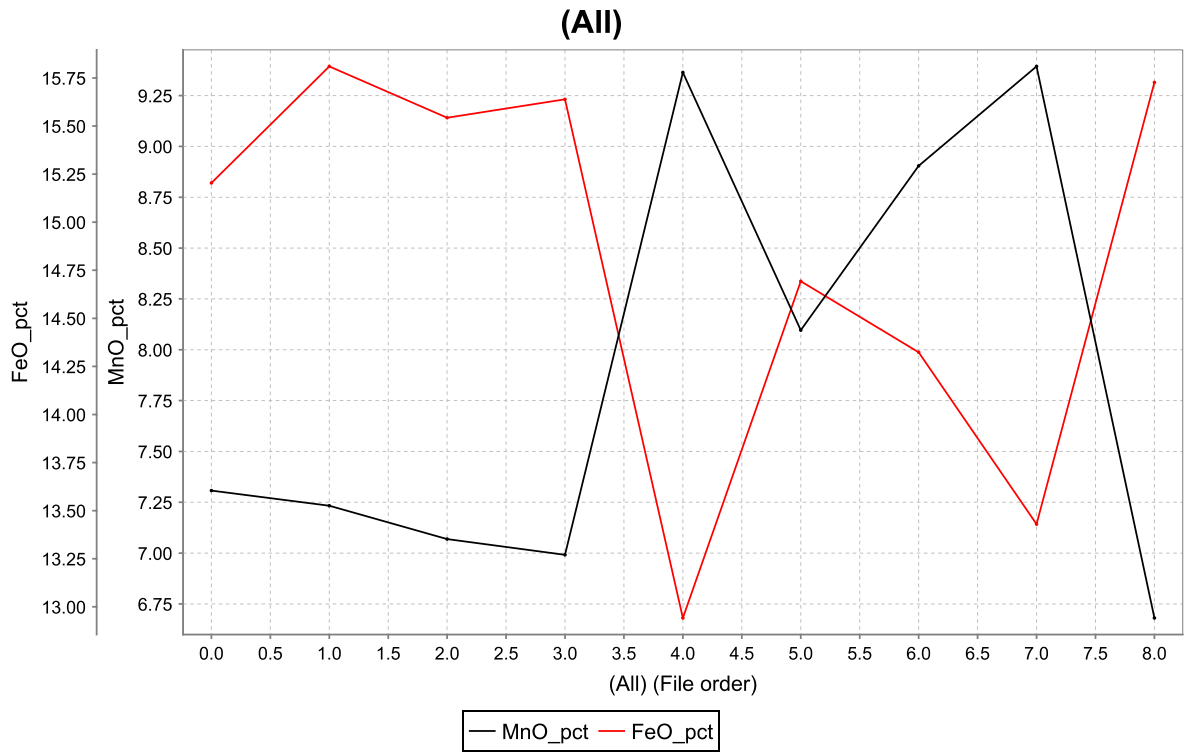


Figure 158

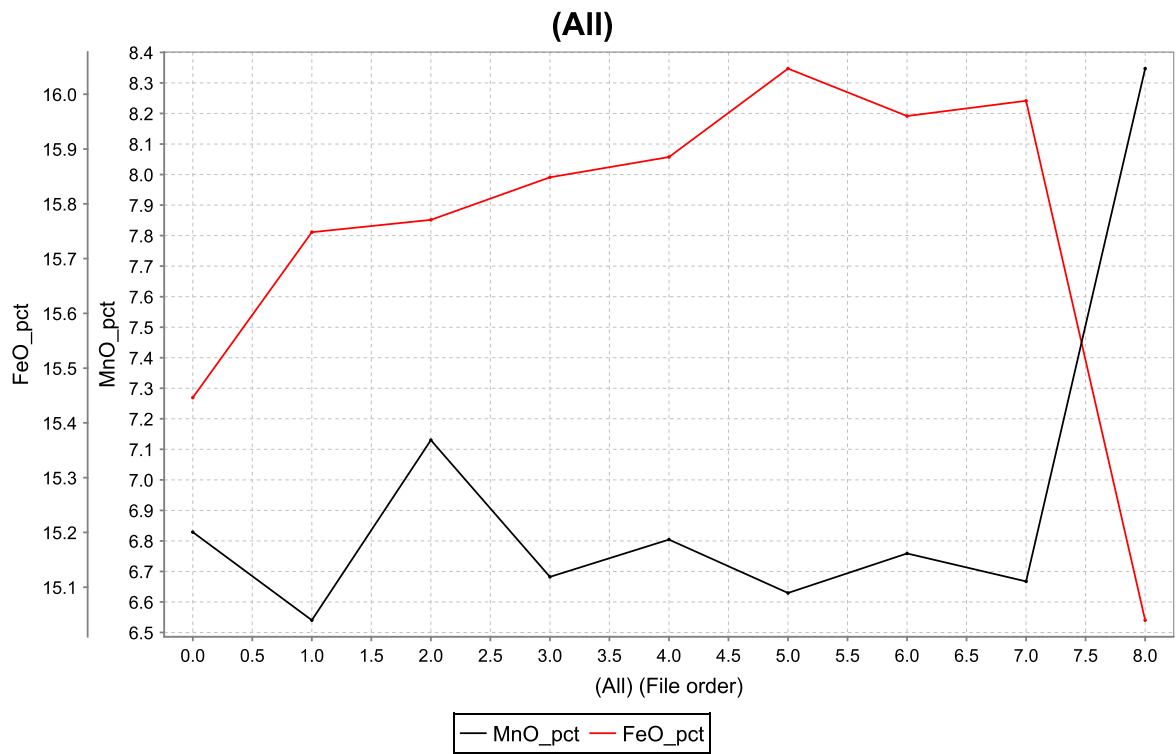


Figure 159

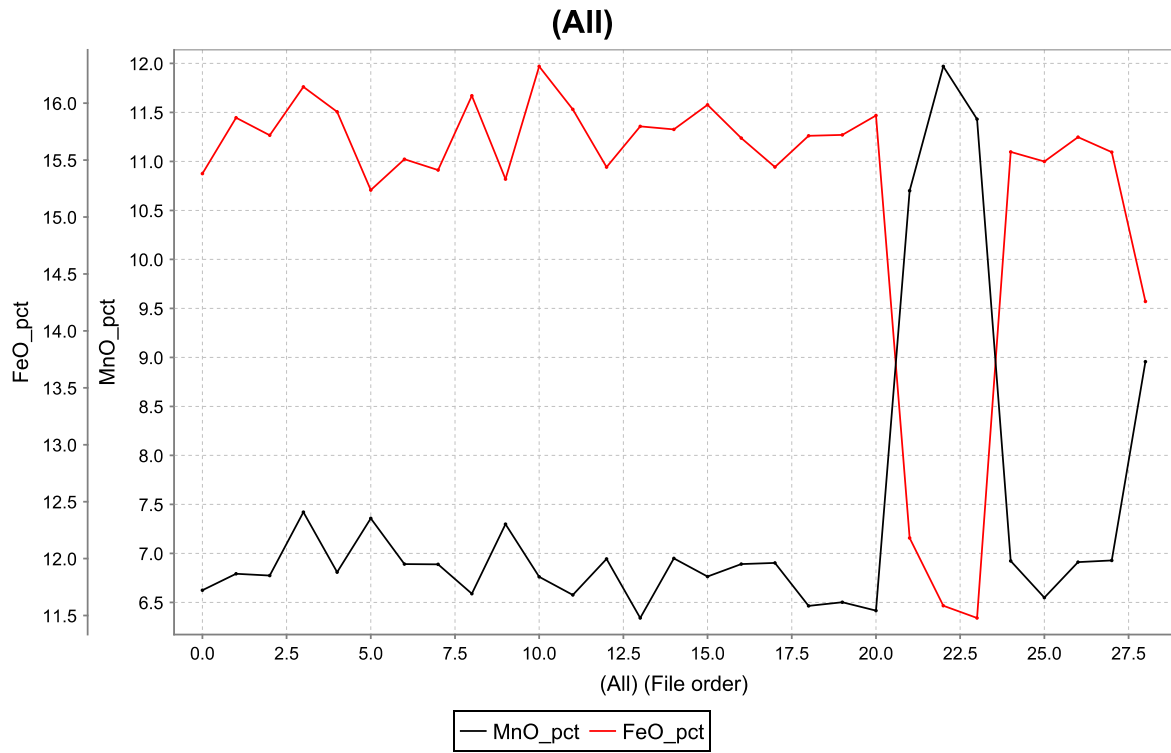


Figure 160

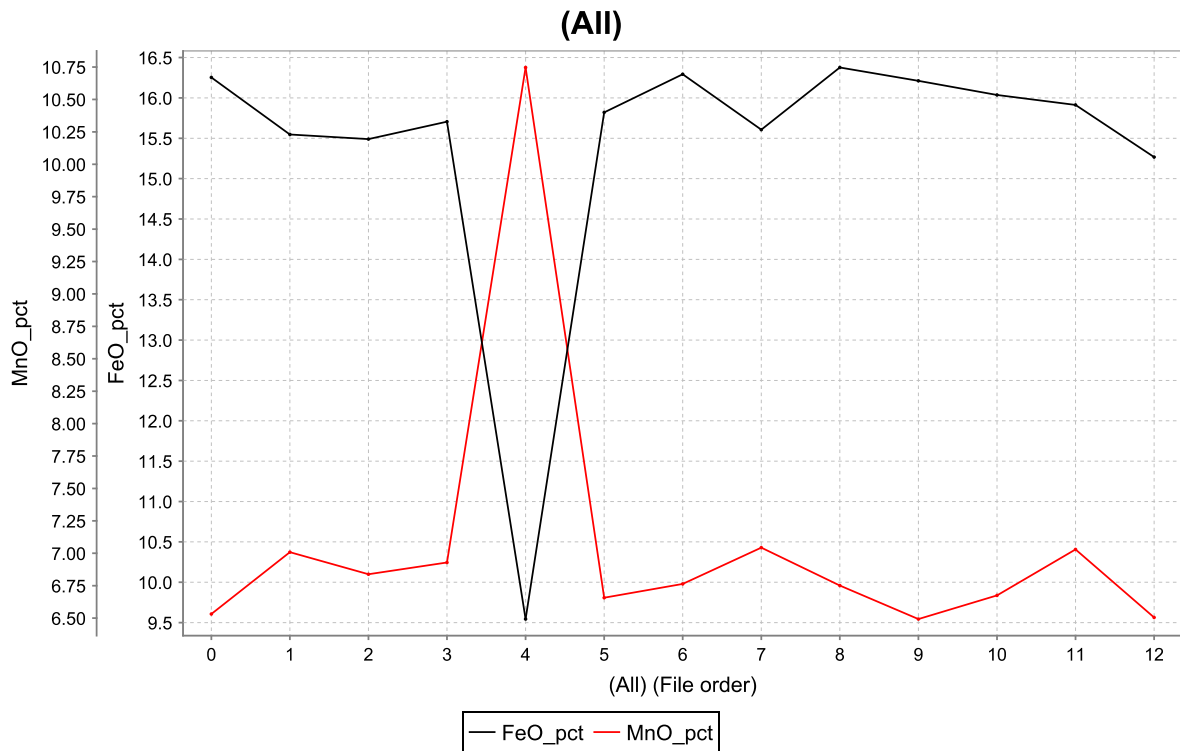


Figure 161

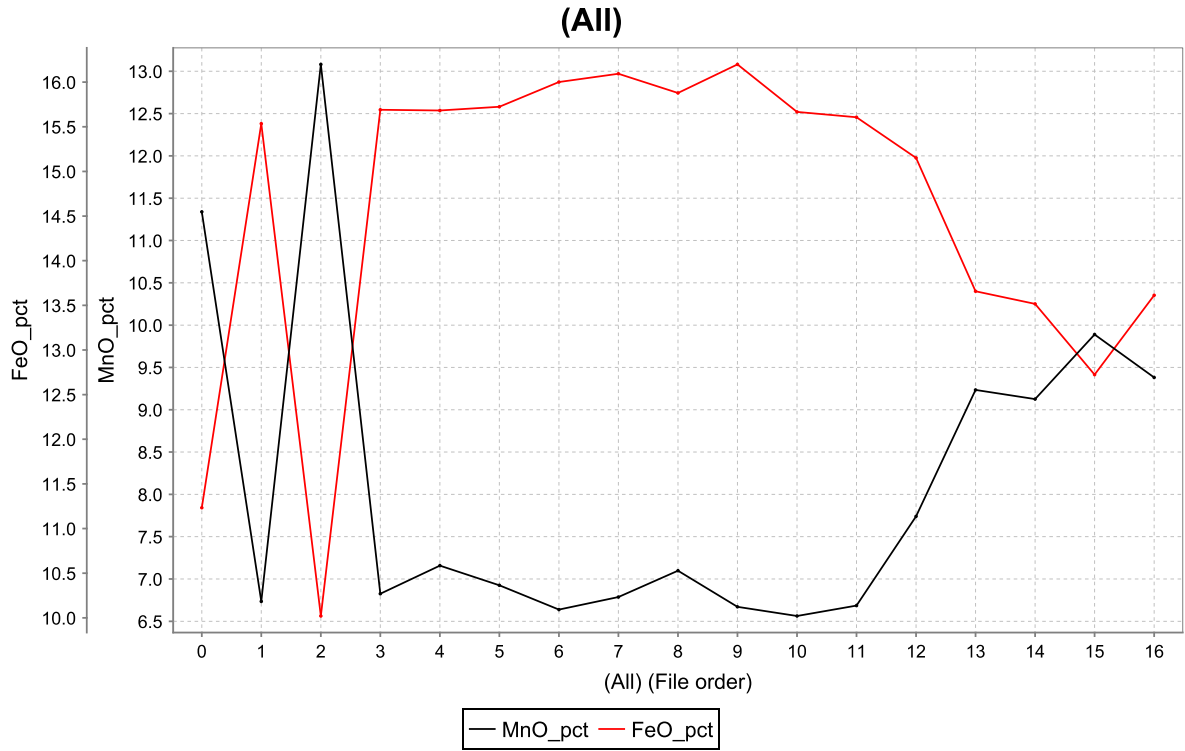


Figure 162

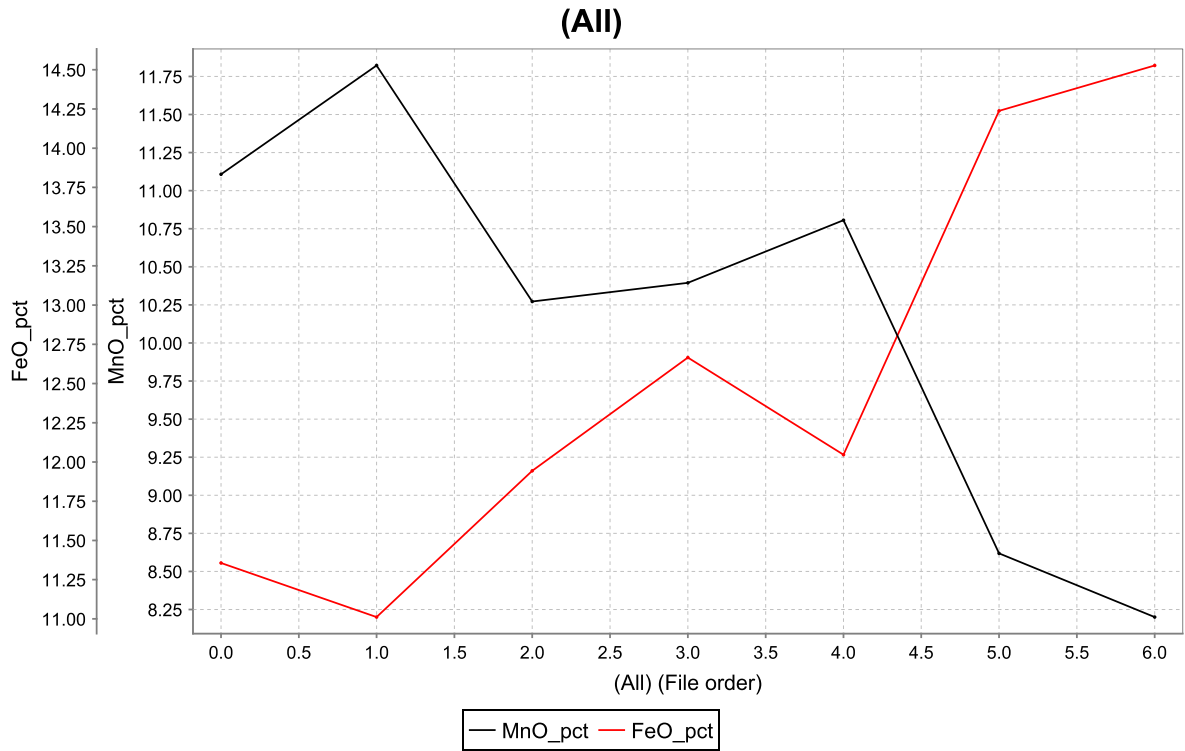


Figure 163

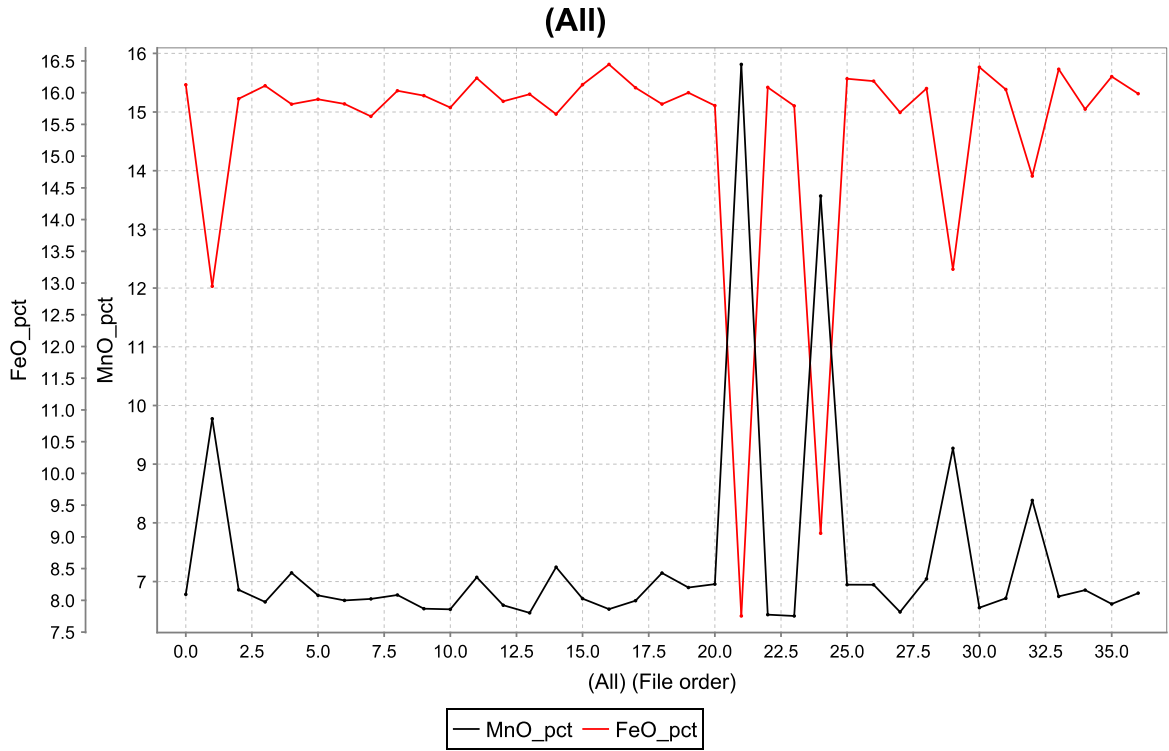


Figure 164

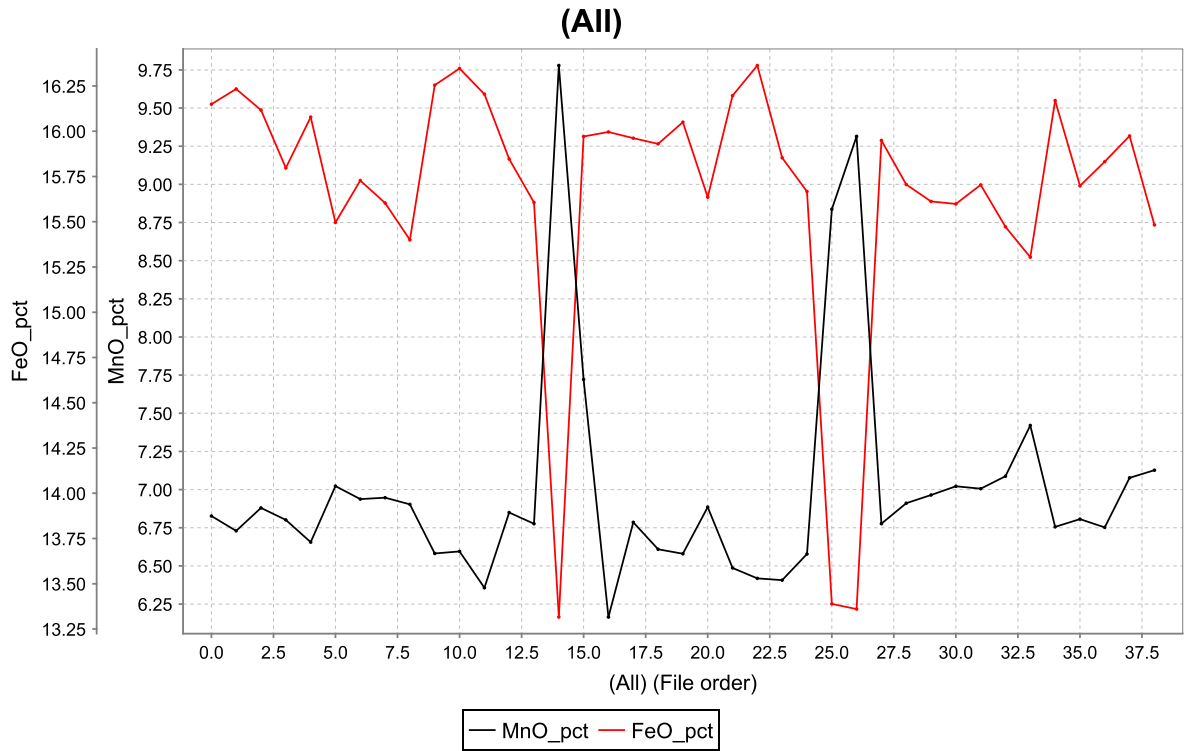


Figure 165

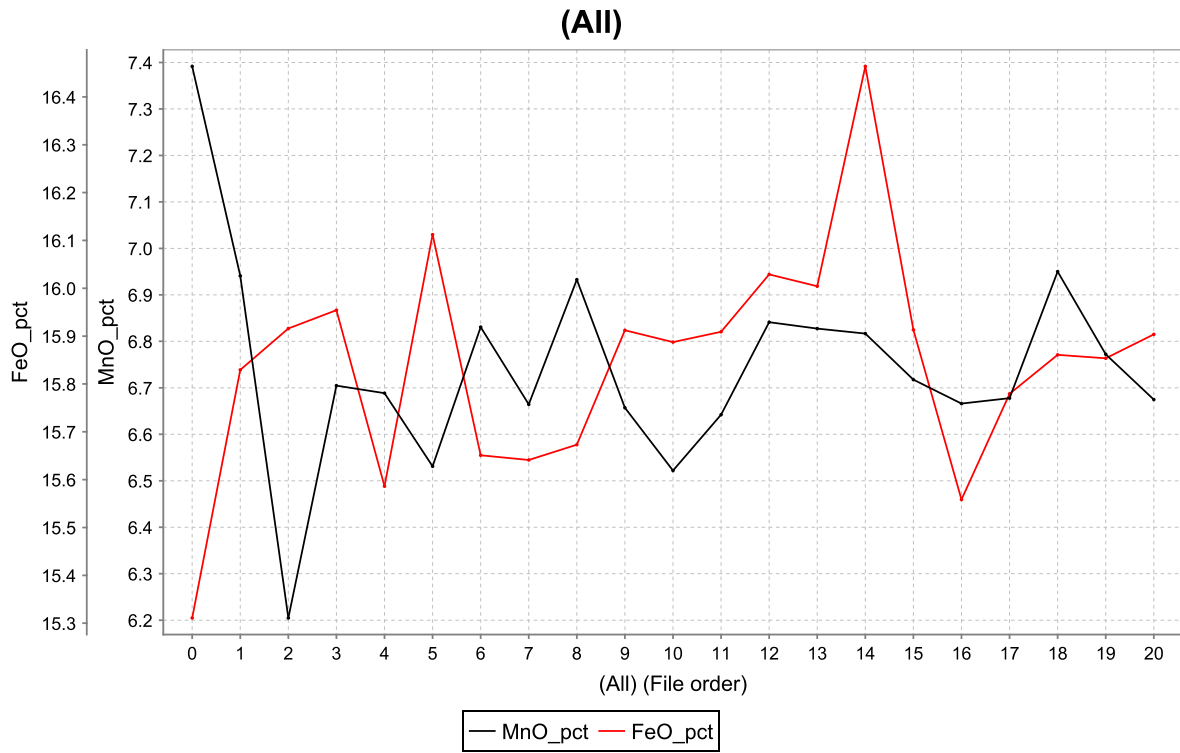


Figure 166

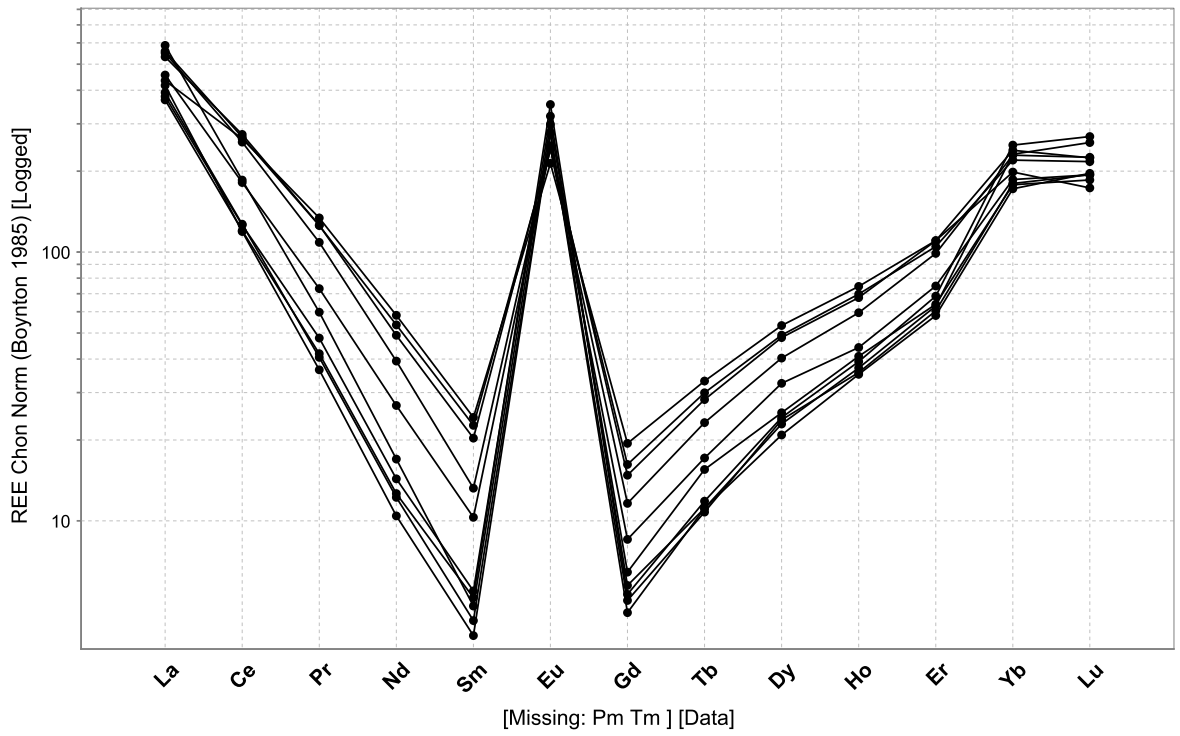


Figure 167

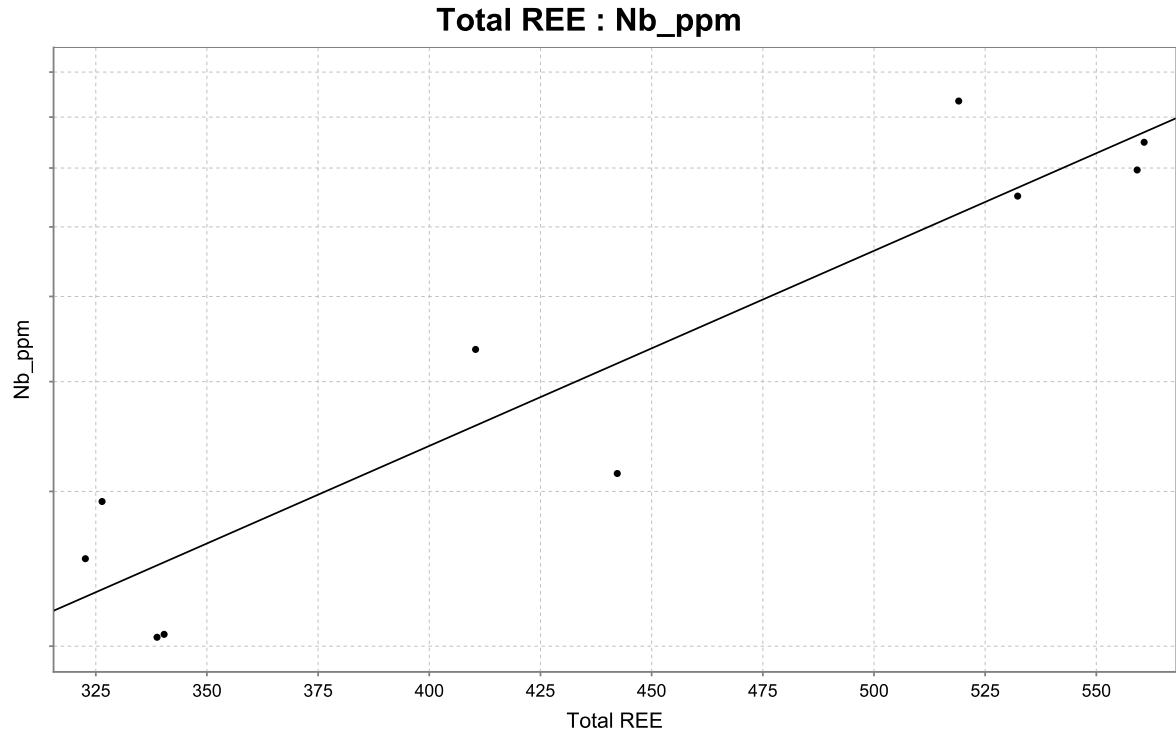


Figure 168

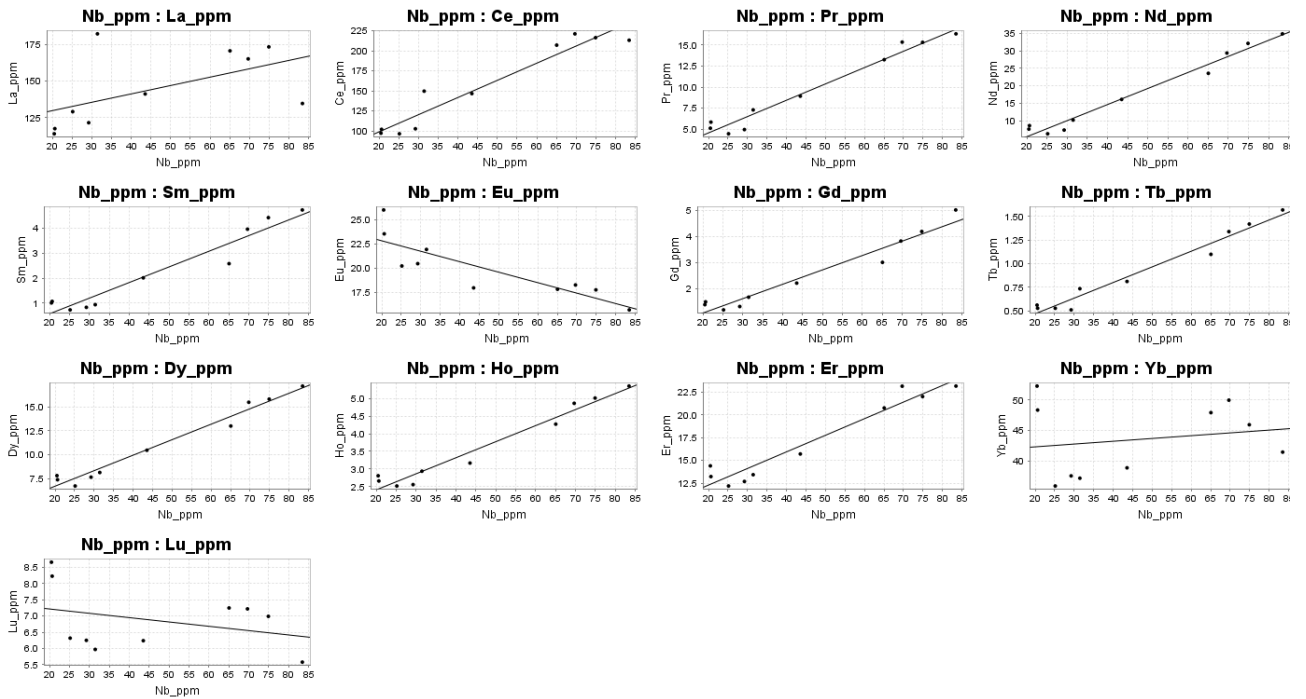


Figure 169

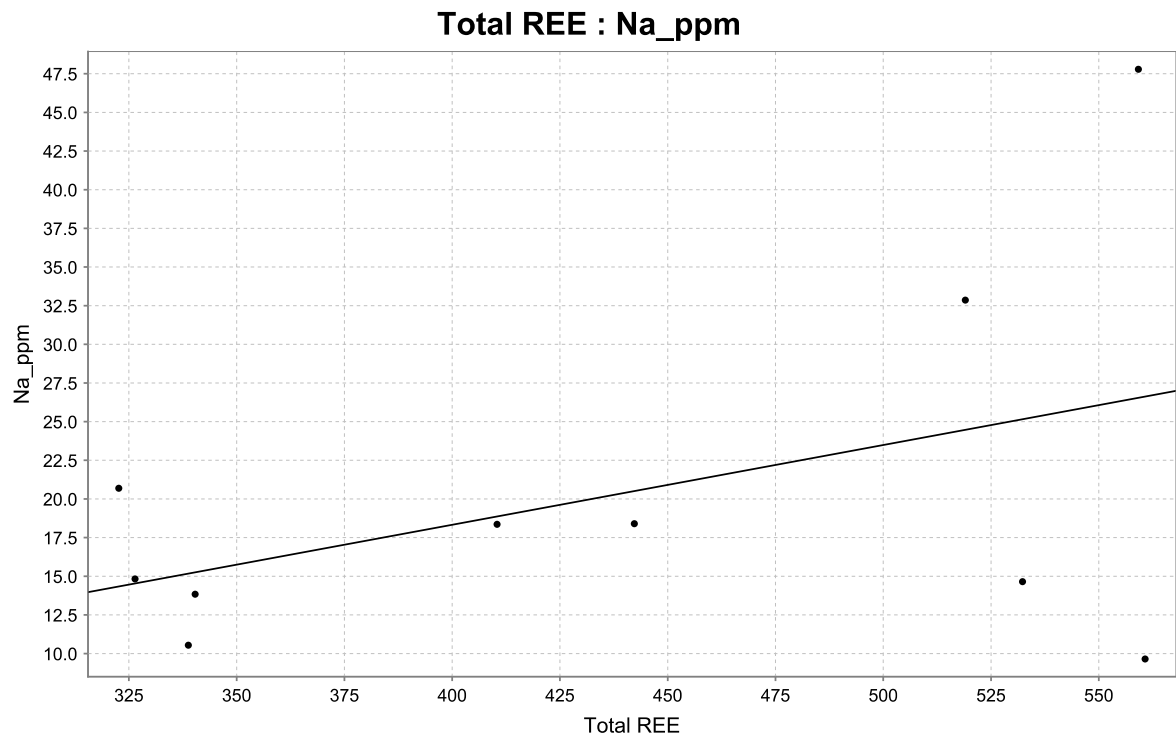


Figure 170

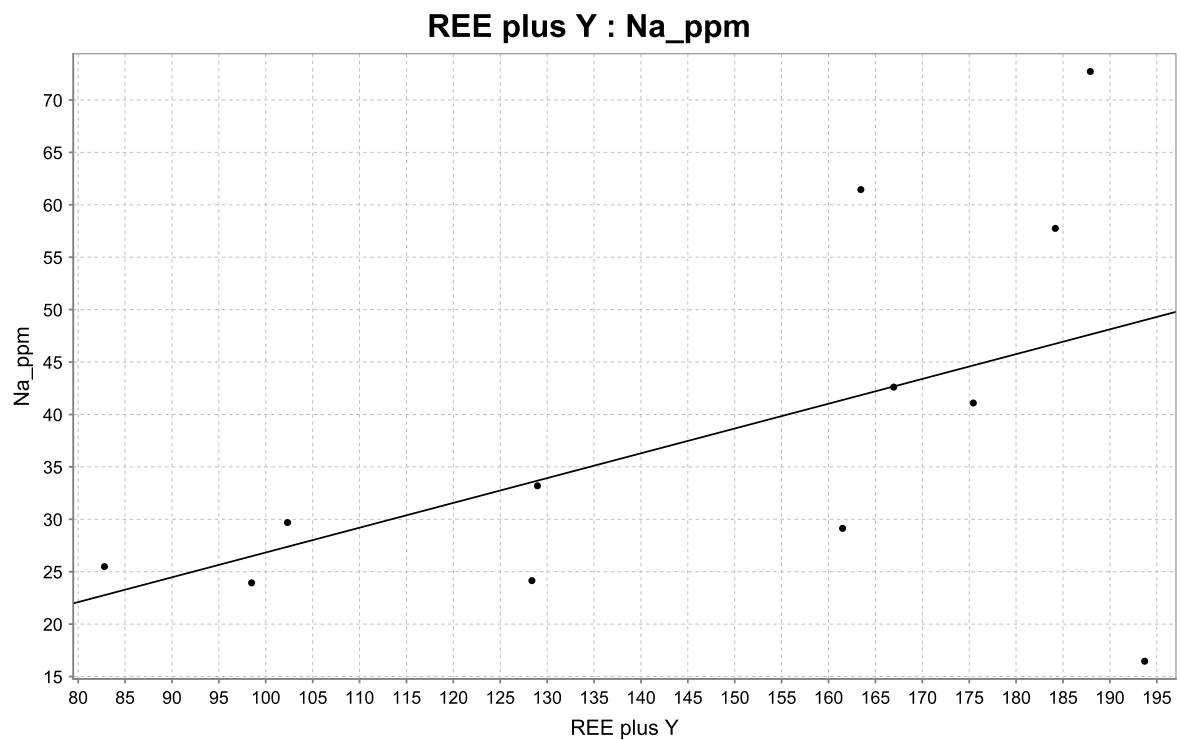


Figure 171

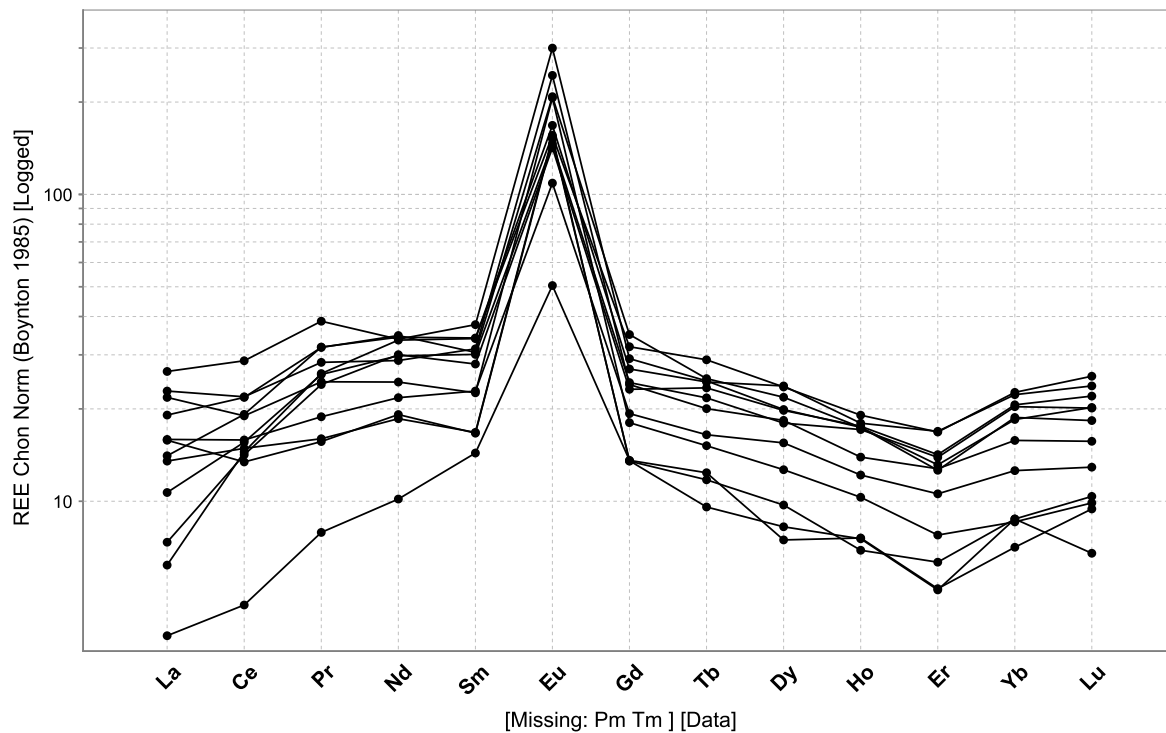


Figure 172

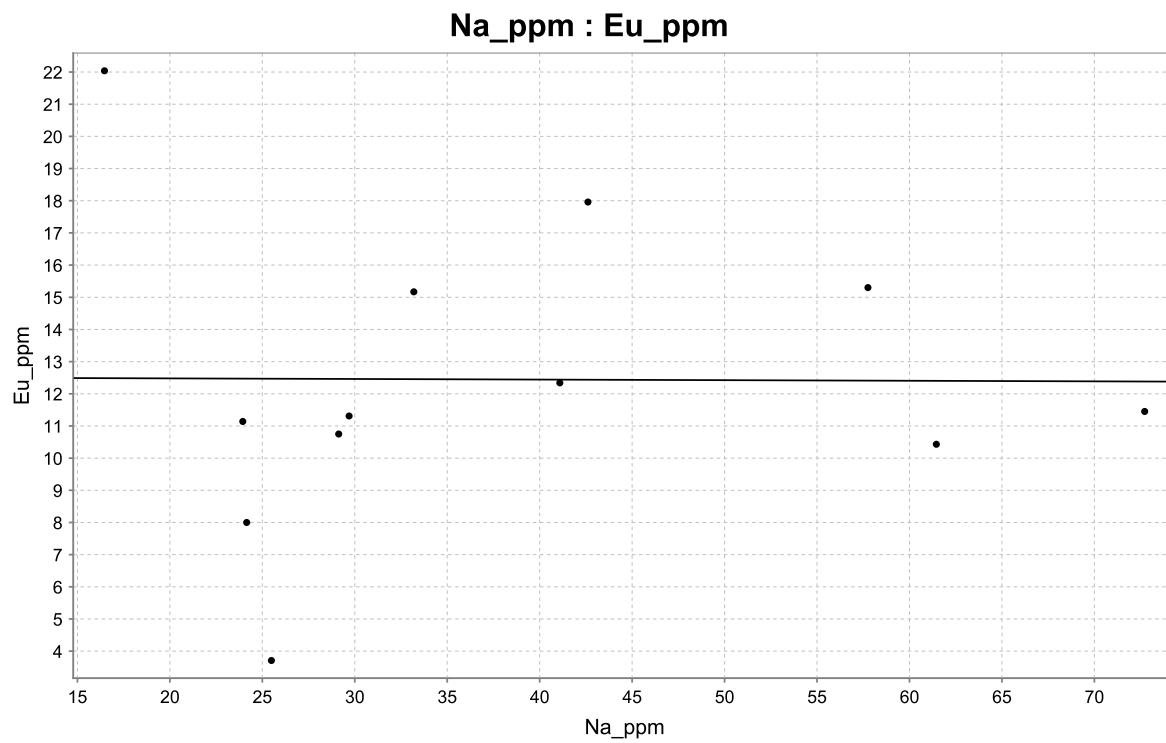


Figure 173

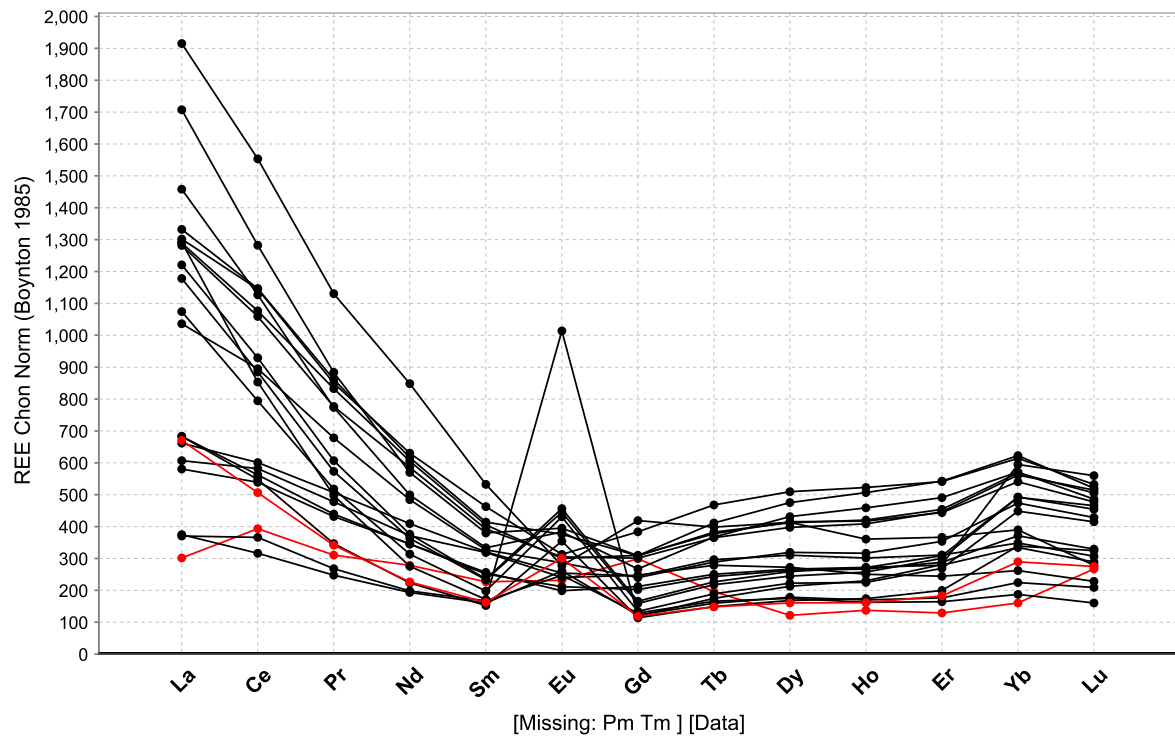


Figure 175



Figure 176

	O	F	Na	Mg	Al	Si	P	Cl	K	Ca	Ti	Cr	Mn	Fe	Mo	W
Wolframite	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Scheelite	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Apatite	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Fluorite	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Biotite	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Tourmaline	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Muscovite	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Acknowledgments

I would like to thank Ian Plimer for all the help, support and direction that I have received throughout the course of the last year. A big thank you to the management of Icon resources Darcy Milburn, John Bishop and Andrew White for the support and opportunity to work and conduct research on site in far north Queensland along with a big thank you to Steve and Sue Northey for their support and kind hospitality and Ian Sheffield-Parker for his support and enlightening lunchtime conversations.

I would also like to acknowledge the academic staff at the University of Adelaide Andreas Schmidt Mumm, Nigel Cook, Christana Ciobanu, David Kelsey, John Foden and Katherine Howard for all their help throughout the course of the year. And last but not least a big thank you goes out to the staff at Adelaide microscopy for all or their help throughout the course of the year.

Scheelite EMPA data

Label	No	W%(O)	W%(F)	W%(Na)	W%(Mg)	W%(Al)	W%(Si)	W%(P)	W%(Cl)	W%(K)	W%(Ca)	W%(Ti)	W%(Cr)	W%(Mn)
scheelite_40-2	3	21.9614	x	x	x	x	x	x	x	x	14.0222	x	x	x
scheelite_40-3	4	21.8277	x	x	x	x	x	x	x	x	13.6781	x	x	x
scheelite_40-4	5	21.9456	x	x	x	x	x	x	x	x	14.1618	x	x	x
scheelite_40-6	7	21.6332	x	x	x	x	x	x	x	x	13.4822	x	x	x
scheelite_40-7	8	21.9458	x	x	x	x	x	x	x	x	13.7984	x	x	x
scheelite_40-8	9	22.0525	x	x	x	x	x	x	x	x	13.7988	x	x	x
scheelite_40-9	10	20.7478	x	x	x	x	x	x	x	x	13.3829	x	x	x
scheelite_40-10	11	20.595	x	x	x	x	x	x	x	x	13.0817	x	x	x
scheelite_40-11	12	22.0697	x	x	x	x	x	x	x	x	13.9466	x	x	x
scheelite_40-12	13	21.5944	x	x	x	x	x	x	x	x	13.824	x	x	x
scheelite_40-13	14	22.0647	x	x	x	x	x	x	x	x	13.8226	x	x	x
scheelite_40-14	15	22.1614	x	x	x	x	x	x	x	x	13.8337	x	x	x
scheelite_40-15	16	21.0632	x	x	x	x	x	x	x	x	13.4739	x	x	x
scheelite_40-16	17	22.014	x	x	x	x	x	x	x	x	14.097	x	x	x
scheelite_40-17	18	21.7582	x	x	x	x	x	x	x	x	13.9915	x	x	x

scheelite_40-18	19	22.112	x	x	x	x	x	x	x	x	14.074	x	x	x
scheelite_40-19	20	22.2441	x	x	x	x	x	x	x	x	14.0969	x	x	x
scheelite_40-20	21	22.0919	x	x	x	x	x	x	x	x	14.0661	x	x	x
scheelite_72	73	22.2772	x	x	x	x	x	x	x	x	14.1258	x	x	x
scheelite_73	74	22.1879	x	x	x	x	x	x	x	x	14.1392	x	x	x
scheelite_74	75	22.3235	x	x	x	x	x	x	x	x	14.0516	x	x	x
scheelite_75	76	22.3434	x	x	x	x	x	x	x	x	14.1844	x	x	x
scheelite_76	77	22.0202	x	x	x	x	x	x	x	x	13.9527	x	x	x
scheelite_77	78	22.2402	x	x	x	x	x	x	x	x	14.2764	x	x	x
scheelite_78	79	21.9259	x	x	x	x	x	x	x	x	13.876	x	x	x
scheelite_79	80	21.9722	x	x	x	x	x	x	x	x	14.2945	x	x	x
scheelite_80	81	22.2392	x	x	x	x	x	x	x	x	14.1767	x	x	x
scheelite_81	82	22.4109	x	x	x	x	x	x	x	x	14.1142	x	x	x
scheelite_82	83	22.2896	x	x	x	x	x	x	x	x	14.027	x	x	x
scheelite_83	84	22.1121	x	x	x	x	x	x	x	x	14.061	x	x	x
scheelite_84	85	22.2952	x	x	x	x	x	x	x	x	14.1056	x	x	x
scheelite_85	86	22.1299	x	x	x	x	x	x	x	x	13.9922	x	x	x

scheelite_86	87	21.689	x	x	x	x	x	x	x	x	13.7518	x	x	x
scheelite_87	88	21.7812	x	x	x	x	x	x	x	x	14.14	x	x	x
scheelite_88	89	21.5584	x	x	x	x	x	x	x	x	14.0707	x	x	x
scheelite_89	90	22.4685	x	x	x	x	x	x	x	x	14.191	x	x	x
scheelite_90	91	22.1285	x	x	x	x	x	x	x	x	14.0968	x	x	x
scheelite_91	92	22.2611	x	x	x	x	x	x	x	x	14.3593	x	x	x
scheelite_92	93	22.2785	x	x	x	x	x	x	x	x	14.4578	x	x	x
scheelite_93	94	22.2432	x	x	x	x	x	x	x	x	14.3214	x	x	x
scheelite_94	95	22.2906	x	x	x	x	x	x	x	x	14.2945	x	x	x
scheelite_95	96	22.1727	x	x	x	x	x	x	x	x	13.9266	x	x	x
scheelite_96	97	22.3239	x	x	x	x	x	x	x	x	14.2689	x	x	x
scheelite_97	98	22.0869	x	x	x	x	x	x	x	x	13.8156	x	x	x
scheelite_98	99	22.1278	x	x	x	x	x	x	x	x	14.1231	x	x	x
scheelite_99	100	22.2374	x	x	x	x	x	x	x	x	14.0783	x	x	x
scheelite_100	101	22.0695	x	x	x	x	x	x	x	x	14.1119	x	x	x
scheelite_40-22	23	22.1312	x	x	x	x	x	x	x	x	13.8337	x	x	x
scheelite_40-23	24	22.2199	x	x	x	x	x	x	x	x	14.1278	x	x	x

scheelite_40-24	25	22.4813	x	x	x	x	x	x	x	x	14.4351	x	x	x
scheelite_40-25	26	22.2291	x	x	x	x	x	x	x	x	14.1474	x	x	x
scheelite_40-26	27	22.2203	x	x	x	x	x	x	x	x	14.3615	x	x	x
scheelite_40-27	28	21.9843	x	x	x	x	x	x	x	x	14.0164	x	x	x
scheelite_40-28	29	22.0346	x	x	x	x	x	x	x	x	13.9239	x	x	x
scheelite_40-29	30	22.1721	x	x	x	x	x	x	x	x	14.0092	x	x	x
scheelite_40-30	31	21.8284	x	x	x	x	x	x	x	x	13.6873	x	x	x
scheelite_40-31	32	22.1456	x	x	x	x	x	x	x	x	14.0477	x	x	x
scheelite_40-32	33	22.3007	x	x	x	x	x	x	x	x	14.2541	x	x	x
scheelite_40-33	34	22.0494	x	x	x	x	x	x	x	x	13.9499	x	x	x
scheelite_40-34	35	22.2387	x	x	x	x	x	x	x	x	14.1137	x	x	x
scheelite_40-35	36	22.3153	x	x	x	x	x	x	x	x	14.1643	x	x	x
scheelite_40-36	37	22.2979	x	x	x	x	x	x	x	x	14.1709	x	x	x
scheelite_40-38	39	22.0578	x	x	x	x	x	x	x	x	14.0171	x	x	x
scheelite_40-39	40	21.9828	x	x	x	x	x	x	x	x	13.8676	x	x	x
scheelite_40	41	22.2079	x	x	x	x	x	x	x	x	14.2532	x	x	x
scheelite_40-40	42	22.4206	x	x	x	x	x	x	x	x	14.1766	x	x	x

scheelite_41	43	22.2267	x	x	x	x	x	x	x	x	13.9057	x	x	x
scheelite_42	44	21.8826	x	x	x	x	x	x	x	x	14.2369	x	x	x
scheelite_43	45	21.8837	x	x	x	x	x	x	x	x	14.0009	x	x	x
scheelite_44	46	22.3886	x	x	x	x	x	x	x	x	14.2618	x	x	x
scheelite_45	47	22.0586	x	x	x	x	x	x	x	x	14.0587	x	x	x
scheelite_46	48	22.0523	x	x	x	x	x	x	x	x	13.856	x	x	x
scheelite_47	49	22.0846	x	x	x	x	x	x	x	x	13.8309	x	x	x
scheelite_48	50	21.134	x	x	x	x	x	x	x	x	13.3121	x	x	x
scheelite_49	51	22.159	x	x	x	x	x	x	x	x	13.864	x	x	x
scheelite_50	52	22.0672	x	x	x	x	x	x	x	x	14.0356	x	x	x
scheelite_51	53	21.5099	x	x	x	x	x	x	x	x	12.9577	x	x	x
scheelite_52	54	21.3877	x	x	x	x	x	x	x	x	12.9648	x	x	x
scheelite_53	55	22.0734	x	x	x	x	x	x	x	x	14.241	x	x	x
scheelite_54	56	22.1587	x	x	x	x	x	x	x	x	13.9695	x	x	x
scheelite_55	57	20.5465	x	x	x	x	x	x	x	x	13.1666	x	x	x
scheelite_56	58	20.1566	x	x	x	x	x	x	x	x	13.0162	x	x	x
scheelite_57	59	21.9222	x	x	x	x	x	x	x	x	14.2022	x	x	x

scheelite_58	60	21.9755	x	x	x	x	x	x	x	x	14.1163	x	x	x
scheelite_59	61	22.0459	x	x	x	x	x	x	x	x	14.0601	x	x	x
scheelite_60	62	22.063	x	x	x	x	x	x	x	x	14.1416	x	x	x
scheelite_62	64	22.5652	x	x	x	x	x	x	x	x	14.0117	x	x	x
scheelite_63	65	21.9726	x	x	x	x	x	x	x	x	14.1	x	x	x
scheelite_65	66	21.9747	x	x	x	x	x	x	x	x	14.0335	x	x	x
scheelite_66	67	21.8175	x	x	x	x	x	x	x	x	14.0391	x	x	x
scheelite_67	68	17.0687	x	x	x	x	x	x	x	x	11.7389	x	x	x
scheelite_68	69	22.177	x	x	x	x	x	x	x	x	14.3287	x	x	x
scheelite_69	70	22.1178	x	x	x	x	x	x	x	x	14.0385	x	x	x
scheelite_70	71	22.163	x	x	x	x	x	x	x	x	14.1221	x	x	x
scheelite_71	72	20.7442	x	x	x	x	x	x	x	x	13.0068	x	x	x
Scheelite_SE_1	466	22.8698	0.1126	0.0187	0.0032	0.0001	0.0001	0.0001	0.0001	0.0001	14.474	0.0387	0.0227	0.0294
Scheelite_SE_2	467	22.7383	0.1502	0.0002	0.0001	0.0054	0.0001	0.0001	0.0001	0.0331	14.3986	0.0244	0.0001	0.04
Scheelite_SE_3	468	22.8888	0.1198	0.0112	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.531	0.0001	0.0059	0.0001
Scheelite_SE_4	469	22.4397	0.0923	0.0219	0.0011	0.0001	0.0001	0.0001	0.0001	0.0001	14.1095	0.0394	0.0001	0.0399
Scheelite_SE_5	470	22.5211	0.2369	0.0022	0.0001	0.0043	0.0001	0.0001	0.02	0.0038	14.3609	0.0001	0.003	0.0337

Scheelite_SE_6	471	22.979	0.0475	0.019	0.0001	0.0001	0.0001	0.0001	0.0001	0.006	14.2742	0.0415	0.0001	0.0525
Scheelite_SE_7	472	22.4424	0.1098	0.0143	0.0157	0.0001	0.0001	0.0001	0.0017	0.0008	14.3241	0.0072	0.0001	0.0001
Scheelite_SE_8	473	22.8558	0.1184	0.0002	0.0076	0.0001	0.0001	0.0001	0.015	0.0068	14.4684	0.0007	0.0198	0.0378
Scheelite_SE_9	474	22.6748	0.1185	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.5416	0.0001	0.0001	0.0126
Scheelite_SE_10	475	22.5066	0.17	0.0039	0.014	0.0047	0.0001	0.0001	0.0083	0.0008	14.0659	0.0064	0.0001	0.0001
Scheelite_SE_11	476	22.6471	0.1153	0.0002	0.0022	0.0001	0.0001	0.0001	0.0001	0.0001	14.2186	0.0001	0.0109	0.0273
Scheelite_SE_12	477	22.5256	0.1095	0.0111	0.0001	0.0648	0.0001	0.0001	0.0332	0.0429	14.0275	0.0001	0.0001	0.179
Scheelite_SE_13	478	22.6026	0.1776	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0233	14.3752	0.0001	0.0059	0.0189
Scheelite_SE_14	479	22.3928	0.0003	0.0002	0.0066	0.0001	0.0001	0.0001	0.0001	0.0023	10.1219	0.0064	0.0001	2.4307
Scheelite_SE_15	480	22.8469	0.1284	0.0002	0.0001	0.0036	0.0001	0.0001	0.0166	0.0083	14.4149	0.048	0.0001	0.1115
Scheelite_SE_16	481	23.0601	0.1675	0.0002	0.0001	0.0259	0.0001	0.0001	0.0149	0.0113	14.2974	0.0057	0.003	0.1455
Scheelite_SE_17	482	22.5817	0.2136	0.0038	0.0001	0.0014	0.0001	0.0001	0.0001	0.0001	14.3066	0.0323	0.0069	0.1516
Scheelite_SE_18	483	23.209	0.0833	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.402	0.015	0.0001	0.1241
Scheelite_SE_19	484	22.6495	0.1674	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.018	14.4879	0.0001	0.003	0.0969
Scheelite_SE_20	485	22.3388	0.0818	0.0002	0.0232	0.037	0.0001	0.0001	0.0099	0.0232	12.6626	0.0001	0.0049	1.4181
Scheelite_SE_21	486	22.7808	0.1184	0.0145	0.0001	0.0076	0.0001	0.0001	0.0083	0.0376	14.4568	0.0001	0.0079	0.04
Scheelite_SE_22	487	22.886	0.0835	0.0002	0.0001	0.0061	0.0001	0.0001	0.0001	0.0001	14.1897	0.0258	0.0069	0.0001

Scheelite_SE_23	488	22.7883	0.0621	0.004	0.0005	0.0001	0.0001	0.0001	0.0433	0.0158	14.5146	0.0001	0.0001	0.0189
Scheelite_SE_24	489	22.8381	0.0289	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.4658	0.0258	0.0237	0.0001
Scheelite_SE_25	490	22.7984	0.0462	0.0002	0.0001	0.0007	0.0001	0.0001	0.015	0.009	14.501	0.0086	0.0208	0.0084
Scheelite_SE_26	491	22.6868	0.0621	0.0161	0.0001	0.0001	0.0001	0.0001	0.0001	0.0301	14.3601	0.0229	0.0178	0.021
Scheelite_SE_27	492	22.8475	0.1008	0.0002	0.0001	0.0242	0.0001	0.0001	0.0001	0.003	14.3558	0.0001	0.0001	0.0001
Scheelite_SE_28	493	22.7629	0.1093	0.0147	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.3968	0.0001	0.0001	0.0001
Scheelite_SE_29	494	22.6354	0.1403	0.0002	0.0173	0.0001	0.0001	0.0001	0.0001	0.0105	14.5923	0.0001	0.0001	0.0001
Scheelite_SE_30	495	22.5744	0.1705	0.0002	0.0027	0.0001	0.0001	0.0001	0.0001	0.0001	14.5144	0.0001	0.0001	0.0001
Scheelite_SE_31	496	22.6014	0.1273	0.0496	0.0001	0.0001	0.0001	0.0001	0.0266	0.0001	14.4817	0.0344	0.0099	0.061
Scheelite_SE_32	497	22.6877	0.0953	0.0002	0.0001	0.0001	0.0001	0.0001	0.0067	0.0001	14.397	0.0194	0.0001	0.0001
Scheelite_SE_33	498	22.9673	0.2127	0.0109	0.0011	0.0001	0.0001	0.0001	0.0116	0.0001	14.2426	0.0001	0.0001	0.0001
Scheelite_SE_34	499	22.81	0.1456	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.3194	0.0007	0.0001	0.0315
Scheelite_SE_35	500	22.7976	0.0838	0.0002	0.0001	0.0001	0.0001	0.0001	0.02	0.0001	14.4368	0.0001	0.0001	0.0946
Scheelite_SE_36	501	22.8766	0.0864	0.0002	0.0146	0.0001	0.0001	0.0001	0.0001	0.0001	14.1477	0.0001	0.0178	0.0273
Scheelite_SE_37	502	22.6075	0.0534	0.0002	0.0011	0.0001	0.0001	0.0001	0.0166	0.021	14.3451	0.033	0.0001	0.0252
Scheelite_SE_38	503	22.8166	0.0967	0.0002	0.0103	0.0001	0.0001	0.0001	0.0382	0.0173	14.4555	0.0001	0.0001	0.0189
Scheelite_SE_39	504	22.7505	0.1834	0.0002	0.0001	0.0001	0.0001	0.0001	0.0083	0.0001	14.4659	0.0021	0.0001	0.0799

Scheelite_SE_40	505	22.9576	0.1514	0.0002	0.0001	0.0119	0.0001	0.0001	0.0183	0.0008	14.4014	0.0001	0.0001	0.0441
Scheelite_SE_41	506	22.7339	0.114	0.0002	0.02	0.0007	0.0001	0.0001	0.0001	0.0001	14.3274	0.0001	0.0001	0.0798
Scheelite_SE_42	507	22.433	0.1184	0.0084	0.0001	0.0001	0.0001	0.0001	0.0199	0.024	14.3399	0.0001	0.0001	0.0001
Scheelite_SE_43	508	22.6872	0.0692	0.0002	0.0001	0.0087	0.0001	0.0001	0.0001	0.0001	14.3397	0.0544	0.0198	0.0378
Scheelite_SE_44	509	22.76	0.1544	0.0002	0.0001	0.0022	0.0001	0.0001	0.0017	0.006	14.3715	0.0001	0.0001	0.0252
Scheelite_SE_45	510	22.8159	0.1484	0.0002	0.0049	0.0176	0.0001	0.0001	0.015	0.0158	14.3256	0.02	0.0001	0.0001
Scheelite_SE_46	511	22.6888	0.0663	0.0002	0.0081	0.0007	0.0001	0.0001	0.0017	0.0001	14.2693	0.0079	0.0001	0.0357
Scheelite_SE_47	512	22.4646	0.0594	0.0002	0.0011	0.0001	0.0001	0.0001	0.0001	0.0045	14.4676	0.051	0.0109	0.0063
Scheelite_SE_48	513	22.7419	0.1745	0.0129	0.0151	0.0001	0.0001	0.0001	0.005	0.0001	14.3748	0.0014	0.0001	0.0001
Scheelite_SE_49	514	22.9677	0.1369	0.0023	0.0059	0.0119	0.0001	0.0001	0.0001	0.003	14.3586	0.01	0.0001	0.0273
Scheelite_SE_50	515	22.6367	0.1828	0.0002	0.0001	0.008	0.0001	0.0001	0.0001	0.0001	14.2782	0.0416	0.0001	0.1054
Scheelite_SE_51	516	22.746	0.0924	0.0002	0.0211	0.0001	0.0001	0.0001	0.0001	0.0001	14.3747	0.0001	0.0001	0.0568
Scheelite_SE_52	517	22.9854	0.0606	0.0002	0.0001	0.0001	0.0001	0.0001	0.025	0.0001	14.4674	0.0315	0.0001	0.0001
Scheelite_SE_53	518	22.4968	0.1345	0.0002	0.0001	0.0001	0.0001	0.0001	0.015	0.0038	14.4917	0.0014	0.0059	0.0001
Scheelite_SE_54	519	22.3638	0.1647	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.3353	0.0001	0.0208	0.0001
Scheelite_SE_55	520	22.7014	0.0663	0.0002	0.0001	0.0001	0.0001	0.0001	0.0383	0.0143	14.2795	0.0001	0.004	0.0021
Scheelite_SE_56	521	22.9564	0.1125	0.0127	0.0001	0.0001	0.0001	0.0001	0.0001	0.0008	14.4884	0.0136	0.0001	0.0001

Scheelite_SE_57	522	22.7302	0.0952	0.0002	0.0032	0.0061	0.0001	0.0001	0.0017	0.0075	14.2203	0.0001	0.003	0.0147
Scheelite_SE_58	523	22.6239	0.0606	0.0288	0.0097	0.0001	0.0001	0.0001	0.0033	0.0001	14.4091	0.0001	0.0001	0.0001
Scheelite_SC_1	524	22.5735	0.2092	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.2444	0.0036	0.0001	0.0001
Scheelite_SC_2	525	22.8062	0.2022	0.0045	0.0001	0.0177	0.0001	0.0001	0.0083	0.0001	14.5796	0.0431	0.0228	0.0001
Scheelite_SC_3	526	22.5641	0.208	0.0002	0.0108	0.0001	0.0001	0.0001	0.0216	0.0001	14.4004	0.0394	0.0168	0.0001
Scheelite_SC_4	527	23.0035	0.1369	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.3101	0.0251	0.0001	0.0126
Scheelite_SC_5	528	22.8509	0.0692	0.0002	0.0001	0.0076	0.0001	0.0001	0.0001	0.0128	14.275	0.0215	0.0148	0.021
Scheelite_SC_6	529	22.7709	0.1197	0.0002	0.0043	0.0083	0.0001	0.0001	0.0001	0.0015	14.3124	0.0251	0.0001	0.0001
Scheelite_SC_7	530	22.7214	0.1225	0.0035	0.0103	0.0047	0.0001	0.0001	0.015	0.006	14.3026	0.0001	0.0001	0.0001
Scheelite_SC_8	531	22.5855	0.094	0.0002	0.0001	0.0061	0.0001	0.0001	0.0033	0.006	14.4462	0.0001	0.0178	0.0042
Scheelite_SC_9	532	22.6598	0.0994	0.0303	0.0001	0.0001	0.0001	0.0001	0.0001	0.0068	14.2143	0.0001	0.0001	0.0126
Scheelite_SC_10	533	22.8918	0.1183	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.3618	0.0014	0.0198	0.0063
Scheelite_SC_11	534	22.8959	0.2219	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0105	14.3219	0.0001	0.0001	0.0231
Scheelite_SC_12	535	22.4541	0.1112	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.2919	0.0001	0.0001	0.0001
Scheelite_SC_13	536	22.6353	0.1097	0.0002	0.0027	0.0155	0.0001	0.0001	0.015	0.0083	14.4217	0.0001	0.0119	0.0001
Scheelite_SC_14	537	22.6093	0.1099	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0241	14.4419	0.0001	0.0069	0.0189
Scheelite_SC_15	538	22.7588	0.1256	0.0057	0.0001	0.0001	0.0001	0.0001	0.0449	0.0001	14.462	0.0057	0.0001	0.0084

Scheelite_SC_16	539	22.9816	0.1944	0.0188	0.0001	0.0209	0.0001	0.0001	0.0233	0.0038	14.2609	0.0001	0.0001	0.0399
Scheelite_SC_17	540	22.4471	0.0506	0.0069	0.0001	0.0025	0.0001	0.0001	0.0001	0.0001	14.309	0.0043	0.0001	0.0547
Scheelite_SC_18	541	22.369	0.1608	0.0269	0.0444	0.0001	0.0001	0.0001	0.0199	0.018	14.5662	0.0043	0.0099	0.0105
Scheelite_SC_19	542	22.7634	0.2278	0.0002	0.0162	0.0001	0.0001	0.0001	0.0116	0.0256	14.3163	0.0001	0.0001	0.0651
Scheelite_SC_20	543	22.8587	0.248	0.0002	0.0001	0.0097	0.0001	0.0001	0.0183	0.0053	14.4195	0.0065	0.001	0.0001
Scheelite_SC_21	544	22.7908	0.0003	0.0002	0.0086	0.0001	0.0001	0.0001	0.0166	0.0173	14.4792	0.0272	0.0001	0.0946
Scheelite_SC_22	545	22.7352	0.0981	0.0002	0.0281	0.005	0.0001	0.0001	0.0001	0.0001	14.2795	0.0186	0.0001	0.0001
Scheelite_SC_23	546	22.8799	0.124	0.0002	0.007	0.0001	0.0001	0.0001	0.0001	0.0001	14.4292	0.0021	0.0001	0.0001
Scheelite_SC_24	547	22.6178	0.0332	0.0002	0.0001	0.0001	0.0001	0.0001	0.0183	0.009	14.3128	0.0602	0.0079	0.0001
Scheelite_SC_25	548	22.3646	0.1778	0.0195	0.0001	0.0087	0.0001	0.0001	0.0001	0.0001	14.4001	0.0001	0.0001	0.0021
Scheelite_SC_26	549	22.6669	0.1069	0.0002	0.0001	0.013	0.0001	0.0001	0.0116	0.012	14.4048	0.0001	0.0001	0.0315
Scheelite_SC_27	550	22.5529	0.039	0.0002	0.0001	0.0001	0.0001	0.0001	0.0017	0.0001	14.3474	0.0122	0.0001	0.0105
Scheelite_SC_28	551	22.4945	0.0679	0.0002	0.0065	0.0001	0.0001	0.0001	0.0017	0.0001	14.3468	0.0001	0.0001	0.0001
Scheelite_SC_29	552	22.9443	0.1341	0.0182	0.0001	0.0018	0.0001	0.0001	0.0133	0.015	14.3509	0.0001	0.0138	0.0001
Scheelite_SC_30	553	22.6118	0.1098	0.0002	0.0081	0.0234	0.0001	0.0001	0.0001	0.003	14.4571	0.0001	0.0001	0.0778
Scheelite_SC_31	554	22.5413	0.0822	0.0002	0.0038	0.0001	0.0001	0.0001	0.0001	0.0001	14.1648	0.0036	0.0178	0.0001
Scheelite_SC_32	555	22.8622	0.0794	0.0002	0.0022	0.0001	0.0001	0.0001	0.0001	0.0001	14.4967	0.0001	0.0217	0.0001

Scheelite_SC_33	556	22.9745	0.1052	0.0002	0.0113	0.014	0.0001	0.0001	0.0001	0.012	14.3507	0.0064	0.0001	0.0063
Scheelite_SC_34	557	22.7984	0.1484	0.0173	0.0162	0.0176	0.0001	0.0001	0.0183	0.0083	14.2376	0.0001	0.0138	0.0357
Scheelite_SC_35	558	22.7164	0.1226	0.0002	0.0027	0.0001	0.0001	0.0001	0.0001	0.0001	14.3844	0.0158	0.0001	0.0001
Scheelite_SC_36	559	22.832	0.098	0.005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.2992	0.0093	0.0128	0.0001
Scheelite_SC_37	560	22.1983	0.0549	0.0002	0.0001	0.0068	0.0001	0.0001	0.0001	0.0001	14.2606	0.0244	0.0001	0.0001
Scheelite_SC_38	561	22.6996	0.0708	0.0002	0.0032	0.0209	0.0001	0.0001	0.0001	0.012	14.452	0.0337	0.0001	0.0421
Scheelite_SC_39	562	22.6278	0.081	0.0002	0.0001	0.0001	0.0001	0.0001	0.0249	0.0068	14.4355	0.0739	0.0119	0.0001
Scheelite_SC_40	563	22.8668	0.085	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.006	14.2999	0.0107	0.0001	0.0126
Scheelite_SC_41	564	22.6166	0.0938	0.0065	0.0001	0.0001	0.0001	0.0001	0.0001	0.0075	14.2979	0.0143	0.0001	0.0294
Scheelite_SC_42	565	22.7266	0.2248	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.3301	0.0001	0.0001	0.0001
Scheelite_SC_43	566	22.8949	0.179	0.0168	0.0124	0.0001	0.0001	0.0001	0.0001	0.0001	14.448	0.0272	0.0001	0.0421
Scheelite_SC_44	567	22.3647	0.0014	0.0135	0.007	0.0079	0.0001	0.0001	0.0083	0.006	13.7304	0.0001	0.0001	0.0001
Scheelite_SC_45	568	22.6262	0.1283	0.0002	0.0022	0.0068	0.0001	0.0001	0.0001	0.0376	14.2097	0.0143	0.0079	0.0294
Scheelite_SC_46	569	22.9728	0.0578	0.0047	0.007	0.0001	0.0001	0.0001	0.0001	0.0105	14.5128	0.0057	0.0001	0.0315
Scheelite_SC_47	570	22.7112	0.1081	0.0153	0.0189	0.0001	0.0001	0.0001	0.03	0.0001	14.2589	0.0001	0.0001	0.0001
Scheelite_SC_48	571	22.6349	0.0404	0.0158	0.0016	0.0001	0.0001	0.0001	0.0001	0.0001	14.3151	0.0001	0.0178	0.0357
Scheelite_SC_49	572	22.7719	0.1846	0.0244	0.0027	0.0001	0.0001	0.0001	0.0001	0.0001	14.3835	0.0001	0.0049	0.0001

Scheelite_SC_50	573	22.8048	0.2137	0.0234	0.0027	0.0001	0.0001	0.0001	0.0001	0.0226	14.3695	0.0001	0.0079	0.0736
Scheelite_SC_51	574	22.7787	0.0636	0.0002	0.0001	0.0076	0.0001	0.0001	0.0001	0.0001	14.6339	0.0001	0.0001	0.0001
Scheelite_SC_52	575	22.8705	0.0952	0.0002	0.0022	0.0115	0.0001	0.0001	0.015	0.0001	14.3893	0.0093	0.0385	0.0126
Scheelite_SC_53	576	22.6748	0.215	0.0002	0.0001	0.0065	0.0001	0.0001	0.0001	0.0001	14.3752	0.0001	0.0001	0.0336
Scheelite_SC_54	577	21.8735	0.085	0.0002	0.014	0.0001	0.0001	0.0001	0.0001	0.0001	13.6939	0.0179	0.0069	0.0126
Scheelite_SC_55	578	22.6703	0.1053	0.0002	0.0097	0.0086	0.0001	0.0001	0.0266	0.0001	14.3372	0.0358	0.0089	0.0147
Scheelite_SC_56	579	22.7414	0.1332	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0069	14.4515	0.0138	0.0001	0.0021
Scheelite_SC_57	580	22.2939	0.1055	0.0078	0.0001	0.0259	0.0001	0.0001	0.0001	0.0023	14.3259	0.0001	0.0079	0.021
Scheelite_SC_58	581	22.4001	0.1244	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.3471	0.0682	0.0001	0.0001
Scheelite_SC_59	582	22.6124	0.1433	0.0014	0.0001	0.0001	0.0001	0.0001	0.0001	0.0113	14.6269	0.023	0.0001	0.0505
Scheelite_SC_60	583	22.5522	0.1108	0.0002	0.0001	0.0001	0.0001	0.0001	0.0083	0.0001	14.3074	0.0001	0.0001	0.0251
Scheelite_SC_61	584	22.1385	0.1664	0.0002	0.0001	0.0001	0.0001	0.0001	0.015	0.003	14.105	0.0001	0.0367	0.0105
Scheelite_SC_62	585	22.2862	0.0979	0.0002	0.0059	0.0001	0.0001	0.0001	0.005	0.009	13.9467	0.0001	0.0001	0.0524
Scheelite_SC_63	586	22.3947	0.0003	0.0002	0.013	0.0001	0.0001	0.0001	0.0001	0.0211	14.4668	0.0122	0.004	0.0169
Scheelite_SC_64	587	22.6936	0.0779	0.0059	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.3221	0.0029	0.0001	0.0168
Scheelite_SC_65	588	22.7139	0.1256	0.0067	0.014	0.0001	0.0001	0.0001	0.0116	0.0001	14.4127	0.0122	0.0001	0.0001
Scheelite_SC_66	589	22.8171	0.1265	0.0002	0.0022	0.0001	0.0001	0.0001	0.0001	0.015	14.3158	0.0001	0.0001	0.0272

Scheelite_SC_67	590	22.8603	0.0622	0.0002	0.0054	0.0069	0.0001	0.0001	0.0001	0.0249	14.3327	0.0001	0.0001	0.0211
Scheelite_SC_68	591	22.4889	0.1184	0.0002	0.0001	0.0018	0.0001	0.0001	0.0001	0.0001	14.4681	0.0029	0.0001	0.0063
Scheelite_SC_69	592	22.7513	0.2251	0.0002	0.0146	0.0001	0.0001	0.0001	0.0001	0.0001	14.5814	0.0001	0.0001	0.0001
Scheelite_SC_70	593	22.7973	0.0506	0.0075	0.0001	0.0001	0.0001	0.0001	0.0001	0.0038	14.5053	0.0136	0.0336	0.0063
Scheelite_SC_71	594	22.2203	0.1643	0.0088	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.2087	0.0201	0.0001	0.0001
Scheelite_SC_72	595	22.6397	0.0635	0.0002	0.0049	0.0018	0.0001	0.0001	0.0033	0.0001	14.3631	0.0001	0.0001	0.0021
Scheelite_SC_73	596	22.5786	0.1303	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.6579	0.0065	0.0001	0.0337
Scheelite_SC_74	597	22.6839	0.1212	0.0002	0.0001	0.0234	0.0001	0.0001	0.0083	0.0001	14.2787	0.0001	0.0001	0.0189
Scheelite_SC_75	598	22.676	0.1068	0.0002	0.0065	0.0001	0.0001	0.0001	0.0233	0.0098	14.2802	0.0001	0.0001	0.0126
Scheelite_SC_76	599	22.8413	0.0982	0.0128	0.0119	0.0001	0.0001	0.0001	0.0216	0.0001	14.5478	0.0001	0.0001	0.0001
Scheelite_SC_77	600	22.5632	0.1269	0.0002	0.0157	0.0001	0.0001	0.0001	0.0001	0.0181	14.1509	0.0165	0.0069	0.0021
Scheelite_SC_78	601	22.5314	0.1548	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0203	14.4337	0.0108	0.0001	0.0717
Scheelite_SC_79	602	22.7009	0.0476	0.0011	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.1599	0.0001	0.0049	0.0168
Scheelite_SC_80	603	22.4106	0.0623	0.0002	0.0032	0.0001	0.0001	0.0001	0.0133	0.0001	14.4122	0.0007	0.004	0.0632
Scheelite_SC_81	604	22.7165	0.1053	0.0002	0.0113	0.0083	0.0001	0.0001	0.0083	0.0001	14.2011	0.0001	0.001	0.0588
Scheelite_SC_82	605	22.4069	0.0723	0.0105	0.0001	0.0001	0.0001	0.0001	0.0001	0.0286	14.3357	0.0001	0.0198	0.0126
Scheelite_SC_83	606	22.6066	0.1374	0.0002	0.0011	0.0001	0.0001	0.0001	0.03	0.0113	14.3594	0.0251	0.0001	0.0926

Scheelite_SC_84	607	22.4933	0.1228	0.0002	0.0001	0.0144	0.0001	0.0001	0.0083	0.012	14.1969	0.0043	0.0001	0.04
Scheelite_SC_85	608	22.7466	0.1634	0.0011	0.0001	0.0025	0.0001	0.0001	0.0067	0.0075	14.5134	0.005	0.0069	0.0253
Scheelite_SC_86	609	22.3027	0.0566	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0279	14.4182	0.0553	0.001	0.0865
Scheelite_SC_87	610	22.4072	0.0955	0.0002	0.0157	0.0001	0.0001	0.0001	0.0001	0.0001	14.2356	0.0359	0.0001	0.1326
Scheelite_SC_88	611	22.8004	0.1849	0.0055	0.0038	0.0166	0.0001	0.0001	0.02	0.0001	14.4246	0.0001	0.0139	0.0295
Scheelite_SC_89	612	22.761	0.0997	0.0002	0.0001	0.0029	0.0001	0.0001	0.0001	0.0008	14.3834	0.0079	0.0218	0.0399
Scheelite_SC_90	613	22.7393	0.1171	0.0186	0.0162	0.017	0.0001	0.0001	0.0133	0.0128	14.4247	0.0122	0.0001	0.0736
Scheelite_SC_91	614	22.4235	0.136	0.0088	0.0146	0.0018	0.0001	0.0001	0.0017	0.0001	14.4776	0.0001	0.0001	0.0001
Scheelite_SC_92	615	22.4187	0.0448	0.0346	0.0001	0.0001	0.0001	0.0001	0.005	0.0001	14.0616	0.0001	0.0079	0.1513
Scheelite_SC_93	616	22.5993	0.0924	0.0002	0.0001	0.0001	0.0001	0.0001	0.0033	0.0196	14.2521	0.0001	0.0178	0.0001
Scheelite_SC_94	617	22.5252	0.1789	0.0077	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.1784	0.0022	0.0001	0.0631
Scheelite_SC_95	618	22.7201	0.0347	0.0002	0.0124	0.0018	0.0001	0.0001	0.02	0.0001	14.3157	0.0001	0.0208	0.0001
Scheelite_SC_96	619	22.3245	0.1341	0.0002	0.0103	0.0068	0.0001	0.0001	0.0033	0.0001	13.9603	0.0108	0.0001	0.0001
Scheelite_SC_97	620	22.6407	0.1575	0.0227	0.0001	0.0001	0.0001	0.0001	0.01	0.0001	14.3771	0.0001	0.0001	0.0001
Scheelite_SC_98	621	22.7726	0.1775	0.0002	0.0135	0.0043	0.0001	0.0001	0.0001	0.0248	14.2009	0.0115	0.0316	0.0736
Scheelite_SC_99	622	22.7742	0.1543	0.0002	0.0108	0.0001	0.0001	0.0001	0.0001	0.0211	14.2186	0.0215	0.0316	0.0001
Scheelite_SC_100	623	22.5389	0.1229	0.0194	0.0108	0.0173	0.0001	0.0001	0.0266	0.0001	14.3856	0.0172	0.0001	0.0147

Scheelite_SC_101	624	22.665	0.1475	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0173	14.3362	0.0624	0.002	0.0442
Scheelite_SC_102	625	22.5769	0.1648	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	14.4566	0.0001	0.002	0.0021
Scheelite_SC_103	626	22.3996	0.0188	0.008	0.0076	0.0018	0.0001	0.0001	0.0033	0.0113	14.4495	0.0093	0.0001	0.0358
1	1	17.0075	x	x	x	x	x	x	x	x	14.2553	x	x	0.0616
2	2	16.8662	x	x	x	x	x	x	x	x	14.2483	x	x	0.0287
scheelite_1	3	16.8546	x	x	x	x	x	x	x	x	13.9693	x	x	0.0245
scheelite_2	4	16.3354	x	x	x	x	x	x	x	x	13.6601	x	x	0.0102
scheelite_3	5	16.4451	x	x	x	x	x	x	x	x	14.3657	x	x	0.0658
scheelite_4	6	16.6601	x	x	x	x	x	x	x	x	14.0231	x	x	0.0001
scheelite_5	7	16.7855	x	x	x	x	x	x	x	x	14.3195	x	x	0.0185
scheelite_6	8	16.8058	x	x	x	x	x	x	x	x	14.1917	x	x	0.0307
scheelite_7	9	16.6245	x	x	x	x	x	x	x	x	14.1172	x	x	0.0103
scheelite_8	10	16.9202	x	x	x	x	x	x	x	x	14.1563	x	x	0.0328
scheelite_9	11	16.8162	x	x	x	x	x	x	x	x	14.1334	x	x	0.0001
scheelite_10	12	16.0143	x	x	x	x	x	x	x	x	13.5302	x	x	0.0143
scheelite_11	13	16.6369	x	x	x	x	x	x	x	x	13.9947	x	x	0.0001
scheelite_12	14	16.7074	x	x	x	x	x	x	x	x	14.1213	x	x	0.0001

scheelite_13	15	16.8575	x	x	x	x	x	x	x	x	14.295	x	x	0.0001
scheelite_14	16	6.331	x	x	x	x	x	x	x	x	15.8504	x	x	0.0001
scheelite_15	17	16.9041	x	x	x	x	x	x	x	x	14.2841	x	x	0.0001
scheelite_16	18	16.7782	x	x	x	x	x	x	x	x	14.2175	x	x	0.0001
scheelite_17	19	16.5419	x	x	x	x	x	x	x	x	14.1361	x	x	0.0001
scheelite_18	20	16.7405	x	x	x	x	x	x	x	x	14.1403	x	x	0.0328
scheelite_19	21	16.6163	x	x	x	x	x	x	x	x	13.7779	x	x	0.0001
scheelite_20	22	16.9137	x	x	x	x	x	x	x	x	14.4289	x	x	0.0267
scheelite_21	23	16.9684	x	x	x	x	x	x	x	x	14.1618	x	x	0.0001
scheelite_22	24	16.5422	x	x	x	x	x	x	x	x	14.0033	x	x	0.0246
scheelite_23	25	16.9489	x	x	x	x	x	x	x	x	14.3566	x	x	0.0001
scheelite_24	26	16.3447	x	x	x	x	x	x	x	x	13.7135	x	x	0.0205
scheelite_25	27	16.8839	x	x	x	x	x	x	x	x	14.0685	x	x	0.0001
scheelite_26	28	16.7615	x	x	x	x	x	x	x	x	14.0836	x	x	0.0533
scheelite_27	29	16.6569	x	x	x	x	x	x	x	x	13.6203	x	x	0.2517
scheelite_28	30	16.8109	x	x	x	x	x	x	x	x	14.0705	x	x	0.0143
scheelite_29	31	16.7327	x	x	x	x	x	x	x	x	14.2441	x	x	0.0001

scheelite_30	32	17.0765	x	x	x	x	x	x	x	x	14.1922	x	x	0.0001
scheelite_31	33	16.7238	x	x	x	x	x	x	x	x	13.9919	x	x	0.0574
scheelite_32	34	16.7811	x	x	x	x	x	x	x	x	14.1146	x	x	0.0102
scheelite_33	35	16.9462	x	x	x	x	x	x	x	x	14.1509	x	x	0.0225
scheelite_34	36	16.8954	x	x	x	x	x	x	x	x	14.4071	x	x	0.0472
scheelite_35	37	16.7459	x	x	x	x	x	x	x	x	14.2255	x	x	0.0001
scheelite_36	38	16.6802	x	x	x	x	x	x	x	x	14.0327	x	x	0.0144
scheelite_37	39	16.7886	x	x	x	x	x	x	x	x	14.2183	x	x	0.0001
scheelite_38	40	16.8722	x	x	x	x	x	x	x	x	14.3188	x	x	0.0001
scheelite_39	41	16.7202	x	x	x	x	x	x	x	x	14.1102	x	x	0.0001
scheelite_40	42	17.0106	x	x	x	x	x	x	x	x	14.1406	x	x	0.0001
scheelite_41	43	16.8467	x	x	x	x	x	x	x	x	14.1916	x	x	0.0287
scheelite_42	44	16.9137	x	x	x	x	x	x	x	x	14.2989	x	x	0.0001
scheelite_43	45	16.9823	x	x	x	x	x	x	x	x	14.0425	x	x	0.0001
scheelite_44	46	16.9748	x	x	x	x	x	x	x	x	14.195	x	x	0.002
scheelite_45	47	16.6601	x	x	x	x	x	x	x	x	14.2121	x	x	0.0001
scheelite_46	48	16.9095	x	x	x	x	x	x	x	x	14.2983	x	x	0.0001

scheelite_47	49	16.7973	x	x	x	x	x	x	x	x	14.1273	x	x	0.0082
scheelite_48	50	16.993	x	x	x	x	x	x	x	x	14.2507	x	x	0.0001
scheelite_49	51	16.7019	x	x	x	x	x	x	x	x	14.2214	x	x	0.0001
scheelite_50	52	16.7797	x	x	x	x	x	x	x	x	14.1612	x	x	0.0041
scheelite_51	53	16.8922	x	x	x	x	x	x	x	x	14.286	x	x	0.0164
scheelite_52	54	16.9368	x	x	x	x	x	x	x	x	14.3017	x	x	0.0001
scheelite_53	55	16.7493	x	x	x	x	x	x	x	x	14.2859	x	x	0.0001
scheelite_54	56	16.8379	x	x	x	x	x	x	x	x	14.0484	x	x	0.0061
scheelite_55	57	16.7442	x	x	x	x	x	x	x	x	14.1739	x	x	0.0001
scheelite_56	58	16.9529	x	x	x	x	x	x	x	x	14.2459	x	x	0.0389
scheelite_57	59	16.705	x	x	x	x	x	x	x	x	14.034	x	x	0.0001
scheelite_58	60	16.8429	x	x	x	x	x	x	x	x	13.9311	x	x	0.0512
scheelite_59	61	16.7093	x	x	x	x	x	x	x	x	14.1128	x	x	0.0001
scheelite_60	62	16.9206	x	x	x	x	x	x	x	x	14.2228	x	x	0.0595
scheelite_61	63	16.3452	x	x	x	x	x	x	x	x	13.906	x	x	0.0185
scheelite_62	64	16.5755	x	x	x	x	x	x	x	x	13.8937	x	x	0.0922
scheelite_63	65	12.0473	x	x	x	x	x	x	x	x	11.0587	x	x	0.0331

scheelite_64	66	16.504	x	x	x	x	x	x	x	x	13.8552	x	x	0.0001
scheelite_65	67	16.7711	x	x	x	x	x	x	x	x	14.2466	x	x	0.0533
scheelite_66	68	15.831	x	x	x	x	x	x	x	x	13.8512	x	x	0.0001
scheelite_67	69	16.3109	x	x	x	x	x	x	x	x	13.7136	x	x	0.0001
scheelite_68	70	16.8291	x	x	x	x	x	x	x	x	14.2159	x	x	0.0001
scheelite_69	71	16.7587	x	x	x	x	x	x	x	x	13.9804	x	x	0.0348
scheelite_70	72	16.7585	x	x	x	x	x	x	x	x	14.0908	x	x	0.0001
scheelite_71	73	16.675	x	x	x	x	x	x	x	x	14.0339	x	x	0.0205
scheelite_72	74	17.0258	x	x	x	x	x	x	x	x	14.2127	x	x	0.0635
scheelite_73	75	16.782	x	x	x	x	x	x	x	x	14.1444	x	x	0.0001
scheelite_74	76	16.8708	x	x	x	x	x	x	x	x	14.1473	x	x	0.0205
scheelite_75	77	16.6139	x	x	x	x	x	x	x	x	13.9046	x	x	0.0001
scheelite_76	78	16.6223	x	x	x	x	x	x	x	x	13.9503	x	x	0.0001
scheelite_77	79	16.7437	x	x	x	x	x	x	x	x	14.1187	x	x	0.0001
scheelite_78	80	16.7712	x	x	x	x	x	x	x	x	13.8734	x	x	0.0696
scheelite_79	81	16.7404	x	x	x	x	x	x	x	x	14.2187	x	x	0.0001
scheelite_80	82	5.8978	x	x	x	x	x	x	x	x	6.6233	x	x	0.0339

scheelite_81	83	16.5991	x	x	x	x	x	x	x	x	14.1612	x	x	0.0001
scheelite_82	84	16.9511	x	x	x	x	x	x	x	x	14.2845	x	x	0.0001
scheelite_83	85	16.5226	x	x	x	x	x	x	x	x	13.922	x	x	0.0001
scheelite_84	86	16.5551	x	x	x	x	x	x	x	x	14.0771	x	x	0.0001
scheelite_85	87	16.7158	x	x	x	x	x	x	x	x	13.9487	x	x	0.0001
scheelite_86	88	16.5952	x	x	x	x	x	x	x	x	14.0861	x	x	0.0001
scheelite_87	89	16.8379	x	x	x	x	x	x	x	x	14.1974	x	x	0.0001
scheelite_88	90	16.8417	x	x	x	x	x	x	x	x	14.2037	x	x	0.0001
scheelite_89	91	16.8518	x	x	x	x	x	x	x	x	14.0621	x	x	0.0553
scheelite_90	92	16.8018	x	x	x	x	x	x	x	x	14.015	x	x	0.0001
scheelite_91	93	16.77	x	x	x	x	x	x	x	x	14.1871	x	x	0.0001
scheelite_92	94	16.4186	x	x	x	x	x	x	x	x	13.9149	x	x	0.0451
scheelite_93	95	16.7801	x	x	x	x	x	x	x	x	14.0937	x	x	0.0001
scheelite_94	96	16.8311	x	x	x	x	x	x	x	x	14.1943	x	x	0.0144
scheelite_95	97	16.6345	x	x	x	x	x	x	x	x	14.0321	x	x	0.0082
scheelite_96	98	16.7643	x	x	x	x	x	x	x	x	14.1247	x	x	0.0001
scheelite_97	99	16.9633	x	x	x	x	x	x	x	x	14.071	x	x	0.0001

scheelite_98	100	16.7051	x	x	x	x	x	x	x	x	13.9646	x	x	0.0205
scheelite_99	101	16.6793	x	x	x	x	x	x	x	x	14.1328	x	x	0.0062
scheelite_100	102	16.756	x	x	x	x	x	x	x	x	13.9466	x	x	0.0389

Label	W%(Ti)	W%(Cr)	W%(Mn)	W%(Fe)	W%(Mo)	W%(W)	Ox%(O)	Ox%(F)	Ox%(Na)	Ox%(Mg)	Ox%(Al)	Ox%(Si)
scheelite_40-2	x	x	x	x	0.0222	62.6393	0	x	x	x	x	x
scheelite_40-3	x	x	x	x	0.0002	62.6954	0	x	x	x	x	x
scheelite_40-4	x	x	x	x	0.0388	62.3334	0	x	x	x	x	x
scheelite_40-6	x	x	x	x	0.0499	62.1544	0	x	x	x	x	x
scheelite_40-7	x	x	x	x	0.0943	62.7834	0	x	x	x	x	x
scheelite_40-8	x	x	x	x	0.061	63.2553	0	x	x	x	x	x
scheelite_40-9	x	x	x	x	0.0002	59.0103	0	x	x	x	x	x
scheelite_40-10	x	x	x	x	0.0002	58.8856	0	x	x	x	x	x
scheelite_40-11	x	x	x	x	0.0002	63.212	0	x	x	x	x	x
scheelite_40-12	x	x	x	x	0.0002	61.5788	0	x	x	x	x	x
scheelite_40-13	x	x	x	x	0.0056	63.3719	0	x	x	x	x	x
scheelite_40-14	x	x	x	x	0.05	63.6401	0	x	x	x	x	x

scheelite_40-15	x	x	x	x	0.0002	60.0795	0	x	x	x	x	x
scheelite_40-16	x	x	x	x	0.0002	62.7684	0	x	x	x	x	x
scheelite_40-17	x	x	x	x	0.0055	61.9399	0	x	x	x	x	x
scheelite_40-18	x	x	x	x	0.0002	63.1789	0	x	x	x	x	x
scheelite_40-19	x	x	x	x	0.0388	63.5759	0	x	x	x	x	x
scheelite_40-20	x	x	x	x	0.0388	63.0402	0	x	x	x	x	x
scheelite_72	x	x	x	x	0.2209	63.3095	0	x	x	x	x	x
scheelite_73	x	x	x	x	0.0002	63.37	0	x	x	x	x	x
scheelite_74	x	x	x	x	0.0719	63.886	0	x	x	x	x	x
scheelite_75	x	x	x	x	0.0553	63.7909	0	x	x	x	x	x
scheelite_76	x	x	x	x	0.0002	63.0129	0	x	x	x	x	x
scheelite_77	x	x	x	x	0.1051	63.1596	0	x	x	x	x	x
scheelite_78	x	x	x	x	0.1164	62.5461	0	x	x	x	x	x
scheelite_79	x	x	x	x	0.0002	62.3064	0	x	x	x	x	x
scheelite_80	x	x	x	x	0.0002	63.5091	0	x	x	x	x	x
scheelite_81	x	x	x	x	0.0221	64.2203	0	x	x	x	x	x
scheelite_82	x	x	x	x	0.0166	63.8998	0	x	x	x	x	x

scheelite_83	x	x	x	x	0.0996	63.0087	0	x	x	x	x	x
scheelite_84	x	x	x	x	0.0665	63.7055	0	x	x	x	x	x
scheelite_85	x	x	x	x	0.061	63.2559	0	x	x	x	x	x
scheelite_86	x	x	x	x	0.0002	62.0515	0	x	x	x	x	x
scheelite_87	x	x	x	x	0.0002	61.8111	0	x	x	x	x	x
scheelite_88	x	x	x	x	0.0002	61.0635	0	x	x	x	x	x
scheelite_89	x	x	x	x	0.0277	64.3131	0	x	x	x	x	x
scheelite_90	x	x	x	x	0.0002	63.2075	0	x	x	x	x	x
scheelite_91	x	x	x	x	0.0111	63.293	0	x	x	x	x	x
scheelite_92	x	x	x	x	0.1492	62.9443	0	x	x	x	x	x
scheelite_93	x	x	x	x	0.0002	63.3033	0	x	x	x	x	x
scheelite_94	x	x	x	x	0.083	63.3675	0	x	x	x	x	x
scheelite_95	x	x	x	x	0.0002	63.637	0	x	x	x	x	x
scheelite_96	x	x	x	x	0.1329	63.4384	0	x	x	x	x	x
scheelite_97	x	x	x	x	0.0002	63.478	0	x	x	x	x	x
scheelite_98	x	x	x	x	0.0387	63.0905	0	x	x	x	x	x
scheelite_99	x	x	x	x	0.0665	63.5257	0	x	x	x	x	x

scheelite_100	x	x	x	x	0.0002	62.9585	0	x	x	x	x	x
scheelite_40-22	x	x	x	x	0.0002	63.62	0	x	x	x	x	x
scheelite_40-23	x	x	x	x	0.0002	63.5099	0	x	x	x	x	x
scheelite_40-24	x	x	x	x	0.0887	63.8721	0	x	x	x	x	x
scheelite_40-25	x	x	x	x	0.0111	63.4945	0	x	x	x	x	x
scheelite_40-26	x	x	x	x	0.0002	63.1545	0	x	x	x	x	x
scheelite_40-27	x	x	x	x	0.0055	62.7677	0	x	x	x	x	x
scheelite_40-28	x	x	x	x	0.0277	63.0592	0	x	x	x	x	x
scheelite_40-29	x	x	x	x	0.0665	63.3813	0	x	x	x	x	x
scheelite_40-30	x	x	x	x	0.0222	62.6417	0	x	x	x	x	x
scheelite_40-31	x	x	x	x	0.0002	63.3481	0	x	x	x	x	x
scheelite_40-32	x	x	x	x	0.0002	63.6266	0	x	x	x	x	x
scheelite_40-33	x	x	x	x	0.0002	63.129	0	x	x	x	x	x
scheelite_40-34	x	x	x	x	0.1496	63.3173	0	x	x	x	x	x
scheelite_40-35	x	x	x	x	0.0776	63.6713	0	x	x	x	x	x
scheelite_40-36	x	x	x	x	0.0002	63.7432	0	x	x	x	x	x
scheelite_40-38	x	x	x	x	0.0166	63.0268	0	x	x	x	x	x

scheelite_40-39	x	x	x	x	0.0222	62.9577	0	x	x	x	x	x
scheelite_40	x	x	x	x	0.0002	63.2723	0	x	x	x	x	x
scheelite_40-40	x	x	x	x	0.1441	63.9284	0	x	x	x	x	x
scheelite_41	x	x	x	x	0.0002	63.8758	0	x	x	x	x	x
scheelite_42	x	x	x	x	0.0002	62.0511	0	x	x	x	x	x
scheelite_43	x	x	x	x	0.0002	62.4164	0	x	x	x	x	x
scheelite_44	x	x	x	x	0.0002	63.9514	0	x	x	x	x	x
scheelite_45	x	x	x	x	0.0002	62.998	0	x	x	x	x	x
scheelite_46	x	x	x	x	0.0388	63.2096	0	x	x	x	x	x
scheelite_47	x	x	x	x	0.0002	63.4458	0	x	x	x	x	x
scheelite_48	x	x	x	x	0.0002	60.5976	0	x	x	x	x	x
scheelite_49	x	x	x	x	0.111	63.4679	0	x	x	x	x	x
scheelite_50	x	x	x	x	0.0002	63.0661	0	x	x	x	x	x
scheelite_51	x	x	x	x	0.1111	62.3672	0	x	x	x	x	x
scheelite_52	x	x	x	x	0.0333	62.0372	0	x	x	x	x	x
scheelite_53	x	x	x	x	0.0002	62.776	0	x	x	x	x	x
scheelite_54	x	x	x	x	0.1219	63.2845	0	x	x	x	x	x

scheelite_55	x	x	x	x	0.0553	58.464	0	x	x	x	x	x
scheelite_56	x	x	x	x	0.0166	57.2747	0	x	x	x	x	x
scheelite_57	x	x	x	x	0.0995	62.0658	0	x	x	x	x	x
scheelite_58	x	x	x	x	0.0002	62.5916	0	x	x	x	x	x
scheelite_59	x	x	x	x	0.0002	62.9469	0	x	x	x	x	x
scheelite_60	x	x	x	x	0.0002	62.888	0	x	x	x	x	x
scheelite_62	x	x	x	x	0.0002	65.0103	0	x	x	x	x	x
scheelite_63	x	x	x	x	0.0002	62.6053	0	x	x	x	x	x
scheelite_65	x	x	x	x	0.1655	62.3983	0	x	x	x	x	x
scheelite_66	x	x	x	x	0.0002	62.1045	0	x	x	x	x	x
scheelite_67	x	x	x	x	0.0055	47.4212	0	x	x	x	x	x
scheelite_68	x	x	x	x	0.0221	62.9963	0	x	x	x	x	x
scheelite_69	x	x	x	x	0.0002	63.2556	0	x	x	x	x	x
scheelite_70	x	x	x	x	0.0388	63.227	0	x	x	x	x	x
scheelite_71	x	x	x	x	0.0111	59.5507	0	x	x	x	x	x
Scheelite_SE_1	0.0387	0.0227	0.0294	0.0131	0.0224	65.0512	0	0.1601	0.0252	0.0054	0.0002	0.0002
Scheelite_SE_2	0.0244	0.0001	0.04	0.0299	0.0728	64.5966	0	0.2134	0.0002	0.0002	0.0102	0.0002

Scheelite_SE_3	0.0001	0.0059	0.0001	0.0504	0.0002	65.1726	0	0.1702	0.0152	0.0002	0.0002	0.0002
Scheelite_SE_4	0.0394	0.0001	0.0399	0.0001	0.0392	64.0524	0	0.1312	0.0295	0.0018	0.0002	0.0002
Scheelite_SE_5	0.0001	0.003	0.0337	0.0617	0.0504	63.7371	0	0.3366	0.003	0.0002	0.0082	0.0002
Scheelite_SE_6	0.0415	0.0001	0.0525	0.0615	0.0002	65.8747	0	0.0676	0.0256	0.0002	0.0002	0.0002
Scheelite_SE_7	0.0072	0.0001	0.0001	0.0037	0.0002	63.8043	0	0.156	0.0193	0.026	0.0002	0.0002
Scheelite_SE_8	0.0007	0.0198	0.0378	0.0056	0.0002	65.0821	0	0.1682	0.0002	0.0125	0.0002	0.0002
Scheelite_SE_9	0.0001	0.0001	0.0126	0.0561	0.0392	64.3257	0	0.1684	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_10	0.0064	0.0001	0.0001	0.0001	0.0673	64.3072	0	0.2416	0.0052	0.0233	0.0088	0.0002
Scheelite_SE_11	0.0001	0.0109	0.0273	0.1867	0.0224	64.5325	0	0.1638	0.0002	0.0036	0.0002	0.0002
Scheelite_SE_12	0.0001	0.0001	0.179	0.6664	0.0002	63.3933	0	0.1556	0.015	0.0002	0.1225	0.0002
Scheelite_SE_13	0.0001	0.0059	0.0189	0.0542	0.1064	64.1065	0	0.2524	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_14	0.0064	0.0001	2.4307	2.9058	0.0002	64.3623	0	0.0005	0.0002	0.011	0.0002	0.0002
Scheelite_SE_15	0.048	0.0001	0.1115	0.2785	0.0002	64.702	0	0.1825	0.0002	0.0002	0.0068	0.0002
Scheelite_SE_16	0.0057	0.003	0.1455	1.8747	0.0223	63.8252	0	0.2381	0.0002	0.0002	0.0489	0.0002
Scheelite_SE_17	0.0323	0.0069	0.1516	0.4118	0.0002	63.5633	0	0.3036	0.0051	0.0002	0.0027	0.0002
Scheelite_SE_18	0.015	0.0001	0.1241	0.9404	0.0002	65.5435	0	0.1184	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_19	0.0001	0.003	0.0969	0.5431	0.0002	63.5915	0	0.2379	0.0002	0.0002	0.0002	0.0002

Scheelite_SE_20	0.0001	0.0049	1.4181	2.303	0.0002	61.7193	0	0.1162	0.0002	0.0385	0.07	0.0002
Scheelite_SE_21	0.0001	0.0079	0.04	0.0374	0.0002	64.7428	0	0.1683	0.0196	0.0002	0.0143	0.0002
Scheelite_SE_22	0.0258	0.0069	0.0001	0.0001	0.0561	65.7036	0	0.1187	0.0002	0.0002	0.0116	0.0002
Scheelite_SE_23	0.0001	0.0001	0.0189	0.0001	0.0392	64.8786	0	0.0883	0.0054	0.0009	0.0002	0.0002
Scheelite_SE_24	0.0258	0.0237	0.0001	0.0243	0.0784	65.1165	0	0.041	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_25	0.0086	0.0208	0.0084	0.0093	0.0002	64.9524	0	0.0657	0.0002	0.0002	0.0014	0.0002
Scheelite_SE_26	0.0229	0.0178	0.021	0.028	0.0002	64.6222	0	0.0882	0.0217	0.0002	0.0002	0.0002
Scheelite_SE_27	0.0001	0.0001	0.0001	0.4391	0.0616	64.7925	0	0.1432	0.0002	0.0002	0.0457	0.0002
Scheelite_SE_28	0.0001	0.0001	0.0001	0.8723	0.0559	63.9874	0	0.1553	0.0198	0.0002	0.0002	0.0002
Scheelite_SE_29	0.0001	0.0001	0.0001	0.0001	0.1063	64.035	0	0.1994	0.0002	0.0287	0.0002	0.0002
Scheelite_SE_30	0.0001	0.0001	0.0001	0.0917	0.1063	63.8241	0	0.2423	0.0002	0.0045	0.0002	0.0002
Scheelite_SE_31	0.0344	0.0099	0.061	0.0001	0.0002	63.9706	0	0.1809	0.0668	0.0002	0.0002	0.0002
Scheelite_SE_32	0.0194	0.0001	0.0001	0.0392	0.2071	64.516	0	0.1354	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_33	0.0001	0.0001	0.0001	0.1025	0.0002	65.7123	0	0.3023	0.0148	0.0018	0.0002	0.0002
Scheelite_SE_34	0.0007	0.0001	0.0315	0.0411	0.0002	65.1585	0	0.2069	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_35	0.0001	0.0001	0.0946	0.0728	0.0448	64.8817	0	0.119	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_36	0.0001	0.0178	0.0273	0.0224	0.1289	65.6273	0	0.1228	0.0002	0.0242	0.0002	0.0002

Scheelite_SE_37	0.033	0.0001	0.0252	0.3271	0.0002	64.074	0	0.0759	0.0002	0.0018	0.0002	0.0002
Scheelite_SE_38	0.0001	0.0001	0.0189	0.2074	0.1008	64.7376	0	0.1374	0.0002	0.017	0.0002	0.0002
Scheelite_SE_39	0.0021	0.0001	0.0799	0.0001	0.1007	64.5626	0	0.2606	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_40	0.0001	0.0001	0.0441	0.0411	0.0002	65.5197	0	0.2151	0.0002	0.0002	0.0225	0.0002
Scheelite_SE_41	0.0001	0.0001	0.0798	0.0056	0.0168	64.8292	0	0.162	0.0002	0.0331	0.0014	0.0002
Scheelite_SE_42	0.0001	0.0001	0.0001	0.0001	0.0002	63.7423	0	0.1683	0.0114	0.0002	0.0002	0.0002
Scheelite_SE_43	0.0544	0.0198	0.0378	0.4298	0.0002	64.1567	0	0.0983	0.0002	0.0002	0.0164	0.0002
Scheelite_SE_44	0.0001	0.0001	0.0252	0.0001	0.0336	64.8874	0	0.2194	0.0002	0.0002	0.0041	0.0002
Scheelite_SE_45	0.02	0.0001	0.0001	0.0355	0.0002	65.0623	0	0.2109	0.0002	0.0081	0.0333	0.0002
Scheelite_SE_46	0.0079	0.0001	0.0357	0.0261	0.0672	64.8305	0	0.0943	0.0002	0.0134	0.0014	0.0002
Scheelite_SE_47	0.051	0.0109	0.0063	0.0001	0.0002	63.6837	0	0.0844	0.0002	0.0018	0.0002	0.0002
Scheelite_SE_48	0.0014	0.0001	0.0001	0.0001	0.0002	64.7859	0	0.248	0.0174	0.0251	0.0002	0.0002
Scheelite_SE_49	0.01	0.0001	0.0273	0.0019	0.0002	65.6846	0	0.1945	0.0031	0.0098	0.0224	0.0002
Scheelite_SE_50	0.0416	0.0001	0.1054	0.8898	0.0002	63.3787	0	0.2598	0.0002	0.0002	0.0151	0.0002
Scheelite_SE_51	0.0001	0.0001	0.0568	0.0729	0.0728	64.7533	0	0.1313	0.0002	0.035	0.0002	0.0002
Scheelite_SE_52	0.0315	0.0001	0.0001	0.0691	0.1064	65.5971	0	0.0861	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_53	0.0014	0.0059	0.0001	0.0001	0.1063	63.6885	0	0.1912	0.0002	0.0002	0.0002	0.0002

Scheelite_SE_54	0.0001	0.0208	0.0001	0.0131	0.0002	63.4001	0	0.2341	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_55	0.0001	0.004	0.0021	0.069	0.0112	64.8612	0	0.0942	0.0002	0.0002	0.0002	0.0002
Scheelite_SE_56	0.0136	0.0001	0.0001	0.0001	0.0728	65.5056	0	0.1599	0.0171	0.0002	0.0002	0.0002
Scheelite_SE_57	0.0001	0.003	0.0147	0.0168	0.0617	65.0434	0	0.1352	0.0002	0.0054	0.0116	0.0002
Scheelite_SE_58	0.0001	0.0001	0.0001	0.0168	0.0672	64.4007	0	0.0862	0.0388	0.0161	0.0002	0.0002
Scheelite_SC_1	0.0036	0.0001	0.0001	0.0001	0.0002	64.3391	0	0.2972	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_2	0.0431	0.0228	0.0001	0.219	0.0559	64.238	0	0.2874	0.006	0.0002	0.0334	0.0002
Scheelite_SC_3	0.0394	0.0168	0.0001	0.0206	0.0002	63.8806	0	0.2955	0.0002	0.0179	0.0002	0.0002
Scheelite_SC_4	0.0251	0.0001	0.0126	0.0001	0.1569	65.8471	0	0.1945	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_5	0.0215	0.0148	0.021	0.0001	0.0002	65.4349	0	0.0983	0.0002	0.0002	0.0143	0.0002
Scheelite_SC_6	0.0251	0.0001	0.0001	0.0001	0.0168	65.0434	0	0.1701	0.0002	0.0072	0.0157	0.0002
Scheelite_SC_7	0.0001	0.0001	0.0001	0.0001	0.0002	64.8955	0	0.1741	0.0047	0.017	0.0088	0.0002
Scheelite_SC_8	0.0001	0.0178	0.0042	0.0001	0.1511	64.0836	0	0.1335	0.0002	0.0002	0.0116	0.0002
Scheelite_SC_9	0.0001	0.0001	0.0126	0.0001	0.0002	64.8349	0	0.1413	0.0408	0.0002	0.0002	0.0002
Scheelite_SC_10	0.0014	0.0198	0.0063	0.0001	0.1401	65.3752	0	0.1681	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_11	0.0001	0.0001	0.0231	0.0001	0.0002	65.4001	0	0.3153	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_12	0.0001	0.0001	0.0001	0.0001	0.0002	63.9741	0	0.158	0.0002	0.0002	0.0002	0.0002

Scheelite_SC_13	0.0001	0.0119	0.0001	0.0131	0.0002	64.3387	0	0.1559	0.0002	0.0045	0.0293	0.0002
Scheelite_SC_14	0.0001	0.0069	0.0189	0.0001	0.0002	64.2624	0	0.1561	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_15	0.0057	0.0001	0.0084	0.0001	0.0002	64.7916	0	0.1785	0.0077	0.0002	0.0002	0.0002
Scheelite_SC_16	0.0001	0.0001	0.0399	0.028	0.0729	65.665	0	0.2762	0.0253	0.0002	0.0395	0.0002
Scheelite_SC_17	0.0043	0.0001	0.0547	0.0001	0.112	63.8611	0	0.0719	0.0093	0.0002	0.0048	0.0002
Scheelite_SC_18	0.0043	0.0099	0.0105	0.0506	0.0002	62.8519	0	0.2284	0.0363	0.0737	0.0002	0.0002
Scheelite_SC_19	0.0001	0.0001	0.0651	0.0019	0.0002	64.7683	0	0.3237	0.0002	0.0269	0.0002	0.0002
Scheelite_SC_20	0.0065	0.001	0.0001	0.0001	0.0448	65.0082	0	0.3525	0.0002	0.0002	0.0184	0.0002
Scheelite_SC_21	0.0272	0.0001	0.0946	0.0373	0.028	64.8772	0	0.0005	0.0002	0.0143	0.0002	0.0002
Scheelite_SC_22	0.0186	0.0001	0.0001	0.0001	0.0002	64.9679	0	0.1394	0.0002	0.0466	0.0095	0.0002
Scheelite_SC_23	0.0021	0.0001	0.0001	0.0001	0.084	65.2995	0	0.1763	0.0002	0.0116	0.0002	0.0002
Scheelite_SC_24	0.0602	0.0079	0.0001	0.0243	0.0002	64.5002	0	0.0472	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_25	0.0001	0.0001	0.0021	0.0001	0.0002	63.3012	0	0.2527	0.0263	0.0002	0.0164	0.0002
Scheelite_SC_26	0.0001	0.0001	0.0315	0.0001	0.0002	64.516	0	0.1519	0.0002	0.0002	0.0245	0.0002
Scheelite_SC_27	0.0122	0.0001	0.0105	0.0001	0.1512	64.2515	0	0.0554	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_28	0.0001	0.0001	0.0001	0.0261	0.0002	64.0687	0	0.0964	0.0002	0.0108	0.0002	0.0002
Scheelite_SC_29	0.0001	0.0138	0.0001	0.0131	0.0002	65.6053	0	0.1905	0.0246	0.0002	0.0034	0.0002

Scheelite_SC_30	0.0001	0.0001	0.0778	0.0112	0.0448	64.0964	0	0.1561	0.0002	0.0134	0.0443	0.0002
Scheelite_SC_31	0.0036	0.0178	0.0001	0.0001	0.0002	64.481	0	0.1168	0.0002	0.0063	0.0002	0.0002
Scheelite_SC_32	0.0001	0.0217	0.0001	0.0001	0.0896	65.1493	0	0.1128	0.0002	0.0036	0.0002	0.0002
Scheelite_SC_33	0.0064	0.0001	0.0063	0.0037	0.0393	65.7447	0	0.1495	0.0002	0.0188	0.0265	0.0002
Scheelite_SC_34	0.0001	0.0138	0.0357	0.0187	0.0002	65.0634	0	0.2109	0.0234	0.0269	0.0333	0.0002
Scheelite_SC_35	0.0158	0.0001	0.0001	0.0001	0.0002	64.7823	0	0.1743	0.0002	0.0045	0.0002	0.0002
Scheelite_SC_36	0.0093	0.0128	0.0001	0.0001	0.0897	65.3128	0	0.1393	0.0068	0.0002	0.0002	0.0002
Scheelite_SC_37	0.0244	0.0001	0.0001	0.0001	0.0504	63.0312	0	0.078	0.0002	0.0002	0.0129	0.0002
Scheelite_SC_38	0.0337	0.0001	0.0421	0.0093	0.0002	64.5161	0	0.1006	0.0002	0.0054	0.0395	0.0002
Scheelite_SC_39	0.0739	0.0119	0.0001	0.0001	0.0336	64.2391	0	0.1151	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_40	0.0107	0.0001	0.0126	0.0541	0.028	65.4643	0	0.1207	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_41	0.0143	0.0001	0.0294	0.0001	0.0504	64.5031	0	0.1333	0.0088	0.0002	0.0002	0.0002
Scheelite_SC_42	0.0001	0.0001	0.0001	0.1289	0.0002	64.6348	0	0.3194	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_43	0.0272	0.0001	0.0421	0.028	0.0952	65.0713	0	0.2543	0.0226	0.0206	0.0002	0.0002
Scheelite_SC_44	0.0001	0.0001	0.0001	0.0186	0.0002	64.5688	0	0.002	0.0182	0.0116	0.0149	0.0002
Scheelite_SC_45	0.0143	0.0079	0.0294	0.0597	0.0002	64.4959	0	0.1824	0.0002	0.0036	0.0129	0.0002
Scheelite_SC_46	0.0057	0.0001	0.0315	0.0224	0.1177	65.524	0	0.0821	0.0063	0.0116	0.0002	0.0002

Scheelite_SC_47	0.0001	0.0001	0.0001	0.0205	0.0728	64.852	0	0.1536	0.0206	0.0313	0.0002	0.0002
Scheelite_SC_48	0.0001	0.0178	0.0357	0.0001	0.084	64.5753	0	0.0574	0.0213	0.0027	0.0002	0.0002
Scheelite_SC_49	0.0001	0.0049	0.0001	0.0149	0.0002	64.8635	0	0.2623	0.0329	0.0045	0.0002	0.0002
Scheelite_SC_50	0.0001	0.0079	0.0736	0.0449	0.0616	64.7675	0	0.3036	0.0315	0.0045	0.0002	0.0002
Scheelite_SC_51	0.0001	0.0001	0.0001	0.0001	0.0896	64.6887	0	0.0904	0.0002	0.0002	0.0143	0.0002
Scheelite_SC_52	0.0093	0.0385	0.0126	0.0001	0.028	65.2265	0	0.1353	0.0002	0.0036	0.0218	0.0002
Scheelite_SC_53	0.0001	0.0001	0.0336	0.0093	0.0002	64.4554	0	0.3056	0.0002	0.0002	0.0123	0.0002
Scheelite_SC_54	0.0179	0.0069	0.0126	0.0001	0.0056	62.6	0	0.1209	0.0002	0.0233	0.0002	0.0002
Scheelite_SC_55	0.0358	0.0089	0.0147	0.0001	0.0056	64.552	0	0.1497	0.0002	0.0161	0.0163	0.0002
Scheelite_SC_56	0.0138	0.0001	0.0021	0.0001	0.0965	64.6943	0	0.1893	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_57	0.0001	0.0079	0.021	0.0411	0.095	63.064	0	0.1499	0.0105	0.0002	0.049	0.0002
Scheelite_SC_58	0.0682	0.0001	0.0001	0.0243	0.0002	63.5044	0	0.1768	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_59	0.023	0.0001	0.0505	0.0001	0.0002	63.8975	0	0.2036	0.0018	0.0002	0.0002	0.0002
Scheelite_SC_60	0.0001	0.0001	0.0251	0.0001	0.0002	64.2917	0	0.1575	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_61	0.0001	0.0367	0.0105	0.0019	0.0002	62.8232	0	0.2365	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_62	0.0001	0.0001	0.0524	0.0001	0.0002	63.7892	0	0.1391	0.0002	0.0098	0.0002	0.0002
Scheelite_SC_63	0.0122	0.004	0.0169	0.0001	0.0112	63.5321	0	0.0005	0.0002	0.0216	0.0002	0.0002

Scheelite_SC_64	0.0029	0.0001	0.0168	0.0001	0.14	64.7782	0	0.1107	0.008	0.0002	0.0002	0.0002
Scheelite_SC_65	0.0122	0.0001	0.0001	0.0001	0.0002	64.6845	0	0.1784	0.009	0.0233	0.0002	0.0002
Scheelite_SC_66	0.0001	0.0001	0.0272	0.0279	0.0838	65.1605	0	0.1798	0.0002	0.0036	0.0002	0.0002
Scheelite_SC_67	0.0001	0.0001	0.0211	0.0001	0.0056	65.4447	0	0.0884	0.0002	0.009	0.013	0.0002
Scheelite_SC_68	0.0029	0.0001	0.0063	0.0001	0.0615	63.7692	0	0.1682	0.0002	0.0002	0.0034	0.0002
Scheelite_SC_69	0.0001	0.0001	0.0001	0.0261	0.1341	64.3353	0	0.3199	0.0002	0.0242	0.0002	0.0002
Scheelite_SC_70	0.0136	0.0336	0.0063	0.0448	0.0002	64.8639	0	0.0718	0.0101	0.0002	0.0002	0.0002
Scheelite_SC_71	0.0201	0.0001	0.0001	0.2765	0.0002	62.7669	0	0.2334	0.0119	0.0002	0.0002	0.0002
Scheelite_SC_72	0.0001	0.0001	0.0021	0.0001	0.0561	64.5948	0	0.0903	0.0002	0.0081	0.0034	0.0002
Scheelite_SC_73	0.0065	0.0001	0.0337	0.103	0.056	63.6621	0	0.1852	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_74	0.0001	0.0001	0.0189	0.0112	0.0112	64.7315	0	0.1722	0.0002	0.0002	0.0442	0.0002
Scheelite_SC_75	0.0001	0.0001	0.0126	0.0001	0.0002	64.7836	0	0.1517	0.0002	0.0107	0.0002	0.0002
Scheelite_SC_76	0.0001	0.0001	0.0001	0.0168	0.0504	64.9714	0	0.1396	0.0173	0.0197	0.0002	0.0002
Scheelite_SC_77	0.0165	0.0069	0.0021	0.0001	0.0002	64.4611	0	0.1804	0.0002	0.026	0.0002	0.0002
Scheelite_SC_78	0.0108	0.0001	0.0717	0.2172	0.0002	63.6128	0	0.2199	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_79	0.0001	0.0049	0.0168	0.0001	0.0002	65.1898	0	0.0676	0.0014	0.0002	0.0002	0.0002
Scheelite_SC_80	0.0007	0.004	0.0632	0.0001	0.0002	63.6003	0	0.0885	0.0002	0.0054	0.0002	0.0002

Scheelite_SC_81	0.0001	0.001	0.0588	0.0001	0.0002	64.9963	0	0.1496	0.0002	0.0188	0.0157	0.0002
Scheelite_SC_82	0.0001	0.0198	0.0126	0.0318	0.0002	63.6237	0	0.1027	0.0141	0.0002	0.0002	0.0002
Scheelite_SC_83	0.0251	0.0001	0.0926	0.0168	0.0002	64.1973	0	0.1953	0.0002	0.0018	0.0002	0.0002
Scheelite_SC_84	0.0043	0.0001	0.04	0.0001	0.0002	64.1238	0	0.1745	0.0002	0.0002	0.0272	0.0002
Scheelite_SC_85	0.005	0.0069	0.0253	0.0019	0.0002	64.5852	0	0.2322	0.0014	0.0002	0.0048	0.0002
Scheelite_SC_86	0.0553	0.001	0.0865	0.0393	0.0002	62.9976	0	0.0804	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_87	0.0359	0.0001	0.1326	0.0019	0.0448	63.6196	0	0.1358	0.0002	0.026	0.0002	0.0002
Scheelite_SC_88	0.0001	0.0139	0.0295	0.0505	0.0224	64.7464	0	0.2628	0.0075	0.0063	0.0314	0.0002
Scheelite_SC_89	0.0079	0.0218	0.0399	0.0112	0.0168	64.8719	0	0.1416	0.0002	0.0002	0.0054	0.0002
Scheelite_SC_90	0.0122	0.0001	0.0736	0.0001	0.0002	64.5948	0	0.1664	0.0251	0.0269	0.032	0.0002
Scheelite_SC_91	0.0001	0.0001	0.0001	0.0001	0.0002	63.4775	0	0.1933	0.0119	0.0242	0.0034	0.0002
Scheelite_SC_92	0.0001	0.0079	0.1513	0.0001	0.0841	64.0024	0	0.0636	0.0467	0.0002	0.0002	0.0002
Scheelite_SC_93	0.0001	0.0178	0.0001	0.0224	0.0002	64.5116	0	0.1313	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_94	0.0022	0.0001	0.0631	0.0037	0.0002	64.2226	0	0.2543	0.0103	0.0002	0.0002	0.0002
Scheelite_SC_95	0.0001	0.0208	0.0001	0.0001	0.0002	64.9649	0	0.0492	0.0002	0.0206	0.0034	0.0002
Scheelite_SC_96	0.0108	0.0001	0.0001	0.0187	0.0449	63.8271	0	0.1906	0.0002	0.017	0.0129	0.0002
Scheelite_SC_97	0.0001	0.0001	0.0001	0.0001	0.0673	64.4026	0	0.2238	0.0306	0.0002	0.0002	0.0002

Scheelite_SC_98	0.0115	0.0316	0.0736	0.0243	0.0002	64.9162	0	0.2522	0.0002	0.0224	0.0082	0.0002
Scheelite_SC_99	0.0215	0.0316	0.0001	0.0579	0.0002	64.9854	0	0.2193	0.0002	0.0179	0.0002	0.0002
Scheelite_SC_100	0.0172	0.0001	0.0147	0.0001	0.0002	63.9537	0	0.1746	0.0262	0.0179	0.0327	0.0002
Scheelite_SC_101	0.0624	0.002	0.0442	0.0001	0.0392	64.4293	0	0.2096	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_102	0.0001	0.002	0.0021	0.0001	0.0002	64.0983	0	0.2341	0.0002	0.0002	0.0002	0.0002
Scheelite_SC_103	0.0093	0.0001	0.0358	0.0262	0.0002	63.5321	0	0.0267	0.0107	0.0126	0.0034	0.0002
1	x	x	0.0616	x	0.0673	64.7923	0	x	x	x	x	x
2	x	x	0.0287	x	0.0168	64.148	0	x	x	x	x	x
scheelite_1	x	x	0.0245	x	0.0393	64.6852	0	x	x	x	x	x
scheelite_2	x	x	0.0102	x	0.0002	62.5106	0	x	x	x	x	x
scheelite_3	x	x	0.0658	x	0.0002	61.4293	0	x	x	x	x	x
scheelite_4	x	x	0.0001	x	0.0112	63.5392	0	x	x	x	x	x
scheelite_5	x	x	0.0185	x	0.0392	63.4957	0	x	x	x	x	x
scheelite_6	x	x	0.0307	x	0.0002	63.9597	0	x	x	x	x	x
scheelite_7	x	x	0.0103	x	0.0002	63.123	0	x	x	x	x	x
scheelite_8	x	x	0.0328	x	0.0393	64.6199	0	x	x	x	x	x
scheelite_9	x	x	0.0001	x	0.1289	63.9575	0	x	x	x	x	x

scheelite_10	x	x	0.0143	x	0.0729	60.8174	0	x	x	x	x	x
scheelite_11	x	x	0.0001	x	0.0002	63.492	0	x	x	x	x	x
scheelite_12	x	x	0.0001	x	0.0002	63.607	0	x	x	x	x	x
scheelite_13	x	x	0.0001	x	0.0002	64.071	0	x	x	x	x	x
scheelite_14	x	x	0.0001	x	0.0001	0.0219	0	x	x	x	x	x
scheelite_15	x	x	0.0001	x	0.0002	64.3639	0	x	x	x	x	x
scheelite_16	x	x	0.0001	x	0.0168	63.7614	0	x	x	x	x	x
scheelite_17	x	x	0.0001	x	0.0002	62.6222	0	x	x	x	x	x
scheelite_18	x	x	0.0328	x	0.0056	63.6883	0	x	x	x	x	x
scheelite_19	x	x	0.0001	x	0.0281	63.8175	0	x	x	x	x	x
scheelite_20	x	x	0.0267	x	0.0224	64	0	x	x	x	x	x
scheelite_21	x	x	0.0001	x	0.0002	65.0137	0	x	x	x	x	x
scheelite_22	x	x	0.0246	x	0.0002	62.8872	0	x	x	x	x	x
scheelite_23	x	x	0.0001	x	0.0002	64.455	0	x	x	x	x	x
scheelite_24	x	x	0.0205	x	0.0002	62.4244	0	x	x	x	x	x
scheelite_25	x	x	0.0001	x	0.0002	64.7423	0	x	x	x	x	x
scheelite_26	x	x	0.0533	x	0.0002	63.9149	0	x	x	x	x	x

scheelite_27	x	x	0.2517	x	0.0225	64.0021	0	x	x	x	x	x
scheelite_28	x	x	0.0143	x	0.0393	64.2196	0	x	x	x	x	x
scheelite_29	x	x	0.0001	x	0.0561	63.3635	0	x	x	x	x	x
scheelite_30	x	x	0.0001	x	0.1404	65.2961	0	x	x	x	x	x
scheelite_31	x	x	0.0574	x	0.0281	63.8489	0	x	x	x	x	x
scheelite_32	x	x	0.0102	x	0.0168	63.9969	0	x	x	x	x	x
scheelite_33	x	x	0.0225	x	0.0112	64.8522	0	x	x	x	x	x
scheelite_34	x	x	0.0472	x	0.0002	63.9526	0	x	x	x	x	x
scheelite_35	x	x	0.0001	x	0.0224	63.5466	0	x	x	x	x	x
scheelite_36	x	x	0.0144	x	0.0002	63.6302	0	x	x	x	x	x
scheelite_37	x	x	0.0001	x	0.0002	63.8512	0	x	x	x	x	x
scheelite_38	x	x	0.0001	x	0.0672	63.9724	0	x	x	x	x	x
scheelite_39	x	x	0.0001	x	0.0224	63.6631	0	x	x	x	x	x
scheelite_40	x	x	0.0001	x	0.0002	65.3047	0	x	x	x	x	x
scheelite_41	x	x	0.0287	x	0.0002	64.1983	0	x	x	x	x	x
scheelite_42	x	x	0.0001	x	0.0224	64.3424	0	x	x	x	x	x
scheelite_43	x	x	0.0001	x	0.0002	65.3673	0	x	x	x	x	x

scheelite_44	x	x	0.002	x	0.0393	64.8961	0	x	x	x	x	x
scheelite_45	x	x	0.0001	x	0.0002	63.1268	0	x	x	x	x	x
scheelite_46	x	x	0.0001	x	0.0168	64.3305	0	x	x	x	x	x
scheelite_47	x	x	0.0082	x	0.0673	63.9676	0	x	x	x	x	x
scheelite_48	x	x	0.0001	x	0.0002	64.9514	0	x	x	x	x	x
scheelite_49	x	x	0.0001	x	0.0002	63.3458	0	x	x	x	x	x
scheelite_50	x	x	0.0041	x	0.0393	63.8495	0	x	x	x	x	x
scheelite_51	x	x	0.0164	x	0.0168	64.2319	0	x	x	x	x	x
scheelite_52	x	x	0.0001	x	0.0112	64.4902	0	x	x	x	x	x
scheelite_53	x	x	0.0001	x	0.0056	63.4595	0	x	x	x	x	x
scheelite_54	x	x	0.0061	x	0.1402	64.2456	0	x	x	x	x	x
scheelite_55	x	x	0.0001	x	0.101	63.5045	0	x	x	x	x	x
scheelite_56	x	x	0.0389	x	0.0002	64.6669	0	x	x	x	x	x
scheelite_57	x	x	0.0001	x	0.0002	63.7932	0	x	x	x	x	x
scheelite_58	x	x	0.0512	x	0.073	64.5968	0	x	x	x	x	x
scheelite_59	x	x	0.0001	x	0.0002	63.6374	0	x	x	x	x	x
scheelite_60	x	x	0.0595	x	0.0002	64.5	0	x	x	x	x	x

scheelite_61	x	x	0.0185	x	0.0002	61.9892	0	x	x	x	x	x
scheelite_62	x	x	0.0922	x	0.0002	63.217	0	x	x	x	x	x
scheelite_63	x	x	0.0331	x	0.0002	43.8008	0	x	x	x	x	x
scheelite_64	x	x	0.0001	x	0.0002	63.0484	0	x	x	x	x	x
scheelite_65	x	x	0.0533	x	0.028	63.5434	0	x	x	x	x	x
scheelite_66	x	x	0.0001	x	0.0002	59.1909	0	x	x	x	x	x
scheelite_67	x	x	0.0001	x	0.0112	62.243	0	x	x	x	x	x
scheelite_68	x	x	0.0001	x	0.0002	64.0897	0	x	x	x	x	x
scheelite_69	x	x	0.0348	x	0.0225	64.1242	0	x	x	x	x	x
scheelite_70	x	x	0.0001	x	0.0002	63.9704	0	x	x	x	x	x
scheelite_71	x	x	0.0205	x	0.0002	63.5873	0	x	x	x	x	x
scheelite_72	x	x	0.0635	x	0.0168	65.0885	0	x	x	x	x	x
scheelite_73	x	x	0.0001	x	0.0002	63.9828	0	x	x	x	x	x
scheelite_74	x	x	0.0205	x	0.0002	64.4521	0	x	x	x	x	x
scheelite_75	x	x	0.0001	x	0.0002	63.5669	0	x	x	x	x	x
scheelite_76	x	x	0.0001	x	0.0002	63.5103	0	x	x	x	x	x
scheelite_77	x	x	0.0001	x	0.0002	63.8216	0	x	x	x	x	x

scheelite_78	x	x	0.0696	x	0.0002	64.4263	0	x	x	x	x	x
scheelite_79	x	x	0.0001	x	0.0002	63.5734	0	x	x	x	x	x
scheelite_80	x	x	0.0339	x	0.0002	18.6389	0	x	x	x	x	x
scheelite_81	x	x	0.0001	x	0.0002	62.8933	0	x	x	x	x	x
scheelite_82	x	x	0.0001	x	0.0953	64.4507	0	x	x	x	x	x
scheelite_83	x	x	0.0001	x	0.0002	63.0022	0	x	x	x	x	x
scheelite_84	x	x	0.0001	x	0.0504	62.7368	0	x	x	x	x	x
scheelite_85	x	x	0.0001	x	0.0002	64.0512	0	x	x	x	x	x
scheelite_86	x	x	0.0001	x	0.0112	63.0223	0	x	x	x	x	x
scheelite_87	x	x	0.0001	x	0.0002	64.1823	0	x	x	x	x	x
scheelite_88	x	x	0.0001	x	0.0002	64.1898	0	x	x	x	x	x
scheelite_89	x	x	0.0553	x	0.0002	64.4801	0	x	x	x	x	x
scheelite_90	x	x	0.0001	x	0.0002	64.3932	0	x	x	x	x	x
scheelite_91	x	x	0.0001	x	0.0224	63.7731	0	x	x	x	x	x
scheelite_92	x	x	0.0451	x	0.0336	62.2817	0	x	x	x	x	x
scheelite_93	x	x	0.0001	x	0.0224	64.0452	0	x	x	x	x	x
scheelite_94	x	x	0.0144	x	0.0112	64.1052	0	x	x	x	x	x

scheelite_95	x	x	0.0082	x	0.0505	63.2829	0	x	x	x	x	x
scheelite_96	x	x	0.0001	x	0.0002	63.9263	0	x	x	x	x	x
scheelite_97	x	x	0.0001	x	0.0506	65.0964	0	x	x	x	x	x
scheelite_98	x	x	0.0205	x	0.0002	63.9193	0	x	x	x	x	x
scheelite_99	x	x	0.0062	x	0.0002	63.4093	0	x	x	x	x	x
scheelite_100	x	x	0.0389	x	0.0002	64.222	0	x	x	x	x	x

Label	Ox%(P)	Ox%(Cl)	Ox%(K)	Ox%(Ca)	Ox%(Ti)	Ox%(Cr)	Ox%(Mn)	Ox%(Fe)	Ox%(Mo)	Ox%(W)
scheelite_40-2	x	x	x	19.6196	x	x	x	x	0.0332	78.9923
scheelite_40-3	x	x	x	19.1381	x	x	x	x	0.0002	79.0631
scheelite_40-4	x	x	x	19.8149	x	x	x	x	0.0582	78.6066
scheelite_40-6	x	x	x	18.864	x	x	x	x	0.0749	78.3809
scheelite_40-7	x	x	x	19.3064	x	x	x	x	0.1415	79.1741
scheelite_40-8	x	x	x	19.3069	x	x	x	x	0.0915	79.7691
scheelite_40-9	x	x	x	18.7251	x	x	x	x	0.0002	74.4159
scheelite_40-10	x	x	x	18.3036	x	x	x	x	0.0002	74.2586

scheelite_40-11	x	x	x	19.5138	x	x	x	x	0.0002	79.7145
scheelite_40-12	x	x	x	19.3422	x	x	x	x	0.0002	77.6549
scheelite_40-13	x	x	x	19.3402	x	x	x	x	0.0083	79.9162
scheelite_40-14	x	x	x	19.3558	x	x	x	x	0.0749	80.2544
scheelite_40-15	x	x	x	18.8523	x	x	x	x	0.0002	75.7642
scheelite_40-16	x	x	x	19.7241	x	x	x	x	0.0002	79.1551
scheelite_40-17	x	x	x	19.5765	x	x	x	x	0.0083	78.1102
scheelite_40-18	x	x	x	19.692	x	x	x	x	0.0002	79.6728
scheelite_40-19	x	x	x	19.7241	x	x	x	x	0.0582	80.1734
scheelite_40-20	x	x	x	19.681	x	x	x	x	0.0582	79.4979
scheelite_72	x	x	x	19.7645	x	x	x	x	0.3314	79.8375
scheelite_73	x	x	x	19.7833	x	x	x	x	0.0002	79.9138
scheelite_74	x	x	x	19.6606	x	x	x	x	0.1079	80.5644
scheelite_75	x	x	x	19.8465	x	x	x	x	0.083	80.4446
scheelite_76	x	x	x	19.5222	x	x	x	x	0.0002	79.4635
scheelite_77	x	x	x	19.9752	x	x	x	x	0.1577	79.6484
scheelite_78	x	x	x	19.415	x	x	x	x	0.1747	78.8747

scheelite_79	x	x	x	20.0006	x	x	x	x	0.0002	78.5725
scheelite_80	x	x	x	19.8358	x	x	x	x	0.0002	80.0891
scheelite_81	x	x	x	19.7483	x	x	x	x	0.0332	80.986
scheelite_82	x	x	x	19.6262	x	x	x	x	0.025	80.5819
scheelite_83	x	x	x	19.6739	x	x	x	x	0.1494	79.4581
scheelite_84	x	x	x	19.7362	x	x	x	x	0.0997	80.3369
scheelite_85	x	x	x	19.5775	x	x	x	x	0.0915	79.7699
scheelite_86	x	x	x	19.2412	x	x	x	x	0.0002	78.251
scheelite_87	x	x	x	19.7844	x	x	x	x	0.0002	77.9479
scheelite_88	x	x	x	19.6874	x	x	x	x	0.0002	77.0051
scheelite_89	x	x	x	19.8557	x	x	x	x	0.0415	81.1031
scheelite_90	x	x	x	19.724	x	x	x	x	0.0002	79.7088
scheelite_91	x	x	x	20.0912	x	x	x	x	0.0166	79.8167
scheelite_92	x	x	x	20.2291	x	x	x	x	0.2238	79.3769
scheelite_93	x	x	x	20.0382	x	x	x	x	0.0002	79.8297
scheelite_94	x	x	x	20.0005	x	x	x	x	0.1245	79.9106
scheelite_95	x	x	x	19.4857	x	x	x	x	0.0002	80.2505

scheelite_96	x	x	x	19.9648	x	x	x	x	0.1993	80
scheelite_97	x	x	x	19.3305	x	x	x	x	0.0002	80.0499
scheelite_98	x	x	x	19.7607	x	x	x	x	0.0581	79.5612
scheelite_99	x	x	x	19.6981	x	x	x	x	0.0997	80.1101
scheelite_100	x	x	x	19.745	x	x	x	x	0.0002	79.3948
scheelite_40-22	x	x	x	19.3558	x	x	x	x	0.0002	80.2291
scheelite_40-23	x	x	x	19.7673	x	x	x	x	0.0002	80.0901
scheelite_40-24	x	x	x	20.1972	x	x	x	x	0.133	80.5469
scheelite_40-25	x	x	x	19.7947	x	x	x	x	0.0166	80.0708
scheelite_40-26	x	x	x	20.0942	x	x	x	x	0.0002	79.642
scheelite_40-27	x	x	x	19.6115	x	x	x	x	0.0083	79.1542
scheelite_40-28	x	x	x	19.482	x	x	x	x	0.0416	79.5218
scheelite_40-29	x	x	x	19.6013	x	x	x	x	0.0998	79.928
scheelite_40-30	x	x	x	19.151	x	x	x	x	0.0333	78.9954
scheelite_40-31	x	x	x	19.6552	x	x	x	x	0.0002	79.8862
scheelite_40-32	x	x	x	19.9441	x	x	x	x	0.0002	80.2373
scheelite_40-33	x	x	x	19.5184	x	x	x	x	0.0002	79.6099

scheelite_40-34	x	x	x	19.7476	x	x	x	x	0.2244	79.8473
scheelite_40-35	x	x	x	19.8183	x	x	x	x	0.1164	80.2937
scheelite_40-36	x	x	x	19.8276	x	x	x	x	0.0002	80.3843
scheelite_40-38	x	x	x	19.6124	x	x	x	x	0.025	79.481
scheelite_40-39	x	x	x	19.4032	x	x	x	x	0.0333	79.3938
scheelite_40	x	x	x	19.9428	x	x	x	x	0.0002	79.7906
scheelite_40-40	x	x	x	19.8356	x	x	x	x	0.2163	80.6179
scheelite_41	x	x	x	19.4565	x	x	x	x	0.0002	80.5516
scheelite_42	x	x	x	19.9199	x	x	x	x	0.0002	78.2505
scheelite_43	x	x	x	19.5897	x	x	x	x	0.0002	78.7112
scheelite_44	x	x	x	19.9548	x	x	x	x	0.0002	80.647
scheelite_45	x	x	x	19.6707	x	x	x	x	0.0002	79.4447
scheelite_46	x	x	x	19.387	x	x	x	x	0.0582	79.7115
scheelite_47	x	x	x	19.3519	x	x	x	x	0.0002	80.0094
scheelite_48	x	x	x	18.626	x	x	x	x	0.0002	76.4176
scheelite_49	x	x	x	19.3982	x	x	x	x	0.1665	80.0372
scheelite_50	x	x	x	19.6383	x	x	x	x	0.0002	79.5305

scheelite_51	x	x	x	18.1301	x	x	x	x	0.1667	78.6491
scheelite_52	x	x	x	18.1401	x	x	x	x	0.05	78.233
scheelite_53	x	x	x	19.9257	x	x	x	x	0.0002	79.1647
scheelite_54	x	x	x	19.5458	x	x	x	x	0.1829	79.8059
scheelite_55	x	x	x	18.4224	x	x	x	x	0.083	73.727
scheelite_56	x	x	x	18.212	x	x	x	x	0.0249	72.2272
scheelite_57	x	x	x	19.8714	x	x	x	x	0.1493	78.269
scheelite_58	x	x	x	19.7512	x	x	x	x	0.0002	78.9321
scheelite_59	x	x	x	19.6726	x	x	x	x	0.0002	79.3802
scheelite_60	x	x	x	19.7866	x	x	x	x	0.0002	79.306
scheelite_62	x	x	x	19.6048	x	x	x	x	0.0002	81.9822
scheelite_63	x	x	x	19.7283	x	x	x	x	0.0002	78.9495
scheelite_65	x	x	x	19.6353	x	x	x	x	0.2483	78.6883
scheelite_66	x	x	x	19.6432	x	x	x	x	0.0002	78.3179
scheelite_67	x	x	x	16.4248	x	x	x	x	0.0083	59.8013
scheelite_68	x	x	x	20.0484	x	x	x	x	0.0332	79.4425
scheelite_69	x	x	x	19.6424	x	x	x	x	0.0002	79.7695

scheelite_70	x	x	x	19.7592	x	x	x	x	0.0582	79.7334
scheelite_71	x	x	x	18.1988	x	x	x	x	0.0166	75.0973
Scheelite_SE_1	0.0003	0.0002	0.0002	20.2517	0.0581	0.0402	0.038	0.0168	0.0261	82.0338
Scheelite_SE_2	0.0003	0.0002	0.0466	20.1462	0.0366	0.0002	0.0516	0.0385	0.0849	81.4606
Scheelite_SE_3	0.0003	0.0002	0.0002	20.3314	0.0002	0.0105	0.0001	0.0649	0.0002	82.1869
Scheelite_SE_4	0.0003	0.0002	0.0002	19.7417	0.0591	0.0002	0.0515	0.0001	0.0457	80.7743
Scheelite_SE_5	0.0003	0.0245	0.0053	20.0934	0.0002	0.0053	0.0435	0.0794	0.0588	80.3768
Scheelite_SE_6	0.0003	0.0002	0.0085	19.9721	0.0623	0.0002	0.0677	0.0792	0.0002	83.0724
Scheelite_SE_7	0.0003	0.002	0.0011	20.0419	0.0108	0.0002	0.0001	0.0048	0.0002	80.4614
Scheelite_SE_8	0.0003	0.0184	0.0095	20.2438	0.0011	0.035	0.0489	0.0072	0.0002	82.0728
Scheelite_SE_9	0.0003	0.0002	0.0002	20.3462	0.0002	0.0002	0.0163	0.0721	0.0457	81.119
Scheelite_SE_10	0.0003	0.0102	0.0011	19.6806	0.0097	0.0002	0.0001	0.0001	0.0785	81.0957
Scheelite_SE_11	0.0003	0.0002	0.0002	19.8943	0.0002	0.0192	0.0353	0.2402	0.0261	81.3798
Scheelite_SE_12	0.0003	0.0408	0.0604	19.6269	0.0002	0.0002	0.2311	0.8573	0.0002	79.9432
Scheelite_SE_13	0.0003	0.0002	0.0328	20.1134	0.0002	0.0105	0.0244	0.0697	0.1241	80.8426
Scheelite_SE_14	0.0003	0.0002	0.0032	14.1623	0.0095	0.0002	3.1386	3.7382	0.0002	81.1651
Scheelite_SE_15	0.0003	0.0204	0.0117	20.169	0.0721	0.0002	0.144	0.3583	0.0002	81.5935

Scheelite_SE_16	0.0003	0.0183	0.0159	20.0046	0.0086	0.0053	0.1879	2.4118	0.026	80.4878
Scheelite_SE_17	0.0003	0.0002	0.0002	20.0174	0.0484	0.0123	0.1958	0.5297	0.0002	80.1575
Scheelite_SE_18	0.0003	0.0002	0.0002	20.151	0.0226	0.0002	0.1602	1.2098	0.0002	82.6547
Scheelite_SE_19	0.0003	0.0002	0.0254	20.2712	0.0002	0.0053	0.1251	0.6987	0.0002	80.1931
Scheelite_SE_20	0.0003	0.0122	0.0328	17.7172	0.0002	0.0087	1.831	2.9627	0.0002	77.8322
Scheelite_SE_21	0.0003	0.0102	0.053	20.2276	0.0002	0.014	0.0516	0.0481	0.0002	81.6449
Scheelite_SE_22	0.0003	0.0002	0.0002	19.8539	0.0387	0.0122	0.0001	0.0001	0.0654	82.8566
Scheelite_SE_23	0.0003	0.053	0.0223	20.3085	0.0002	0.0002	0.0244	0.0001	0.0458	81.8163
Scheelite_SE_24	0.0003	0.0002	0.0002	20.2402	0.0387	0.042	0.0001	0.0312	0.0915	82.1162
Scheelite_SE_25	0.0003	0.0183	0.0127	20.2895	0.0129	0.0367	0.0109	0.012	0.0002	81.9093
Scheelite_SE_26	0.0003	0.0002	0.0424	20.0923	0.0344	0.0315	0.0271	0.036	0.0002	81.4928
Scheelite_SE_27	0.0003	0.0002	0.0042	20.0863	0.0002	0.0002	0.0001	0.5649	0.0719	81.7076
Scheelite_SE_28	0.0003	0.0002	0.0002	20.1437	0.0002	0.0002	0.0001	1.1222	0.0652	80.6923
Scheelite_SE_29	0.0003	0.0002	0.0148	20.4172	0.0002	0.0002	0.0001	0.0001	0.1241	80.7523
Scheelite_SE_30	0.0003	0.0002	0.0002	20.3082	0.0002	0.0002	0.0001	0.1179	0.124	80.4864
Scheelite_SE_31	0.0003	0.0326	0.0002	20.2624	0.0517	0.0175	0.0788	0.0001	0.0002	80.6712
Scheelite_SE_32	0.0003	0.0082	0.0002	20.144	0.029	0.0002	0.0001	0.0505	0.2417	81.359

Scheelite_SE_33	0.0003	0.0143	0.0002	19.9279	0.0002	0.0002	0.0001	0.1319	0.0002	82.8675
Scheelite_SE_34	0.0003	0.0002	0.0002	20.0354	0.0011	0.0002	0.0407	0.0528	0.0002	82.1691
Scheelite_SE_35	0.0003	0.0245	0.0002	20.1996	0.0002	0.0002	0.1221	0.0937	0.0523	81.8201
Scheelite_SE_36	0.0003	0.0002	0.0002	19.7951	0.0002	0.0314	0.0352	0.0288	0.1505	82.7604
Scheelite_SE_37	0.0003	0.0204	0.0297	20.0713	0.0495	0.0002	0.0326	0.4208	0.0002	80.8016
Scheelite_SE_38	0.0003	0.0469	0.0244	20.2258	0.0002	0.0002	0.0244	0.2669	0.1176	81.6384
Scheelite_SE_39	0.0003	0.0102	0.0002	20.2404	0.0032	0.0002	0.1032	0.0001	0.1175	81.4177
Scheelite_SE_40	0.0003	0.0224	0.0011	20.1502	0.0002	0.0002	0.057	0.0528	0.0002	82.6246
Scheelite_SE_41	0.0003	0.0002	0.0002	20.0466	0.0002	0.0002	0.1031	0.0072	0.0196	81.7539
Scheelite_SE_42	0.0003	0.0244	0.0339	20.0641	0.0002	0.0002	0.0001	0.0001	0.0002	80.3833
Scheelite_SE_43	0.0003	0.0002	0.0002	20.0638	0.0817	0.035	0.0489	0.5529	0.0002	80.9058
Scheelite_SE_44	0.0003	0.002	0.0085	20.1083	0.0002	0.0002	0.0326	0.0001	0.0392	81.8273
Scheelite_SE_45	0.0003	0.0183	0.0222	20.044	0.0301	0.0002	0.0001	0.0456	0.0002	82.0479
Scheelite_SE_46	0.0003	0.002	0.0002	19.9653	0.0118	0.0002	0.0461	0.0336	0.0785	81.7555
Scheelite_SE_47	0.0003	0.0002	0.0064	20.2428	0.0765	0.0193	0.0082	0.0001	0.0002	80.3093
Scheelite_SE_48	0.0003	0.0061	0.0002	20.1129	0.0022	0.0002	0.0001	0.0001	0.0002	81.6993
Scheelite_SE_49	0.0003	0.0002	0.0042	20.0903	0.015	0.0002	0.0353	0.0024	0.0002	82.8326

Scheelite_SE_50	0.0003	0.0002	0.0002	19.9778	0.0624	0.0002	0.136	1.1447	0.0002	79.9247
Scheelite_SE_51	0.0003	0.0002	0.0002	20.1127	0.0002	0.0002	0.0733	0.0937	0.085	81.6582
Scheelite_SE_52	0.0003	0.0306	0.0002	20.2425	0.0473	0.0002	0.0001	0.0888	0.1242	82.7223
Scheelite_SE_53	0.0003	0.0183	0.0053	20.2765	0.0022	0.0105	0.0001	0.0001	0.1241	80.3154
Scheelite_SE_54	0.0003	0.0002	0.0002	20.0576	0.0002	0.0368	0.0001	0.0168	0.0002	79.9517
Scheelite_SE_55	0.0003	0.0469	0.0201	19.9795	0.0002	0.007	0.0027	0.0888	0.0131	81.7943
Scheelite_SE_56	0.0003	0.0002	0.0011	20.2718	0.0204	0.0002	0.0001	0.0001	0.085	82.6069
Scheelite_SE_57	0.0003	0.002	0.0106	19.8967	0.0002	0.0052	0.019	0.0216	0.072	82.024
Scheelite_SE_58	0.0003	0.0041	0.0002	20.1608	0.0002	0.0002	0.0001	0.0216	0.0784	81.2135
Scheelite_SC_1	0.0003	0.0002	0.0002	19.9305	0.0054	0.0002	0.0001	0.0001	0.0002	81.1359
Scheelite_SC_2	0.0003	0.0102	0.0002	20.3994	0.0646	0.0403	0.0001	0.2817	0.0653	81.0084
Scheelite_SC_3	0.0003	0.0265	0.0002	20.1487	0.0592	0.0298	0.0001	0.0264	0.0002	80.5576
Scheelite_SC_4	0.0003	0.0002	0.0002	20.0224	0.0376	0.0002	0.0163	0.0001	0.1831	83.0375
Scheelite_SC_5	0.0003	0.0002	0.018	19.9733	0.0322	0.0262	0.0271	0.0001	0.0002	82.5177
Scheelite_SC_6	0.0003	0.0002	0.0021	20.0256	0.0376	0.0002	0.0001	0.0001	0.0196	82.024
Scheelite_SC_7	0.0003	0.0184	0.0085	20.0118	0.0002	0.0002	0.0001	0.0001	0.0002	81.8375
Scheelite_SC_8	0.0003	0.0041	0.0085	20.2128	0.0002	0.0315	0.0054	0.0001	0.1763	80.8136

Scheelite_SC_9	0.0003	0.0002	0.0095	19.8884	0.0002	0.0002	0.0163	0.0001	0.0002	81.7611
Scheelite_SC_10	0.0003	0.0002	0.0002	20.0947	0.0022	0.035	0.0081	0.0001	0.1635	82.4425
Scheelite_SC_11	0.0003	0.0002	0.0148	20.0388	0.0002	0.0002	0.0298	0.0001	0.0002	82.4738
Scheelite_SC_12	0.0003	0.0002	0.0002	19.9969	0.0002	0.0002	0.0001	0.0001	0.0002	80.6756
Scheelite_SC_13	0.0003	0.0183	0.0116	20.1785	0.0002	0.021	0.0001	0.0168	0.0002	81.1353
Scheelite_SC_14	0.0003	0.0002	0.0339	20.2068	0.0002	0.0123	0.0245	0.0001	0.0002	81.0391
Scheelite_SC_15	0.0003	0.055	0.0002	20.2349	0.0086	0.0002	0.0109	0.0001	0.0002	81.7065
Scheelite_SC_16	0.0003	0.0286	0.0053	19.9535	0.0002	0.0002	0.0515	0.036	0.085	82.8079
Scheelite_SC_17	0.0003	0.0002	0.0002	20.0208	0.0065	0.0002	0.0706	0.0001	0.1307	80.5331
Scheelite_SC_18	0.0003	0.0244	0.0254	20.3807	0.0065	0.0175	0.0136	0.0651	0.0002	79.2604
Scheelite_SC_19	0.0003	0.0143	0.036	20.0311	0.0002	0.0002	0.0841	0.0024	0.0002	81.6771
Scheelite_SC_20	0.0003	0.0224	0.0074	20.1755	0.0097	0.0017	0.0001	0.0001	0.0523	81.9796
Scheelite_SC_21	0.0003	0.0204	0.0244	20.259	0.0409	0.0002	0.1221	0.048	0.0327	81.8145
Scheelite_SC_22	0.0003	0.0002	0.0002	19.9796	0.028	0.0002	0.0001	0.0001	0.0002	81.9289
Scheelite_SC_23	0.0003	0.0002	0.0002	20.189	0.0032	0.0002	0.0001	0.0001	0.0981	82.347
Scheelite_SC_24	0.0003	0.0224	0.0127	20.0262	0.0903	0.014	0.0001	0.0312	0.0002	81.339
Scheelite_SC_25	0.0003	0.0002	0.0002	20.1483	0.0002	0.0002	0.0027	0.0001	0.0002	79.827

Scheelite_SC_26	0.0003	0.0143	0.017	20.1549	0.0002	0.0002	0.0407	0.0001	0.0002	81.3589
Scheelite_SC_27	0.0003	0.002	0.0002	20.0745	0.0183	0.0002	0.0136	0.0001	0.1764	81.0254
Scheelite_SC_28	0.0003	0.002	0.0002	20.0737	0.0002	0.0002	0.0001	0.0336	0.0002	80.7948
Scheelite_SC_29	0.0003	0.0163	0.0212	20.0795	0.0002	0.0245	0.0001	0.0168	0.0002	82.7327
Scheelite_SC_30	0.0003	0.0002	0.0042	20.228	0.0002	0.0002	0.1005	0.0144	0.0522	80.8298
Scheelite_SC_31	0.0003	0.0002	0.0002	19.8191	0.0054	0.0315	0.0001	0.0001	0.0002	81.3148
Scheelite_SC_32	0.0003	0.0002	0.0002	20.2834	0.0002	0.0385	0.0001	0.0001	0.1046	82.1576
Scheelite_SC_33	0.0003	0.0002	0.017	20.0792	0.0097	0.0002	0.0081	0.0048	0.0458	82.9084
Scheelite_SC_34	0.0003	0.0224	0.0117	19.921	0.0002	0.0245	0.0461	0.024	0.0002	82.0493
Scheelite_SC_35	0.0003	0.0002	0.0002	20.1263	0.0237	0.0002	0.0001	0.0001	0.0002	81.6948
Scheelite_SC_36	0.0003	0.0002	0.0002	20.0071	0.014	0.0227	0.0001	0.0001	0.1046	82.3637
Scheelite_SC_37	0.0003	0.0002	0.0002	19.9531	0.0366	0.0002	0.0001	0.0001	0.0588	79.4865
Scheelite_SC_38	0.0003	0.0002	0.017	20.2209	0.0506	0.0002	0.0543	0.012	0.0002	81.359
Scheelite_SC_39	0.0003	0.0306	0.0095	20.1978	0.1109	0.021	0.0001	0.0001	0.0392	81.0097
Scheelite_SC_40	0.0003	0.0002	0.0085	20.008	0.0161	0.0002	0.0163	0.0695	0.0327	82.5548
Scheelite_SC_41	0.0003	0.0002	0.0106	20.0053	0.0215	0.0002	0.038	0.0001	0.0588	81.3427
Scheelite_SC_42	0.0003	0.0002	0.0002	20.0503	0.0002	0.0002	0.0001	0.1658	0.0002	81.5088

Scheelite_SC_43	0.0003	0.0002	0.0002	20.2153	0.0409	0.0002	0.0543	0.036	0.1111	82.0593
Scheelite_SC_44	0.0003	0.0102	0.0085	19.2113	0.0002	0.0002	0.0001	0.024	0.0002	81.4255
Scheelite_SC_45	0.0003	0.0002	0.053	19.8819	0.0215	0.014	0.038	0.0769	0.0002	81.3335
Scheelite_SC_46	0.0003	0.0002	0.0148	20.3059	0.0086	0.0002	0.0407	0.0288	0.1373	82.6301
Scheelite_SC_47	0.0003	0.0367	0.0002	19.9507	0.0002	0.0002	0.0001	0.0264	0.085	81.7827
Scheelite_SC_48	0.0003	0.0002	0.0002	20.0294	0.0002	0.0315	0.0461	0.0001	0.098	81.4337
Scheelite_SC_49	0.0003	0.0002	0.0002	20.1251	0.0002	0.0087	0.0001	0.0192	0.0002	81.7972
Scheelite_SC_50	0.0003	0.0002	0.0318	20.1054	0.0002	0.014	0.0951	0.0577	0.0719	81.6761
Scheelite_SC_51	0.0003	0.0002	0.0002	20.4754	0.0002	0.0002	0.0001	0.0001	0.1045	81.5767
Scheelite_SC_52	0.0003	0.0184	0.0002	20.1331	0.014	0.0682	0.0163	0.0001	0.0327	82.255
Scheelite_SC_53	0.0003	0.0002	0.0002	20.1134	0.0002	0.0002	0.0434	0.012	0.0002	81.2826
Scheelite_SC_54	0.0003	0.0002	0.0002	19.1601	0.0269	0.0122	0.0163	0.0001	0.0065	78.9427
Scheelite_SC_55	0.0003	0.0326	0.0002	20.0603	0.0538	0.0157	0.019	0.0001	0.0065	81.4044
Scheelite_SC_56	0.0003	0.0002	0.0097	20.2202	0.0207	0.0002	0.0028	0.0001	0.1126	81.5838
Scheelite_SC_57	0.0003	0.0002	0.0032	20.0445	0.0002	0.014	0.0271	0.0529	0.1109	79.5279
Scheelite_SC_58	0.0003	0.0002	0.0002	20.0741	0.1023	0.0002	0.0001	0.0313	0.0002	80.0833
Scheelite_SC_59	0.0003	0.0002	0.0159	20.4656	0.0345	0.0002	0.0652	0.0001	0.0002	80.5789

Scheelite_SC_60	0.0003	0.0102	0.0002	20.0186	0.0002	0.0002	0.0325	0.0001	0.0002	81.0761
Scheelite_SC_61	0.0003	0.0184	0.0042	19.7353	0.0002	0.0649	0.0136	0.0024	0.0002	79.2242
Scheelite_SC_62	0.0003	0.0061	0.0127	19.5139	0.0002	0.0002	0.0677	0.0001	0.0002	80.4424
Scheelite_SC_63	0.0003	0.0002	0.0298	20.2416	0.0184	0.007	0.0218	0.0001	0.0131	80.1181
Scheelite_SC_64	0.0003	0.0002	0.0002	20.0392	0.0043	0.0002	0.0217	0.0001	0.1633	81.6895
Scheelite_SC_65	0.0003	0.0143	0.0002	20.1659	0.0183	0.0002	0.0001	0.0001	0.0002	81.5715
Scheelite_SC_66	0.0003	0.0002	0.0211	20.0303	0.0002	0.0002	0.0352	0.0359	0.0978	82.1717
Scheelite_SC_67	0.0003	0.0002	0.0351	20.054	0.0002	0.0002	0.0272	0.0001	0.0066	82.5301
Scheelite_SC_68	0.0003	0.0002	0.0002	20.2434	0.0043	0.0002	0.0081	0.0001	0.0717	80.4172
Scheelite_SC_69	0.0003	0.0002	0.0002	20.402	0.0002	0.0002	0.0001	0.0336	0.1565	81.1311
Scheelite_SC_70	0.0003	0.0002	0.0053	20.2955	0.0204	0.0595	0.0081	0.0577	0.0002	81.7976
Scheelite_SC_71	0.0003	0.0002	0.0002	19.8805	0.0301	0.0002	0.0001	0.3557	0.0002	79.1532
Scheelite_SC_72	0.0003	0.0041	0.0002	20.0965	0.0002	0.0002	0.0027	0.0001	0.0654	81.4583
Scheelite_SC_73	0.0003	0.0002	0.0002	20.509	0.0097	0.0002	0.0435	0.1325	0.0653	80.2822
Scheelite_SC_74	0.0003	0.0102	0.0002	19.9785	0.0002	0.0002	0.0244	0.0144	0.0131	81.6307
Scheelite_SC_75	0.0003	0.0286	0.0138	19.9806	0.0002	0.0002	0.0163	0.0001	0.0002	81.6964
Scheelite_SC_76	0.0003	0.0265	0.0002	20.3549	0.0002	0.0002	0.0001	0.0216	0.0588	81.9333

Scheelite_SC_77	0.0003	0.0002	0.0254	19.7996	0.0247	0.0122	0.0027	0.0001	0.0002	81.2898
Scheelite_SC_78	0.0003	0.0002	0.0286	20.1953	0.0162	0.0002	0.0925	0.2795	0.0002	80.2199
Scheelite_SC_79	0.0003	0.0002	0.0002	19.8122	0.0002	0.0087	0.0217	0.0001	0.0002	82.2087
Scheelite_SC_80	0.0003	0.0163	0.0002	20.1653	0.0011	0.007	0.0816	0.0001	0.0002	80.2042
Scheelite_SC_81	0.0003	0.0102	0.0002	19.8699	0.0002	0.0017	0.076	0.0001	0.0002	81.9646
Scheelite_SC_82	0.0003	0.0002	0.0403	20.0582	0.0002	0.035	0.0163	0.0409	0.0002	80.2337
Scheelite_SC_83	0.0003	0.0367	0.0159	20.0913	0.0377	0.0002	0.1196	0.0217	0.0002	80.9571
Scheelite_SC_84	0.0003	0.0102	0.017	19.864	0.0065	0.0002	0.0516	0.0001	0.0002	80.8644
Scheelite_SC_85	0.0003	0.0082	0.0106	20.3068	0.0075	0.0123	0.0326	0.0024	0.0002	81.4462
Scheelite_SC_86	0.0003	0.0002	0.0392	20.1736	0.0831	0.0018	0.1116	0.0506	0.0002	79.4442
Scheelite_SC_87	0.0003	0.0002	0.0002	19.9181	0.0539	0.0002	0.1712	0.0024	0.0523	80.2286
Scheelite_SC_88	0.0003	0.0245	0.0002	20.1825	0.0002	0.0245	0.0381	0.065	0.0262	81.6494
Scheelite_SC_89	0.0003	0.0002	0.0011	20.1249	0.0118	0.0385	0.0516	0.0144	0.0196	81.8077
Scheelite_SC_90	0.0003	0.0163	0.018	20.1827	0.0183	0.0002	0.0951	0.0001	0.0002	81.4584
Scheelite_SC_91	0.0003	0.002	0.0002	20.2568	0.0002	0.0002	0.0001	0.0001	0.0002	80.0493
Scheelite_SC_92	0.0003	0.0061	0.0002	19.6747	0.0002	0.014	0.1954	0.0001	0.0981	80.7113
Scheelite_SC_93	0.0003	0.0041	0.0276	19.9412	0.0002	0.0315	0.0001	0.0288	0.0002	81.3534

Scheelite_SC_94	0.0003	0.0002	0.0002	19.8381	0.0032	0.0002	0.0814	0.0048	0.0002	80.989
Scheelite_SC_95	0.0003	0.0245	0.0002	20.0302	0.0002	0.0367	0.0001	0.0001	0.0002	81.9251
Scheelite_SC_96	0.0003	0.0041	0.0002	19.5329	0.0161	0.0002	0.0001	0.024	0.0524	80.4902
Scheelite_SC_97	0.0003	0.0122	0.0002	20.116	0.0002	0.0002	0.0001	0.0001	0.0785	81.216
Scheelite_SC_98	0.0003	0.0002	0.035	19.8695	0.0172	0.056	0.095	0.0312	0.0002	81.8636
Scheelite_SC_99	0.0003	0.0002	0.0297	19.8943	0.0323	0.056	0.0001	0.0745	0.0002	81.9509
Scheelite_SC_100	0.0003	0.0326	0.0002	20.128	0.0258	0.0002	0.019	0.0001	0.0002	80.6498
Scheelite_SC_101	0.0003	0.0002	0.0244	20.0588	0.0937	0.0035	0.0571	0.0001	0.0458	81.2496
Scheelite_SC_102	0.0003	0.0002	0.0002	20.2274	0.0002	0.0035	0.0027	0.0001	0.0002	80.8322
Scheelite_SC_103	0.0003	0.0041	0.0159	20.2175	0.014	0.0002	0.0462	0.0337	0.0002	80.1182
1	x	x	x	19.9457	x	x	0.0795	x	0.0898	76.069
2	x	x	x	19.9359	x	x	0.0371	x	0.0224	75.3126
scheelite_1	x	x	x	19.5456	x	x	0.0317	x	0.0524	75.9433
scheelite_2	x	x	x	19.1129	x	x	0.0132	x	0.0002	73.3903
scheelite_3	x	x	x	20.1001	x	x	0.085	x	0.0002	72.1207
scheelite_4	x	x	x	19.6209	x	x	0.0001	x	0.015	74.5978
scheelite_5	x	x	x	20.0355	x	x	0.0238	x	0.0523	74.5468

scheelite_6	x	x	x	19.8567	x	x	0.0397	x	0.0002	75.0915
scheelite_7	x	x	x	19.7524	x	x	0.0132	x	0.0002	74.1092
scheelite_8	x	x	x	19.8071	x	x	0.0423	x	0.0524	75.8666
scheelite_9	x	x	x	19.7751	x	x	0.0001	x	0.1719	75.089
scheelite_10	x	x	x	18.9311	x	x	0.0185	x	0.0972	71.4023
scheelite_11	x	x	x	19.5811	x	x	0.0001	x	0.0002	74.5425
scheelite_12	x	x	x	19.7582	x	x	0.0001	x	0.0002	74.6774
scheelite_13	x	x	x	20.0013	x	x	0.0001	x	0.0002	75.2221
scheelite_14	x	x	x	22.1775	x	x	0.0002	x	0.0002	0.0257
scheelite_15	x	x	x	19.986	x	x	0.0001	x	0.0002	75.566
scheelite_16	x	x	x	19.8928	x	x	0.0001	x	0.0224	74.8587
scheelite_17	x	x	x	19.7789	x	x	0.0001	x	0.0002	73.5212
scheelite_18	x	x	x	19.7847	x	x	0.0424	x	0.0075	74.7729
scheelite_19	x	x	x	19.2778	x	x	0.0001	x	0.0374	74.9245
scheelite_20	x	x	x	20.1886	x	x	0.0344	x	0.0299	75.1388
scheelite_21	x	x	x	19.8149	x	x	0.0001	x	0.0002	76.329
scheelite_22	x	x	x	19.5931	x	x	0.0318	x	0.0002	73.8323

scheelite_23	x	x	x	20.0874	x	x	0.0001	x	0.0002	75.673
scheelite_24	x	x	x	19.1875	x	x	0.0265	x	0.0002	73.289
scheelite_25	x	x	x	19.6843	x	x	0.0001	x	0.0002	76.0103
scheelite_26	x	x	x	19.7055	x	x	0.0688	x	0.0002	75.039
scheelite_27	x	x	x	19.0572	x	x	0.325	x	0.03	75.1412
scheelite_28	x	x	x	19.6871	x	x	0.0185	x	0.0524	75.3966
scheelite_29	x	x	x	19.93	x	x	0.0001	x	0.0748	74.3915
scheelite_30	x	x	x	19.8574	x	x	0.0001	x	0.1873	76.6605
scheelite_31	x	x	x	19.5772	x	x	0.0741	x	0.0374	74.9615
scheelite_32	x	x	x	19.7489	x	x	0.0132	x	0.0224	75.1351
scheelite_33	x	x	x	19.7996	x	x	0.0291	x	0.015	76.1394
scheelite_34	x	x	x	20.1581	x	x	0.0609	x	0.0002	75.0831
scheelite_35	x	x	x	19.904	x	x	0.0001	x	0.0299	74.6065
scheelite_36	x	x	x	19.6343	x	x	0.0185	x	0.0002	74.7047
scheelite_37	x	x	x	19.8939	x	x	0.0001	x	0.0002	74.9641
scheelite_38	x	x	x	20.0345	x	x	0.0001	x	0.0897	75.1064
scheelite_39	x	x	x	19.7427	x	x	0.0001	x	0.0299	74.7433

scheelite_40	x	x	x	19.7853	x	x	0.0001	x	0.0002	76.6706
scheelite_41	x	x	x	19.8565	x	x	0.037	x	0.0002	75.3716
scheelite_42	x	x	x	20.0066	x	x	0.0001	x	0.0299	75.5408
scheelite_43	x	x	x	19.6479	x	x	0.0001	x	0.0002	76.7441
scheelite_44	x	x	x	19.8613	x	x	0.0026	x	0.0524	76.1908
scheelite_45	x	x	x	19.8852	x	x	0.0001	x	0.0002	74.1137
scheelite_46	x	x	x	20.0058	x	x	0.0001	x	0.0225	75.5268
scheelite_47	x	x	x	19.7666	x	x	0.0106	x	0.0898	75.1008
scheelite_48	x	x	x	19.9393	x	x	0.0001	x	0.0002	76.2558
scheelite_49	x	x	x	19.8982	x	x	0.0001	x	0.0002	74.3708
scheelite_50	x	x	x	19.8141	x	x	0.0053	x	0.0524	74.9621
scheelite_51	x	x	x	19.9886	x	x	0.0212	x	0.0224	75.4111
scheelite_52	x	x	x	20.0105	x	x	0.0001	x	0.015	75.7144
scheelite_53	x	x	x	19.9886	x	x	0.0001	x	0.0075	74.5042
scheelite_54	x	x	x	19.6561	x	x	0.0079	x	0.1869	75.4271
scheelite_55	x	x	x	19.8318	x	x	0.0001	x	0.1346	74.5571
scheelite_56	x	x	x	19.9326	x	x	0.0503	x	0.0002	75.9217

scheelite_57	x	x	x	19.6361	x	x	0.0001	x	0.0002	74.8961
scheelite_58	x	x	x	19.492	x	x	0.0661	x	0.0973	75.8394
scheelite_59	x	x	x	19.7463	x	x	0.0001	x	0.0002	74.7131
scheelite_60	x	x	x	19.9002	x	x	0.0768	x	0.0002	75.7259
scheelite_61	x	x	x	19.4569	x	x	0.0239	x	0.0002	72.778
scheelite_62	x	x	x	19.4397	x	x	0.1191	x	0.0002	74.2196
scheelite_63	x	x	x	15.473	x	x	0.0427	x	0.0002	51.4241
scheelite_64	x	x	x	19.3859	x	x	0.0001	x	0.0002	74.0216
scheelite_65	x	x	x	19.9335	x	x	0.0689	x	0.0374	74.6028
scheelite_66	x	x	x	19.3803	x	x	0.0001	x	0.0002	69.4927
scheelite_67	x	x	x	19.1877	x	x	0.0001	x	0.015	73.0761
scheelite_68	x	x	x	19.8905	x	x	0.0001	x	0.0002	75.2441
scheelite_69	x	x	x	19.5611	x	x	0.0449	x	0.0299	75.2847
scheelite_70	x	x	x	19.7155	x	x	0.0001	x	0.0002	75.104
scheelite_71	x	x	x	19.6359	x	x	0.0265	x	0.0002	74.6543
scheelite_72	x	x	x	19.8861	x	x	0.082	x	0.0225	76.4167
scheelite_73	x	x	x	19.7905	x	x	0.0001	x	0.0002	75.1186

scheelite_74	x	x	x	19.7945	x	x	0.0265	x	0.0002	75.6696
scheelite_75	x	x	x	19.455	x	x	0.0001	x	0.0002	74.6304
scheelite_76	x	x	x	19.519	x	x	0.0001	x	0.0002	74.5639
scheelite_77	x	x	x	19.7545	x	x	0.0001	x	0.0002	74.9294
scheelite_78	x	x	x	19.4113	x	x	0.0899	x	0.0002	75.6393
scheelite_79	x	x	x	19.8945	x	x	0.0001	x	0.0002	74.638
scheelite_80	x	x	x	9.2672	x	x	0.0438	x	0.0002	21.8829
scheelite_81	x	x	x	19.8141	x	x	0.0001	x	0.0002	73.8395
scheelite_82	x	x	x	19.9865	x	x	0.0001	x	0.1271	75.6679
scheelite_83	x	x	x	19.4794	x	x	0.0001	x	0.0002	73.9673
scheelite_84	x	x	x	19.6964	x	x	0.0001	x	0.0673	73.6558
scheelite_85	x	x	x	19.5168	x	x	0.0001	x	0.0002	75.1989
scheelite_86	x	x	x	19.7089	x	x	0.0001	x	0.015	73.9909
scheelite_87	x	x	x	19.8647	x	x	0.0001	x	0.0002	75.3528
scheelite_88	x	x	x	19.8735	x	x	0.0001	x	0.0002	75.3616
scheelite_89	x	x	x	19.6753	x	x	0.0714	x	0.0002	75.7025
scheelite_90	x	x	x	19.6094	x	x	0.0001	x	0.0002	75.6004

scheelite_91	x	x	x	19.8502	x	x	0.0001	x	0.0299	74.8724
scheelite_92	x	x	x	19.4694	x	x	0.0583	x	0.0449	73.1214
scheelite_93	x	x	x	19.7196	x	x	0.0001	x	0.0299	75.1918
scheelite_94	x	x	x	19.8604	x	x	0.0185	x	0.015	75.2623
scheelite_95	x	x	x	19.6334	x	x	0.0106	x	0.0673	74.2969
scheelite_96	x	x	x	19.763	x	x	0.0001	x	0.0002	75.0523
scheelite_97	x	x	x	19.6878	x	x	0.0001	x	0.0674	76.426
scheelite_98	x	x	x	19.5389	x	x	0.0265	x	0.0002	75.0441
scheelite_99	x	x	x	19.7743	x	x	0.0079	x	0.0002	74.4453
scheelite_100	x	x	x	19.5138	x	x	0.0502	x	0.0002	75.3994

Wolframite EMPA data

Label	No	W%(O)	W%(F)	W%(Na)	W%(Mg)	W%(Al)	W%(Si)	W%(P)
wolframite_68	1	20.8093	x	x	0.0642	x	x	x
wolframite_69	2	20.7174	x	x	0.0832	x	x	x
wolframite_70	3	20.6481	x	x	0.1124	x	x	x
wolframite_71	4	20.6469	x	x	0.1099	x	x	x
wolframite_72	5	20.7011	x	x	0.1285	x	x	x
wolframite_73	6	20.8503	x	x	0.1086	x	x	x
wolframite_74	7	20.7139	x	x	0.1184	x	x	x
wolframite_75	8	20.6663	x	x	0.1024	x	x	x
wolframite_76	9	20.2832	x	x	0.0989	x	x	x
wolframite_77	10	20.81	x	x	0.1215	x	x	x
wolframite_78	11	20.6385	x	x	0.0606	x	x	x
wolframite_79	12	20.9575	x	x	0.1107	x	x	x
wolframite_80	13	20.7498	x	x	0.0939	x	x	x
wolframite_81	14	20.6601	x	x	0.0515	x	x	x
wolframite_82	15	20.5376	x	x	0.1122	x	x	x

wolframite_83	16	19.8063	x	x	0.0941	x	x	x
wolframite_84	17	20.1744	x	x	0.0607	x	x	x
wolframite_85	18	20.646	x	x	0.0786	x	x	x
wolframite_86	19	20.3962	x	x	0.0323	x	x	x
wolframite_87	20	20.8275	x	x	0.1152	x	x	x
wolframite_88	21	20.6502	x	x	0.0651	x	x	x
wolframite_89	22	20.7651	x	x	0.0928	x	x	x
wolframite_90	23	20.9708	x	x	0.1315	x	x	x
wolframite_91	24	20.0074	x	x	0.0885	x	x	x
wolframite_92	25	20.8844	x	x	0.114	x	x	x
wolframite_93	26	20.0182	x	x	0.1018	x	x	x
wolframite_94	27	20.4887	x	x	0.1023	x	x	x
wolframite_95	28	20.7648	x	x	0.1194	x	x	x
wolframite_96	29	20.5173	x	x	0.1011	x	x	x
wolframite_97	30	20.5145	x	x	0.127	x	x	x
wolframite_98	31	20.8735	x	x	0.0856	x	x	x
wolframite_99	32	20.5614	x	x	0.1204	x	x	x

wolframite_100	33	20.482	x	x	0.1193	x	x	x
wolframite_2	2	20.6606	x	x	0.11	x	x	x
wolframite_3	3	20.8155	x	x	0.0847	x	x	x
wolframite_4	4	20.6643	x	x	0.1118	x	x	x
wolframite_5	5	20.698	x	x	0.1054	x	x	x
wolframite_6	6	20.4727	x	x	0.1032	x	x	x
wolframite_7	7	20.5729	x	x	0.0905	x	x	x
wolframite_8	8	20.5658	x	x	0.1125	x	x	x
wolframite_9	9	20.8315	x	x	0.0984	x	x	x
wolframite_10	10	20.771	x	x	0.1089	x	x	x
wolframite_11	11	19.4855	x	x	0.0686	x	x	x
wolframite_12	12	20.8998	x	x	0.0936	x	x	x
wolframite_13	13	20.7242	x	x	0.0909	x	x	x
wolframite_14	14	20.8112	x	x	0.098	x	x	x
wolframite_15	15	20.8153	x	x	0.0745	x	x	x
wolframite_16	16	20.5261	x	x	0.0984	x	x	x
wolframite_17	17	20.8481	x	x	0.1103	x	x	x

wolframite_18	18	20.9863	x	x	0.0971	x	x	x
wolframite_19	19	20.4597	x	x	0.0878	x	x	x
wolframite_20	20	20.8789	x	x	0.0916	x	x	x
wolframite_21	21	20.7284	x	x	0.1076	x	x	x
wolframite_22	22	20.9212	x	x	0.1067	x	x	x
wolframite_23	23	20.8022	x	x	0.113	x	x	x
wolframite_24	24	21.1404	x	x	0.1093	x	x	x
wolframite_25	25	20.6524	x	x	0.1011	x	x	x
wolframite_26	26	20.9117	x	x	0.11	x	x	x
wolframite_27	27	20.8351	x	x	0.0867	x	x	x
wolframite_28	28	20.9385	x	x	0.0914	x	x	x
wolframite_29	29	20.6085	x	x	0.0853	x	x	x
wolframite_30	30	20.7821	x	x	0.1088	x	x	x
wolframite_31	31	21.0615	x	x	0.1117	x	x	x
wolframite_32	32	20.6915	x	x	0.0829	x	x	x
wolframite_33	33	20.758	x	x	0.1136	x	x	x
wolframite_34	34	20.5889	x	x	0.0873	x	x	x

wolframite_35	35	20.6225	x	x	0.118	x	x	x
wolframite_36	36	20.9328	x	x	0.1169	x	x	x
wolframite_37	37	20.0687	x	x	0.0765	x	x	x
wolframite_38	38	20.6884	x	x	0.1256	x	x	x
wolframite_39	39	20.7601	x	x	0.0753	x	x	x
wolframite_40	40	20.5836	x	x	0.1	x	x	x
wolframite_41	41	20.4271	x	x	0.1037	x	x	x
wolframite_42	42	20.8742	x	x	0.11	x	x	x
wolframite_43	43	20.9497	x	x	0.0956	x	x	x
wolframite_44	44	20.5879	x	x	0.077	x	x	x
wolframite_45	45	20.8602	x	x	0.0871	x	x	x
wolframite_46	46	20.9017	x	x	0.094	x	x	x
wolframite_47	47	20.5963	x	x	0.1198	x	x	x
wolframite_48	48	20.8005	x	x	0.0859	x	x	x
wolframite_49	49	20.4514	x	x	0.0913	x	x	x
wolframite_50	50	21.0945	x	x	0.1046	x	x	x
wolframite_51	51	20.924	x	x	0.1137	x	x	x

wolframite_52	52	21.0855	x	x	0.1156	x	x	x
wolframite_53	53	20.5581	x	x	0.0864	x	x	x
wolframite_54	54	20.6558	x	x	0.1006	x	x	x
wolframite_55	55	20.721	x	x	0.1126	x	x	x
wolframite_56	56	20.8806	x	x	0.0919	x	x	x
wolframite_57	57	20.4523	x	x	0.0814	x	x	x
wolframite_60	60	19.8903	x	x	0.0569	x	x	x
wolframite_61	61	20.5048	x	x	0.0499	x	x	x
wolframite_62	62	20.4738	x	x	0.044	x	x	x
wolframite_63	63	20.249	x	x	0.1141	x	x	x
wolframite_64	64	20.7018	x	x	0.0724	x	x	x
wolframite_65	65	20.8514	x	x	0.1086	x	x	x
wolframite_67	66	20.9259	x	x	0.0937	x	x	x
wolframite_68	67	20.796	x	x	0.1072	x	x	x
wolframite_69	68	21.2482	x	x	0.1354	x	x	x
wolframite_70	69	20.8975	x	x	0.0958	x	x	x
wolframite_71	70	20.9544	x	x	0.0853	x	x	x

wolframite_73	72	21.1087	x	x	0.1026	x	x	x
wolframite_75	74	20.8933	x	x	0.1116	x	x	x
wolframite_76	75	20.7933	x	x	0.1059	x	x	x
wolframite_77	76	20.8996	x	x	0.1084	x	x	x
wolframite_78	77	21.2224	x	x	0.0893	x	x	x
wolframite_79	78	20.8767	x	x	0.0387	x	x	x
wolframite_80	79	21.043	x	x	0.1008	x	x	x
wolframite_81	80	20.8503	x	x	0.0954	x	x	x
wolframite_82	81	20.8421	x	x	0.1032	x	x	x
wolframite_83	82	20.8241	x	x	0.1223	x	x	x
wolframite_85	84	21.1636	x	x	0.105	x	x	x
wolframite_86	85	21.0454	x	x	0.111	x	x	x
wolframite_87	86	21.0768	x	x	0.1013	x	x	x
wolframite_88	87	20.6063	x	x	0.1081	x	x	x
wolframite_89	88	20.7874	x	x	0.1124	x	x	x
wolframite_90	89	20.9277	x	x	0.1055	x	x	x
wolframite_93	92	20.9006	x	x	0.1047	x	x	x

wolframite_94	93	21.2419	x	x	0.1135	x	x	x
wolframite_95	94	20.653	x	x	0.0922	x	x	x
wolframite_96	95	21.2408	x	x	0.092	x	x	x
wolframite_97	96	21.0698	x	x	0.0768	x	x	x
wolframite_98	97	21.0495	x	x	0.0968	x	x	x
wolframite_99	98	20.9502	x	x	0.087	x	x	x
wolframite_100	99	20.8282	x	x	0.0858	x	x	x
wolframite_101	100	21.2372	x	x	0.0989	x	x	x
wolframite_102	101	21.2061	x	x	0.0893	x	x	x
wolframite_103	102	19.9468	x	x	0.0599	x	x	x
wolframite_104	103	20.6528	x	x	0.1036	x	x	x
wolframite_105	104	20.9971	x	x	0.104	x	x	x
wolframite_106	105	20.7416	x	x	0.0933	x	x	x
wolframite_107	106	21.3544	x	x	0.1024	x	x	x
wolframite_108	107	21.1535	x	x	0.11	x	x	x
wolframite_109	108	20.935	x	x	0.1031	x	x	x
wolframite_110	109	20.7774	x	x	0.0963	x	x	x

wolframite_111	110	21.205	x	x	0.086	x	x	x
wolframite_112	111	21.2669	x	x	0.092	x	x	x
wolframite_113	112	21.1819	x	x	0.0951	x	x	x
wolframite_114	113	21.0779	x	x	0.1149	x	x	x
wolframite_115	114	21.0526	x	x	0.1144	x	x	x
wolframite_116	115	20.6966	x	x	0.1027	x	x	x
wolframite_117	116	21.0008	x	x	0.0987	x	x	x
wolframite_118	117	21.0565	x	x	0.0857	x	x	x
wolframite_120	119	21.1496	x	x	0.0816	x	x	x
wolframite_121	120	20.8584	x	x	0.1046	x	x	x
wolframite_122	121	20.9799	x	x	0.1221	x	x	x
wolframite_124	123	20.6857	x	x	0.0807	x	x	x
wolframite_125	124	20.7337	x	x	0.0997	x	x	x
wolframite_126	125	21.0412	x	x	0.1118	x	x	x
wolframite_127	126	21.0612	x	x	0.128	x	x	x
wolframite_128	127	20.8996	x	x	0.1019	x	x	x
wolframite_129	128	20.935	x	x	0.1198	x	x	x

wolframite_130	129	20.9048	x	x	0.0912	x	x	x
wolframite_131	130	20.7576	x	x	0.0852	x	x	x
wolframite_132	131	20.886	x	x	0.107	x	x	x
wolframite_133	132	21.1946	x	x	0.1173	x	x	x
wolframite_134	133	20.5883	x	x	0.0928	x	x	x
wolframite_135	134	20.9397	x	x	0.12	x	x	x
wolframite_136	135	20.8542	x	x	0.0994	x	x	x
wolframite_138	137	21.0053	x	x	0.0876	x	x	x
wolframite_139	138	21.1026	x	x	0.1011	x	x	x
wolframite_140	139	21.2069	x	x	0.0817	x	x	x
wolframite_141	140	20.5036	x	x	0.0904	x	x	x
wolframite_142	141	20.8423	x	x	0.0004	x	x	x
wolframite_144	143	21.0356	x	x	0.0739	x	x	x
wolframite_145	144	20.6222	x	x	0.1123	x	x	x
wolframite_146	145	20.7237	x	x	0.0698	x	x	x
wolframite_147	146	21.0843	x	x	0.0641	x	x	x
wolframite_148	147	20.7478	x	x	0.0933	x	x	x

wolframite_149	148	21.0687	x	x	0.1113	x	x	x
wolframite_151	150	21.4157	x	x	0.0778	x	x	x
wolframite_152	151	20.858	x	x	0.0897	x	x	x
wolframite_154	153	20.9233	x	x	0.1045	x	x	x
wolframite_155	154	21.0616	x	x	0.0804	x	x	x
wolframite_156	155	21.2613	x	x	0.0682	x	x	x
wolframite_157	156	20.8982	x	x	0.031	x	x	x
wolframite_158	157	20.523	x	x	0.0964	x	x	x
wolframite_159	158	21.0109	x	x	0.1114	x	x	x
wolframite_160	159	21.0698	x	x	0.0842	x	x	x
wolframite_161	160	21.0697	x	x	0.0706	x	x	x
wolframite_162	161	20.7022	x	x	0.0906	x	x	x
wolframite_163	162	21.0876	x	x	0.1009	x	x	x
wolframite_164	163	20.2449	x	x	0.0591	x	x	x
wolframite_165	164	21.0755	x	x	0.0988	x	x	x
wolframite_168	167	21.1574	x	x	0.1002	x	x	x
wolframite_169	168	21.2315	x	x	0.1075	x	x	x

wolframite_170	169	21.0665	x	x	0.0223	x	x	x
wolframite_171	170	20.7826	x	x	0.0919	x	x	x
wolframite_172	171	20.7045	x	x	0.0196	x	x	x
wolframite_173	172	20.8579	x	x	0.1004	x	x	x
wolframite_174	173	21.0365	x	x	0.1028	x	x	x
wolframite_175	174	20.3169	x	x	0.087	x	x	x
wolframite_176	175	20.5244	x	x	0.0974	x	x	x
wolframite_177	176	20.5998	x	x	0.1124	x	x	x
wolframite_178	177	20.5752	x	x	0.0934	x	x	x
wolframite_179	178	20.6303	x	x	0.1092	x	x	x
wolframite_180	179	20.5939	x	x	0.1338	x	x	x
wolframite_181	180	20.6147	x	x	0.1019	x	x	x
wolframite_182	181	20.344	x	x	0.1012	x	x	x
wolframite_183	182	20.6637	x	x	0.1092	x	x	x
wolframite_184	183	19.2826	x	x	0.109	x	x	x
wolframite_185	184	20.8501	x	x	0.1149	x	x	x
wolframite_186	185	20.5923	x	x	0.0931	x	x	x

wolframite_187	186	20.8046	x	x	0.1122	x	x	x
wolframite_188	187	20.3816	x	x	0.1191	x	x	x
wolframite_189	188	20.7977	x	x	0.1049	x	x	x
wolframite_190	189	21.03	x	x	0.1189	x	x	x
wolframite_191	190	20.862	x	x	0.0769	x	x	x
wolframite_194	193	19.857	x	x	0.125	x	x	x
wolframite_195	194	20.5538	x	x	0.096	x	x	x
wolframite_196	195	20.5628	x	x	0.1273	x	x	x
wolframite_197	196	20.7222	x	x	0.1026	x	x	x
wolframite_198	197	20.4654	x	x	0.1103	x	x	x
wolframite_199	198	20.9154	x	x	0.0899	x	x	x
wolframite_200	199	20.6053	x	x	0.1099	x	x	x
wolframite_1	472	20.7273	0.0369	0.011	0.0802	0.0001	0.0001	0.0002
wolframite_2	473	20.7249	0.0748	0.0002	0.1248	0.0234	0.0001	0.0002
wolframite_4	475	20.9895	0.1974	0.0075	0.1157	0.001	0.0001	0.0002
wolframite_5	476	20.4889	0.1646	0.0002	0.1151	0.0001	0.0001	0.0002
wolframite_6	477	20.7448	0.0382	0.0002	0.1052	0.0001	0.0001	0.0002

wolframite_7	478	20.6011	0.1297	0.0143	0.0788	0.0001	0.0001	0.0002
wolframite_8	479	20.508	0.0945	0.06	0.126	0.0001	0.0001	0.0002
wolframite_9	480	20.4964	0.0975	0.009	0.0885	0.0065	0.0001	0.0002
wolframite_10	481	20.889	0.0003	0.0002	0.1203	0.0001	0.0001	0.0002
wolframite_15	486	20.4797	0.0472	0.0002	0.122	0.0001	0.0001	0.0242
wolframite_19	490	20.3484	0.0697	0.0002	0.0947	0.0264	0.0001	0.0002
wolframite_20	491	20.8741	0.0728	0.0138	0.12	0.0001	0.0001	0.0002
wolframite_21	492	20.8068	0.0629	0.0118	0.1131	0.0001	0.0001	0.0002
wolframite_22	493	20.8137	0.1538	0.0045	0.0864	0.0001	0.0001	0.0002
wolframite_23	494	20.8451	0.1409	0.0002	0.1312	0.0005	0.0001	0.0002
wolframite_24	495	20.8154	0.0845	0.0071	0.1223	0.0001	0.0001	0.0145
wolframite_25	496	20.9283	0.1519	0.0002	0.0639	0.0005	0.0001	0.0002
wolframite_26	497	20.5334	0.1329	0.0002	0.1123	0.008	0.0001	0.0002
wolframite_27	498	20.3159	0.0199	0.0171	0.1115	0.0001	0.0001	0.0002
wolframite_28	499	20.6062	0.0747	0.0002	0.1001	0.0109	0.0001	0.0002
wolframite_29	500	20.9396	0.0433	0.0065	0.1248	0.0001	0.0001	0.0002
wolframite_30	501	20.8262	0.1575	0.0002	0.0938	0.0228	0.0001	0.0002

wolframite_31	502	20.6565	0.0003	0.0002	0.1052	0.007	0.0001	0.0002
wolframite_32	503	20.6904	0.0747	0.0002	0.0954	0.0164	0.0001	0.0002
wolframite_33	504	20.5957	0.0003	0.0051	0.1007	0.0001	0.0001	0.0002
wolframite_34	505	20.8355	0.0199	0.0002	0.1149	0.0001	0.0001	0.0002
wolframite_35	506	20.8088	0.1465	0.0002	0.1077	0.0001	0.0001	0.0002
wolframite_36	507	20.9095	0.1363	0.0002	0.1237	0.0001	0.0001	0.0002
wolframite_37	508	20.8263	0.0863	0.0002	0.0979	0.01	0.0001	0.0002
wolframite_38	509	20.7469	0.0465	0.0307	0.0931	0.0001	0.0001	0.0002
wolframite_39	510	20.5983	0.1025	0.0002	0.0932	0.0001	0.0001	0.0002
wolframite_40	511	21.0332	0.0977	0.0403	0.1097	0.0001	0.0001	0.0002
wolframite_41	512	20.4213	0.0003	0.0287	0.0944	0.0001	0.0001	0.0002
wolframite_42	513	20.6186	0.0574	0.014	0.0957	0.0084	0.0001	0.0002
wolframite_44	515	20.9478	0.242	0.0076	0.164	0.0001	0.0001	0.0002
wolframite_45	516	20.6529	0.0447	0.0002	0.1138	0.0045	0.0001	0.0002
wolframite_49	520	20.8923	0.0686	0.0002	0.0865	0.0001	0.0001	0.0002
wolframite_50	521	20.37	0.005	0.0002	0.0993	0.0001	0.0001	0.0024
wolframite_51	522	20.3751	0.1211	0.0002	0.106	0.0268	0.0001	0.0002

wolframite_52	523	20.9611	0.0913	0.0002	0.1122	0.0001	0.0001	0.0002
wolframite_53	524	20.8895	0.0795	0.0059	0.1351	0.0005	0.0001	0.0002
wolframite_54	525	20.8033	0.1178	0.0103	0.1536	0.0085	0.0001	0.0002
wolframite_55	526	20.6693	0.0003	0.0002	0.0959	0.0079	0.0001	0.0002
wolframite_57	528	20.7137	0.1061	0.0002	0.0854	0.0139	0.0001	0.0002
wolframite_59	530	20.688	0.1392	0.0203	0.1121	0.0084	0.0001	0.0002
wolframite_60	531	20.5369	0.0979	0.0007	0.1243	0.0001	0.0001	0.0002
wolframite_61	532	20.6237	0.0003	0.0234	0.0677	0.0001	0.0001	0.0002
wolframite_62	533	20.5093	0.0927	0.0002	0.111	0.0001	0.0001	0.0002
wolframite_63	534	20.5902	0.0765	0.0002	0.1151	0.0001	0.0001	0.0002
wolframite_64	535	20.2362	0.0779	0.009	0.1056	0.0001	0.0001	0.0002
wolframite_65	536	20.876	0.1094	0.0394	0.1328	0.0001	0.0001	0.0002
wolframite_66	537	20.4883	0.0003	0.0002	0.0675	0.0069	0.0001	0.0002
wolframite_67	538	20.641	0.1472	0.0078	0.0614	0.0148	0.0001	0.0002
wolframite_68	539	20.6128	0.1361	0.0025	0.1572	0.0089	0.0001	0.0002
wolframite_70	541	20.6599	0.0254	0.0058	0.0753	0.0001	0.0001	0.0002
wolframite_71	542	20.9568	0.027	0.0002	0.0661	0.0001	0.0001	0.0002

wolframite_72	543	20.8801	0.1274	0.0059	0.0976	0.0089	0.0001	0.0002
wolframite_73	544	20.965	0.0768	0.0002	0.1201	0.0001	0.0001	0.0002
wolframite_74	545	20.8488	0.0913	0.0107	0.1257	0.0001	0.0001	0.0002
wolframite_75	546	20.5576	0.0481	0.0002	0.0973	0.0149	0.0001	0.0002
wolframite_76	547	20.5316	0.0645	0.0002	0.1371	0.0001	0.0001	0.0002
wolframite_77	548	20.3178	0.0233	0.0002	0.1136	0.003	0.0001	0.0002
wolframite_78	549	20.9147	0.1507	0.0098	0.1477	0.0229	0.0001	0.0002
wolframite_79	550	20.4823	0.1074	0.0122	0.1486	0.0001	0.0001	0.0002
wolframite_80	551	20.2488	0.0003	0.0002	0.1036	0.0001	0.0001	0.0002
wolframite_81	552	21.001	0.0432	0.0265	0.1202	0.0001	0.0001	0.0002
wolframite_82	553	20.7757	0.0763	0.0089	0.0855	0.0084	0.0001	0.0002
wolframite_83	554	20.5613	0.091	0.0002	0.1169	0.0025	0.0001	0.0002
wolframite_84	555	20.7186	0.0464	0.0296	0.1145	0.0015	0.0001	0.0002
wolframite_85	556	20.7342	0.093	0.0024	0.0764	0.0001	0.0001	0.0002
wolframite_86	557	20.5877	0.1113	0.0002	0.0841	0.0001	0.0001	0.0002
wolframite_87	558	21.0707	0.0003	0.0002	0.0999	0.0001	0.0001	0.0002
wolframite_88	559	20.6241	0.0133	0.0151	0.114	0.001	0.0001	0.0002

wolframite_93	564	20.595	0.0003	0.0242	0.1196	0.0149	0.0001	0.0002
wolframite_94	565	20.8109	0.1141	0.0002	0.0746	0.0001	0.0001	0.0002
wolframite_95	566	20.7109	0.0748	0.0293	0.1237	0.0204	0.0001	0.0002
wolframite_96	567	20.8185	0.0648	0.0002	0.1115	0.0134	0.0001	0.0002
wolframite_98	569	20.5695	0.0003	0.0002	0.0776	0.0129	0.0001	0.0002
wolframite_99	570	20.3852	0.0367	0.0002	0.0953	0.0001	0.0001	0.0002
wolframite_101	572	20.3359	0.0447	0.0193	0.0806	0.0109	0.0001	0.0002
wolframite_102	573	20.6997	0.0496	0.0002	0.0845	0.0001	0.0001	0.0002
wolframite_103	574	20.6106	0.1629	0.0192	0.1214	0.0001	0.0001	0.0002
wolframite_104	575	20.5108	0.1091	0.0364	0.0641	0.0199	0.0001	0.0002
wolframite_105	576	20.4346	0.1195	0.0002	0.0939	0.0001	0.0001	0.0002
wolframite_106	577	20.1989	0.0763	0.0284	0.1049	0.009	0.0001	0.0002
wolframite_107	578	20.4656	0.0563	0.0002	0.0955	0.0001	0.0001	0.0002
wolframite_108	579	20.3439	0.1737	0.0002	0.1056	0.0005	0.0001	0.0002
wolframite_109	580	20.5435	0.0017	0.0226	0.1292	0.0001	0.0001	0.0002
wolframite_110	581	20.4343	0.058	0.0002	0.1199	0.0001	0.0001	0.0002
wolframite_112	583	20.6239	0.0003	0.0002	0.1231	0.0001	0.0001	0.0002

wolframite_113	584	20.3845	0.0778	0.0002	0.1213	0.0179	0.0001	0.0002
wolframite_114	585	20.1746	0.172	0.0409	0.1245	0.005	0.0001	0.0002
wolframite_116	587	20.4789	0.0232	0.0002	0.1299	0.0001	0.0001	0.0002
wolframite_117	588	20.7398	0.0779	0.0002	0.1184	0.009	0.0001	0.0002
wolframite_118	589	20.5875	0.1451	0.0002	0.1304	0.0001	0.0001	0.0002
wolframite_119	590	20.6209	0.0003	0.0002	0.0448	0.0001	0.0001	0.0002
wolframite_1	1	20.649	0.009	0.0002	0.0774	0.0001	0.0001	0.0002
wolframite_2	2	20.8511	0.2214	0.0002	0.139	0.0001	0.0001	0.0002
wolframite_5	5	20.6934	0.126	0.0054	0.0815	0.0001	0.0001	0.0002
wolframite_6	6	20.4867	0.1771	0.0002	0.1042	0.0001	0.0001	0.0002
wolframite_8	8	20.3409	0.2557	0.0002	0.1252	0.0001	0.0001	0.0002
wolframite_9	9	20.4234	0.034	0.0002	0.151	0.0001	0.0001	0.0002
wolframite_1	12	20.768	0.1511	0.0132	0.0906	0.0001	0.0001	0.0002
wolframite_2	13	20.6895	0.1115	0.0002	0.1267	0.01	0.0001	0.0002
wolframite_5	16	20.2271	0.0334	0.0002	0.0993	0.0062	0.0001	0.0002
wolframite_6	17	20.3566	0.138	0.0002	0.1183	0.0001	0.0001	0.0002
wolframite_7	18	20.1445	0.099	0.0002	0.1116	0.0001	0.0001	0.0002

wolframite_8	19	20.4805	0.0545	0.0002	0.1404	0.0001	0.0001	0.0002
wolframite_9	20	20.3761	0.1265	0.0117	0.1525	0.0193	0.0001	0.0002
wolframite_10	21	20.2251	0.1455	0.0002	0.1332	0.0001	0.0001	0.0002
wolframite_11	22	20.1665	0.1739	0.0002	0.1247	0.0001	0.0001	0.0002
wolframite_14	25	20.3745	0.0874	0.0039	0.1217	0.0001	0.0001	0.0002
wolframite_15	26	20.2002	0.0596	0.0002	0.1297	0.0173	0.0001	0.0002
wolframite_16	27	20.4801	0.071	0.0002	0.148	0.0001	0.0001	0.0002
wolframite_17	28	20.1116	0.1768	0.0002	0.0639	0.0186	0.0001	0.0056
wolframite_18	29	20.701	0.1726	0.006	0.0738	0.0001	0.0001	0.0002
wolframite_19	30	20.5232	0.0746	0.0002	0.105	0.0001	0.0001	0.0002
wolframite_20	31	20.3756	0.1704	0.0305	0.0993	0.0213	0.0001	0.0002
wolframite_21	32	20.3065	0.1268	0.0002	0.1101	0.0001	0.0001	0.0002
wolframite_22	33	20.3985	0.1467	0.0055	0.102	0.0001	0.0001	0.0002
wolframite_23	34	20.462	0.1077	0.0002	0.1183	0.0001	0.0001	0.0002
wolframite_25	36	20.358	0.0546	0.0002	0.11	0.0108	0.0001	0.0002
wolframite_26	37	20.5462	0.076	0.0047	0.1044	0.0061	0.0001	0.0002
wolframite_27	38	20.1107	0.1255	0.0041	0.1257	0.0127	0.0001	0.0002

wolframite_28	39	20.3813	0.0746	0.0131	0.1388	0.0001	0.0001	0.0002
wolframite_29	40	20.4368	0.1546	0.0004	0.1254	0.0019	0.0001	0.0002
wolframite_30	41	20.1674	0.0532	0.0002	0.1099	0.0001	0.0001	0.0002
wolframite_31	42	19.6629	0.2373	0.0002	0.084	0.0078	0.0001	0.0001
wolframite_32	43	20.3145	0.0559	0.0002	0.1134	0.0001	0.0001	0.0002
wolframite_33	44	20.633	0.1763	0.0045	0.1134	0.0001	0.0001	0.0002
wolframite_34	45	20.4073	0.0533	0.0002	0.0905	0.0001	0.0001	0.0002
wolframite_35	46	20.3558	0.104	0.0183	0.1355	0.0001	0.0001	0.0002
wolframite_36	47	20.2474	0.0725	0.0002	0.0733	0.0001	0.0001	0.0002
wolframite_37	48	20.1766	0.0658	0.0002	0.0649	0.0027	0.0001	0.0002
wolframite_38	49	20.126	0.1016	0.0002	0.0852	0.0065	0.0001	0.0002
wolframite_39	50	20.281	0.0595	0.0002	0.1353	0.0073	0.0001	0.0002
wolframite_40	51	20.1257	0.0748	0.0133	0.1034	0.0001	0.0001	0.0002
wolframite_41	52	19.9784	0.0968	0.0002	0.0905	0.0108	0.0001	0.0002
wolframite_42	53	20.2202	0.1206	0.0002	0.1298	0.0001	0.0001	0.0002
wolframite_43	54	20.6117	0.142	0.0002	0.1048	0.0001	0.0001	0.0002
wolframite_44	55	20.4936	0.1488	0.0096	0.1005	0.0001	0.0001	0.0002

wolframite_45	56	20.6325	0.1269	0.0002	0.1435	0.0001	0.0001	0.0002
wolframite_46	57	20.3236	0.1659	0.0084	0.1021	0.0031	0.0001	0.0002
wolframite_47	58	20.2414	0.0687	0.0002	0.1231	0.0001	0.0001	0.0002
wolframite_48	59	20.5037	0.2506	0.0002	0.0833	0.0019	0.0001	0.0002
wolframite_49	60	20.6757	0.0643	0.0016	0.1068	0.0131	0.0001	0.0002
wolframite_50	61	20.4471	0.1065	0.0038	0.1387	0.0042	0.0001	0.0002
wolframite_51	62	20.5374	0.1792	0.0123	0.0697	0.0001	0.0001	0.0002
wolframite_52	63	20.2015	0.0621	0.0167	0.1122	0.0001	0.0001	0.0002
wolframite_53	64	20.0485	0.0697	0.0002	0.1166	0.0008	0.0001	0.0002
wolframite_54	65	20.7406	0.1598	0.0002	0.1109	0.0001	0.0001	0.0002
wolframite_55	66	20.4001	0.0811	0.0211	0.1136	0.0001	0.0001	0.0002
wolframite_56	67	20.0752	0.1415	0.0002	0.1038	0.0001	0.0001	0.0002
wolframite_57	68	20.468	0.0603	0.0002	0.0673	0.0001	0.0001	0.0002
wolframite_58	69	20.0983	0.1316	0.0002	0.0949	0.0046	0.0001	0.0002
wolframite_59	70	20.7354	0.1897	0.0002	0.079	0.0001	0.0001	0.0002
wolframite_60	71	20.3358	0.0648	0.0002	0.1254	0.0223	0.0001	0.0002
wolframite_61	72	20.9094	0.3909	0.0002	0.1032	0.0001	0.0001	0.0002

wolframite_62	73	20.2797	0.1782	0.0002	0.1114	0.0001	0.0001	0.0002
wolframite_63	74	20.3888	0.0546	0.0075	0.1001	0.0039	0.0001	0.0002
wolframite_64	75	20.4027	0.0991	0.0082	0.0886	0.0001	0.0001	0.0002
wolframite_65	76	20.3312	0.0748	0.0002	0.1066	0.0326	0.0001	0.0002
wolframite_66	77	20.0941	0.0419	0.0002	0.1028	0.0001	0.0001	0.0002
wolframite_67	78	20.056	0.0267	0.0002	0.0902	0.0092	0.0001	0.0002
wolframite_68	79	20.4537	0.2343	0.0007	0.1207	0.0104	0.0001	0.0002
wolframite_69	80	20.067	0.1706	0.0003	0.1095	0.0925	0.0001	0.0002
wolframite_70	81	20.2653	0.0722	0.0035	0.1313	0.0001	0.0001	0.0002
wolframite_71	82	20.2642	0.141	0.0002	0.1337	0.0001	0.0001	0.0002
wolframite_73	84	20.4172	0.155	0.0002	0.1054	0.0001	0.0001	0.0002
wolframite_74	85	20.3477	0.098	0.0005	0.133	0.0162	0.0001	0.0002
wolframite_75	86	20.4288	0.0564	0.0002	0.1025	0.0001	0.0001	0.0002
wolframite_79	90	20.5436	0.1902	0.0064	0.1269	0.0123	0.0001	0.0002
wolframite_80	91	20.4571	0.099	0.0002	0.1267	0.0001	0.0001	0.0002
wolframite_81	92	20.6495	0.3167	0.0002	0.1256	0.0143	0.0001	0.0002
wolframite_82	93	20.4355	0.1369	0.0022	0.1246	0.0069	0.0001	0.0002

wolframite_83	94	19.9856	0.1306	0.0234	0.1143	0.0147	0.0001	0.0002
wolframite_84	95	20.2743	0.1214	0.026	0.1072	0.0001	0.0001	0.0002
wolframite_86	97	20.5623	0.0994	0.0002	0.0942	0.0001	0.0001	0.0002
wolframite_87	98	20.5831	0.0003	0.0034	0.0931	0.0042	0.0001	0.0002
wolframite_88	99	20.2231	0.0902	0.0002	0.1249	0.0004	0.0001	0.0002
wolframite_92	103	20.1446	0.2053	0.0002	0.09	0.0227	0.0001	0.0002
wolframite_93	104	20.1135	0.1105	0.0002	0.1248	0.0001	0.0001	0.0002
wolframite_94	105	20.4003	0.1431	0.0002	0.1147	0.0054	0.0001	0.0002
wolframite_95	106	19.2198	0.0633	0.0828	0.0862	0.1637	0.0001	0.0001
wolframite_96	107	20.177	0.1569	0.0002	0.1206	0.0015	0.0001	0.0002
wolframite_97	108	20.5803	0.0887	0.0002	0.1187	0.0001	0.0001	0.0002
wolframite_98	109	20.4132	0.0723	0.0002	0.1133	0.0001	0.0001	0.0002
wolframite_99	110	20.3935	0.1254	0.0017	0.1105	0.0001	0.0001	0.0002
wolframite_100	111	20.742	0.1255	0.0352	0.1191	0.0001	0.0001	0.0002
wolframite_101	112	20.5817	0.1064	0.0002	0.1212	0.0001	0.0001	0.0002
wolframite_102	113	20.2297	0.1583	0.0186	0.0926	0.0001	0.0001	0.0002
wolframite_103	114	20.2234	0.0877	0.0002	0.1022	0.0004	0.0001	0.0002

wolframite_104	115	20.1916	0.1002	0.0002	0.1089	0.0001	0.0001	0.0002
wolframite_105	116	20.4525	0.0521	0.0126	0.0958	0.0001	0.0001	0.0002
wolframite_106	117	20.4702	0.0862	0.0002	0.1369	0.0001	0.0001	0.0002
wolframite_107	118	20.341	0.1587	0.0059	0.1333	0.0001	0.0001	0.0002
wolframite_108	119	20.2789	0.0912	0.0002	0.1306	0.0085	0.0001	0.0002
wolframite_109	120	20.2355	0.0966	0.0002	0.1346	0.0001	0.0001	0.0002
wolframite_110	121	20.3972	0.1476	0.0002	0.0807	0.0001	0.0001	0.0002
wolframite_111	122	20.4071	0.0003	0.0002	0.1365	0.0112	0.0001	0.0002
wolframite_112	123	20.3195	0.1	0.0002	0.1226	0.0069	0.0001	0.0002
wolframite_113	124	20.6972	0.1862	0.0002	0.1163	0.0001	0.0001	0.0002
wolframite_115	126	20.1487	0.1443	0.0218	0.133	0.0012	0.0001	0.0002
wolframite_116	127	20.2881	0.086	0.0203	0.1385	0.0127	0.0001	0.0002
wolframite_117	128	20.3552	0.1065	0.0185	0.0903	0.0161	0.0001	0.0002
wolframite_118	129	20.0751	0.1039	0.0002	0.1143	0.0001	0.0001	0.0002
wolframite_119	130	20.2723	0.0925	0.0002	0.1206	0.022	0.0001	0.0002
wolframite_120	131	20.2628	0.0991	0.0342	0.1017	0.0158	0.0001	0.0002
wolframite_121	132	20.1346	0.0971	0.016	0.1253	0.0062	0.0001	0.0002

wolframite_122	133	20.2387	0.1432	0.0002	0.1385	0.0065	0.0001	0.0002
wolframite_123	134	20.5533	0.1158	0.0002	0.138	0.0031	0.0001	0.0002
wolframite_124	135	20.2495	0.1188	0.0002	0.117	0.0001	0.0001	0.0002
wolframite_125	136	19.9951	0.164	0.0002	0.1552	0.012	0.0001	0.0002
wolframite_126	137	20.8344	0.1458	0.0002	0.1299	0.0085	0.0001	0.0002
wolframite_127	138	20.1985	0.1303	0.0225	0.1178	0.0001	0.0001	0.0002
wolframite_128	139	20.0675	0.0786	0.0002	0.1269	0.0001	0.0001	0.0002
wolframite_129	140	20.2189	0.1592	0.0023	0.0894	0.0177	0.0001	0.0002
wolframite_130	141	20.1888	0.0482	0.0002	0.1135	0.0004	0.0001	0.0002
wolframite_131	142	20.3279	0.1629	0.0002	0.1608	0.0092	0.0001	0.0002
wolframite_132	143	20.1891	0.1373	0.0002	0.0927	0.0001	0.0001	0.0002
wolframite_133	144	20.8003	0.1334	0.0002	0.1186	0.0046	0.0001	0.0002
wolframite_134	145	20.3832	0.0382	0.0019	0.0921	0.0081	0.0001	0.0002
wolframite_135	146	20.5286	0.1853	0.0033	0.1161	0.0001	0.0001	0.0002
wolframite_136	147	20.4354	0.0003	0.0002	0.0885	0.0001	0.0001	0.0002
wolframite_137	148	20.6859	0.0735	0.0002	0.1239	0.0001	0.0001	0.0002
wolframite_138	149	20.6257	0.1903	0.0002	0.1558	0.0001	0.0001	0.0002

wolframite_139	150	20.3585	0.137	0.0002	0.1323	0.0069	0.0001	0.0002
wolframite_140	151	20.1522	0.1104	0.0002	0.1015	0.0001	0.0001	0.0002
wolframite_141	152	20.5788	0.1906	0.0022	0.1229	0.0001	0.0001	0.0002
wolframite_142	153	20.5961	0.1712	0.0002	0.1289	0.0001	0.0001	0.0002
wolframite_143	154	20.4207	0.1092	0.0141	0.1018	0.0116	0.0001	0.0002
wolframite_144	155	20.4524	0.1761	0.0122	0.1065	0.0001	0.0001	0.0002
wolframite_145	156	20.7179	0.1252	0.0322	0.0948	0.0046	0.0001	0.0002
wolframite_146	157	19.9554	0.1114	0.0508	0.1333	0.02	0.0001	0.0002
wolframite_147	158	20.1697	0.1662	0.0031	0.1226	0.0001	0.0001	0.0002
wolframite_149	160	20.3992	0.1662	0.0002	0.1249	0.0019	0.0001	0.0002
wolframite_150	161	20.551	0.0747	0.0444	0.1323	0.0001	0.0001	0.0002
wolframite_151	162	20.4769	0.1117	0.0002	0.1157	0.0001	0.0001	0.0002
wolframite_152	163	19.9715	0.0412	0.0002	0.0816	0.0001	0.0001	0.0002
wolframite_156	167	20.522	0.0873	0.0002	0.126	0.0116	0.0001	0.0002
wolframite_157	168	20.3218	0.0282	0.0002	0.1057	0.0058	0.0001	0.0002
wolframite_158	169	20.2834	0.0399	0.01	0.0779	0.0001	0.0001	0.0002
wolframite_159	170	20.2373	0.0988	0.0212	0.1331	0.0001	0.0001	0.0002

wolframite_160	171	20.1083	0.0003	0.0184	0.145	0.0134	0.0001	0.0002
wolframite_162	173	20.2476	0.1828	0.0293	0.1263	0.0015	0.0001	0.0002
wolframite_163	174	20.401	0.1598	0.0002	0.1183	0.0001	0.0001	0.0002
wolframite_164	175	20.2237	0.1279	0.0196	0.1086	0.0035	0.0001	0.0002
wolframite_165	176	20.3539	0.0697	0.0002	0.1175	0.0001	0.0001	0.0002
wolframite_166	177	20.0035	0.0152	0.0002	0.1047	0.0096	0.0001	0.0002
wolframite_167	178	20.4725	0.0431	0.0268	0.1196	0.0001	0.0001	0.0002
wolframite_168	179	20.2223	0.0888	0.05	0.1209	0.0027	0.0001	0.0002
wolframite_169	180	20.3647	0.1453	0.001	0.1251	0.005	0.0001	0.0002
wolframite_170	181	20.6851	0.1178	0.0002	0.1195	0.0001	0.0001	0.0002
wolframite_171	182	20.3121	0.1156	0.0002	0.1038	0.0012	0.0001	0.0002
wolframite_173	184	20.569	0.1603	0.0129	0.1486	0.0001	0.0001	0.0002
wolframite_176	187	20.4836	0.0897	0.0002	0.115	0.0138	0.0001	0.0002
wolframite_177	188	20.3176	0.0988	0.0034	0.1157	0.0001	0.0001	0.0002
wolframite_178	189	19.196	0.1766	0.0526	0.1371	0.034	0.0001	0.0186
wolframite_179	190	20.2974	0.1714	0.0002	0.1234	0.0001	0.0001	0.0002
wolframite_180	191	20.4413	0.1317	0.0002	0.117	0.0001	0.0001	0.0002

wolframite_181	192	20.1214	0.1531	0.0021	0.1041	0.0001	0.0001	0.0002
wolframite_182	193	19.2545	0.1733	0.0011	0.0977	0.0027	0.0001	0.0094
wolframite_183	194	20.5539	0.2266	0.0002	0.1306	0.0001	0.0001	0.0002
wolframite_185	196	20.265	0.1132	0.0002	0.1237	0.015	0.0001	0.0002
wolframite_187	198	20.1318	0.1179	0.0002	0.1222	0.0001	0.0001	0.0002
wolframite_188	199	20.3499	0.0837	0.0002	0.0975	0.0054	0.0001	0.0002
wolframite_189	200	19.9912	0.1419	0.0002	0.0761	0.0058	0.0001	0.0002
wolframite_190	201	20.1012	0.0469	0.001	0.1054	0.0173	0.0001	0.0002
wolframite_191	202	20.7115	0.0787	0.0002	0.0874	0.0001	0.0001	0.0002
wolframite_192	203	20.5701	0.1165	0.0182	0.0992	0.0062	0.0001	0.0002
wolframite_193	204	20.1158	0.1079	0.0002	0.1048	0.0112	0.0001	0.0002
wolframite_194	205	20.5455	0.1907	0.0071	0.1477	0.0008	0.0001	0.0002
wolframite_195	206	20.8676	0.1319	0.0002	0.1162	0.0001	0.0001	0.0002
wolframite_197	208	20.5602	0.0354	0.0016	0.1319	0.0001	0.0001	0.0002
wolframite_198	209	20.4672	0.133	0.001	0.0956	0.0001	0.0001	0.0002
wolframite_199	210	20.4176	0.0836	0.0137	0.135	0.0001	0.0001	0.0002
wolframite_200	211	20.4058	0.1513	0.0002	0.1328	0.0001	0.0001	0.0002

wolframite_201	212	20.9609	0.1515	0.0002	0.1135	0.0192	0.0001	0.0002
wolframite_204	215	20.1904	0.0934	0.0061	0.1034	0.0001	0.0001	0.0002
wolframite_205	216	20.6747	0.1178	0.0002	0.1263	0.0112	0.0001	0.0002
wolframite_206	217	20.1999	0.0482	0.0139	0.1113	0.0001	0.0001	0.0002
wolframite_207	218	20.5498	0.5317	0.0405	0.0376	0.0546	0.0001	0.0001
wolframite_208	219	20.4476	0.0419	0.0212	0.0962	0.0001	0.0001	0.0002
wolframite_209	220	20.1987	0.0697	0.0002	0.1009	0.0001	0.0001	0.0002
wolframite_210	221	20.5067	0.1307	0.002	0.1225	0.0001	0.0001	0.0002
wolframite_211	222	20.3332	0.2297	0.0173	0.1031	0.0001	0.0001	0.0002
wolframite_212	223	20.2025	0.1916	0.0002	0.1135	0.0015	0.0001	0.0002
wolframite_213	224	20.3973	0.0953	0.0038	0.1039	0.0001	0.0001	0.0002
wolframite_214	225	20.17	0.0744	0.0002	0.0938	0.0001	0.0001	0.0002
wolframite_215	226	19.9623	0.0924	0.0022	0.1037	0.0001	0.0001	0.0002
wolframite_216	227	20.3821	0.1714	0.0002	0.1118	0.0001	0.0001	0.0002
wolframite_217	228	20.3133	0.1231	0.0002	0.1152	0.0001	0.0001	0.0002
wolframite_218	229	20.4256	0.0911	0.0023	0.1264	0.0001	0.0001	0.0002
wolframite_219	230	20.5773	0.0669	0.0355	0.14	0.0001	0.0001	0.0002

wolframite_220	231	20.1782	0.1154	0.0065	0.1152	0.0001	0.0001	0.0002
wolframite_221	232	20.0416	0.0467	0.0002	0.1417	0.0038	0.0001	0.0002
wolframite_222	233	20.3539	0.1106	0.0002	0.1039	0.0001	0.0001	0.0002
wolframite_225	236	20.4205	0.1308	0.0098	0.1357	0.0001	0.0001	0.0002
wolframite_226	237	20.098	0.1358	0.0002	0.1482	0.0001	0.0001	0.0002
wolframite_227	238	19.8498	0.1092	0.0002	0.1052	0.0001	0.0001	0.0002
wolframite_229	240	20.6239	0.1156	0.0002	0.0701	0.0001	0.0001	0.0002
wolframite_230	241	20.5358	0.0003	0.0002	0.0288	0.0001	0.0001	0.0002
wolframite_231	242	20.3604	0.0003	0.0137	0.02	0.0001	0.0001	0.0002
wolframite_232	243	20.1947	0.0797	0.0002	0.1005	0.0001	0.0001	0.0002
wolframite_233	244	20.6404	0.0875	0.0002	0.1258	0.0181	0.0001	0.0002
wolframite_234	245	19.6345	0.2015	0.0004	0.104	0.0113	0.0001	0.0001
wolframite_235	246	20.478	0.0025	0.0002	0.1253	0.0001	0.0001	0.0002
wolframite_236	247	20.5461	0.2164	0.0002	0.0704	0.0181	0.0001	0.0002
wolframite_237	248	20.7525	0.1558	0.0338	0.1068	0.0001	0.0001	0.0002
wolframite_238	249	20.5367	0.0003	0.0002	0.0317	0.0065	0.0001	0.0002
wolframite_239	250	20.2852	0.1662	0.0002	0.0959	0.0001	0.0001	0.0002

wolframite_240	251	20.5644	0.2225	0.0002	0.0816	0.0454	0.0001	0.0002
wolframite_242	253	20.3414	0.1178	0.0495	0.1014	0.0001	0.0001	0.0002
wolframite_243	254	20.379	0.0596	0.0002	0.0939	0.0077	0.0001	0.0002
wolframite_244	255	20.1283	0.1158	0.0002	0.1302	0.0001	0.0001	0.0002
wolframite_245	256	20.3406	0.0572	0.0002	0.1026	0.0173	0.0001	0.0002
wolframite_246	257	20.3634	0.0231	0.0002	0.0772	0.0001	0.0001	0.0002
wolframite_247	258	20.2215	0.1153	0.0002	0.0786	0.0001	0.0001	0.0002
wolframite_248	259	20.1004	0.0861	0.0537	0.1089	0.0001	0.0001	0.0002
wolframite_249	260	20.3895	0.0003	0.0131	0.0992	0.0001	0.0001	0.0002
wolframite_250	261	20.6012	0.1014	0.0186	0.1743	0.0001	0.0001	0.0002
wolframite_251	262	20.6468	0.0888	0.0002	0.1052	0.0108	0.0001	0.0002
wolframite_252	263	20.7273	0.1321	0.0002	0.1282	0.0001	0.0001	0.0002
wolframite_253	264	20.0993	0.1748	0.0391	0.0947	0.0235	0.0001	0.0002
wolframite_254	265	20.3317	0.0953	0.0002	0.115	0.0001	0.0001	0.0002
wolframite_255	266	20.666	0.0951	0.0035	0.1306	0.0001	0.0001	0.0002
wolframite_256	267	20.4434	0.033	0.0002	0.0928	0.0081	0.0001	0.0002
wolframite_257	268	20.4378	0.052	0.011	0.1246	0.0119	0.0001	0.0002

wolframite_258	269	20.2862	0.1494	0.0031	0.0798	0.0001	0.0001	0.0002
wolframite_259	270	20.7192	0.0961	0.0134	0.1194	0.0065	0.0001	0.0002
wolframite_260	271	20.5215	0.0873	0.0077	0.1343	0.0001	0.0001	0.0002
wolframite_261	272	20.484	0.1128	0.0002	0.1075	0.0042	0.0001	0.0002
wolframite_262	273	20.3379	0.128	0.0002	0.1	0.0001	0.0001	0.0002
wolframite_263	274	20.4727	0.0913	0.0002	0.1091	0.0001	0.0001	0.0002
wolframite_264	275	20.1879	0.0003	0.0002	0.0992	0.0001	0.0001	0.0002
wolframite_265	276	20.4384	0.0003	0.0011	0.076	0.0001	0.0001	0.0002
wolframite_266	277	20.2449	0.1274	0.0002	0.062	0.0001	0.0001	0.0002
wolframite_267	278	20.2695	0.1332	0.0002	0.1057	0.0001	0.0001	0.0002
wolframite_268	279	20.43	0.1185	0.0049	0.1143	0.0088	0.0001	0.0002
wolframite_269	280	20.5295	0.1064	0.005	0.1411	0.0001	0.0001	0.0002
wolframite_270	281	20.0692	0.1244	0.0002	0.1112	0.0001	0.0001	0.0002
wolframite_271	282	20.3545	0.1041	0.0002	0.1443	0.0001	0.0001	0.0002
wolframite_272	283	20.6191	0.1753	0.0045	0.1117	0.0001	0.0001	0.0002
wolframite_273	284	20.3873	0.009	0.0002	0.0932	0.0001	0.0001	0.0002
wolframite_274	285	20.1211	0.0527	0.0003	0.0943	0.0001	0.0001	0.0002

wolframite_275	286	20.2531	0.0331	0.0002	0.0814	0.0207	0.0001	0.0002
wolframite_276	287	20.2771	0.1642	0.0002	0.1114	0.0001	0.0001	0.0002
wolframite_277	288	20.0846	0.1293	0.0002	0.113	0.0001	0.0001	0.0002
wolframite_278	289	20.2873	0.1445	0.0002	0.1041	0.0001	0.0001	0.0002
wolframite_280	291	20.3623	0.1228	0.0046	0.0944	0.0001	0.0001	0.0002
wolframite_282	293	20.2971	0.128	0.0002	0.1152	0.0001	0.0001	0.0002
wolframite_283	294	20.2306	0.1319	0.0002	0.0878	0.0001	0.0001	0.0002
wolframite_284	295	20.327	0.1066	0.014	0.1212	0.0001	0.0001	0.0002
wolframite_285	296	20.3551	0.263	0.0002	0.1241	0.0046	0.0001	0.0002
wolframite_286	297	19.9452	0.0406	0.0002	0.1051	0.0001	0.0001	0.0002
wolframite_287	298	20.2872	0.1141	0.0002	0.1188	0.0001	0.0001	0.0002
wolframite_288	299	20.0222	0.0559	0.0002	0.0926	0.0135	0.0001	0.0002
wolframite_289	300	20.1648	0.0544	0.0002	0.1244	0.0161	0.0001	0.0002
wolframite_290	301	20.2025	0.0216	0.011	0.1096	0.0001	0.0001	0.0002
wolframite_291	302	20.3751	0.1685	0.0002	0.1197	0.015	0.0001	0.0002
wolframite_292	303	20.666	0.0928	0.0002	0.085	0.0031	0.0001	0.0002
wolframite_293	304	20.1438	0.0456	0.0039	0.1244	0.0001	0.0001	0.0002

wolframite_294	305	20.7909	0.1144	0.0002	0.1338	0.0001	0.0001	0.0002
wolframite_75	8	20.6663	x	x	0.1024	x	x	x
wolframite_76	9	20.2832	x	x	0.0989	x	x	x
wolframite_77	10	20.81	x	x	0.1215	x	x	x
wolframite_78	11	20.6385	x	x	0.0606	x	x	x
wolframite_79	12	20.9575	x	x	0.1107	x	x	x
wolframite_80	13	20.7498	x	x	0.0939	x	x	x
wolframite_81	14	20.6601	x	x	0.0515	x	x	x
wolframite_82	15	20.5376	x	x	0.1122	x	x	x
wolframite_83	16	19.8063	x	x	0.0941	x	x	x
wolframite_84	17	20.1744	x	x	0.0607	x	x	x
wolframite_85	18	20.646	x	x	0.0786	x	x	x
wolframite_86	19	20.3962	x	x	0.0323	x	x	x
wolframite_87	20	20.8275	x	x	0.1152	x	x	x
wolframite_88	21	20.6502	x	x	0.0651	x	x	x
wolframite_89	22	20.7651	x	x	0.0928	x	x	x
wolframite_90	23	20.9708	x	x	0.1315	x	x	x

wolframite_91	24	20.0074	x	x	0.0885	x	x	x
wolframite_92	25	20.8844	x	x	0.114	x	x	x
wolframite_93	26	20.0182	x	x	0.1018	x	x	x
wolframite_94	27	20.4887	x	x	0.1023	x	x	x
wolframite_95	28	20.7648	x	x	0.1194	x	x	x
wolframite_96	29	20.5173	x	x	0.1011	x	x	x
wolframite_97	30	20.5145	x	x	0.127	x	x	x
wolframite_98	31	20.8735	x	x	0.0856	x	x	x
wolframite_99	32	20.5614	x	x	0.1204	x	x	x
wolframite_100	33	20.482	x	x	0.1193	x	x	x
wolframite_239	239	20.7038	x	x	0.1192	x	x	x
wolframite_240	240	20.8082	x	x	0.1117	x	x	x
wolframite_241	241	20.7396	x	x	0.1334	x	x	x
wolframite_242	242	20.701	x	x	0.1074	x	x	x
wolframite_243	243	20.892	x	x	0.1185	x	x	x
wolframite_244	244	21.0839	x	x	0.1075	x	x	x
wolframite_245	245	20.7711	x	x	0.1061	x	x	x

wolframite_246	246	21.2399	x	x	0.0788	x	x	x
wolframite_247	247	20.6761	x	x	0.1446	x	x	x
wolframite_248	248	20.9745	x	x	0.132	x	x	x
wolframite_249	249	20.0306	x	x	0.1205	x	x	x
wolframite_250	250	20.4534	x	x	0.1232	x	x	x
wolframite_251	251	20.7229	x	x	0.1158	x	x	x
wolframite_252	252	20.4911	x	x	0.1176	x	x	x
wolframite_253	253	20.6084	x	x	0.0853	x	x	x
wolframite_254	254	20.3959	x	x	0.1227	x	x	x
wolframite_255	255	18.1555	x	x	0.1367	x	x	x
wolframite_256	256	20.8869	x	x	0.094	x	x	x
wolframite_257	257	20.7213	x	x	0.1255	x	x	x
wolframite_258	258	20.9356	x	x	0.1296	x	x	x
wolframite_259	259	21.2992	x	x	0.1253	x	x	x
wolframite_260	260	20.6674	x	x	0.1208	x	x	x
wolframite_261	261	21.0773	x	x	0.1252	x	x	x
wolframite_262	262	21.1186	x	x	0.1038	x	x	x

wolframite_263	263	20.6412	x	x	0.1207	x	x	x
wolframite_264	264	19.943	x	x	0.1122	x	x	x
wolframite_265	265	20.3916	x	x	0.1111	x	x	x
wolframite_266	266	20.7566	x	x	0.1234	x	x	x
wolframite_267	267	21.0847	x	x	0.1066	x	x	x
wolframite_268	268	20.9193	x	x	0.1415	x	x	x
wolframite_269	269	20.3115	x	x	0.1166	x	x	x
wolframite_270	270	20.9944	x	x	0.1298	x	x	x
wolframite_271	271	20.645	x	x	0.1314	x	x	x
wolframite_272	272	20.2961	x	x	0.1236	x	x	x
wolframite_273	273	20.8422	x	x	0.1273	x	x	x
wolframite_274	274	20.3482	x	x	0.0883	x	x	x
wolframite_275	275	20.9236	x	x	0.1228	x	x	x
wolframite_276	276	20.3168	x	x	0.1297	x	x	x
wolframite_277	277	20.8187	x	x	0.1069	x	x	x
wolframite_278	278	21.0735	x	x	0.0962	x	x	x
wolframite_279	279	20.5167	x	x	0.1218	x	x	x

wolframite_280	280	20.6014	x	x	0.1002	x	x	x
wolframite_281	281	21.0533	x	x	0.1263	x	x	x
wolframite_282	282	20.7477	x	x	0.1172	x	x	x
wolframite_283	283	20.7517	x	x	0.1415	x	x	x
wolframite_284	284	20.8982	x	x	0.1113	x	x	x
wolframite_285	285	20.8019	x	x	0.115	x	x	x
wolframite_286	286	20.673	x	x	0.1239	x	x	x
wolframite_287	287	20.404	x	x	0.1263	x	x	x
wolframite_288	288	21.0181	x	x	0.1068	x	x	x
wolframite_289	289	20.3449	x	x	0.0974	x	x	x
wolframite_290	290	20.7659	x	x	0.1104	x	x	x
wolframite_291	291	20.4351	x	x	0.1131	x	x	x
wolframite_292	292	20.6515	x	x	0.1376	x	x	x
wolframite_57	57	20.736	x	x	0.0984	x	x	x
wolframite_58	58	20.4335	x	x	0.0598	x	x	x
wolframite_59	59	21.057	x	x	0.1019	x	x	x
wolframite_60	60	20.8112	x	x	0.0272	x	x	x

wolframite_61	61	20.5802	x	x	0.0994	x	x	x
wolframite_62	62	20.8333	x	x	0.1205	x	x	x
wolframite_63	63	20.7746	x	x	0.0718	x	x	x
wolframite_64	64	20.3003	x	x	0.0713	x	x	x
wolframite_65	65	20.7567	x	x	0.1206	x	x	x
wolframite_66	66	20.8089	x	x	0.1047	x	x	x
wolframite_67	67	20.7173	x	x	0.1046	x	x	x
wolframite_68	68	20.3984	x	x	0.0869	x	x	x
wolframite_69	69	20.6358	x	x	0.0988	x	x	x
wolframite_70	70	21.1501	x	x	0.1011	x	x	x
wolframite_71	71	20.6806	x	x	0.1058	x	x	x
wolframite_72	72	20.6772	x	x	0.0977	x	x	x
wolframite_73	73	20.3428	x	x	0.0016	x	x	x
wolframite_74	74	20.7307	x	x	0.1028	x	x	x
wolframite_75	75	21.3056	x	x	0.1007	x	x	x
wolframite_76	76	20.8531	x	x	0.0945	x	x	x
wolframite_77	77	21.1958	x	x	0.0965	x	x	x

wolframite_78	78	20.8867	x	x	0.0494	x	x	x
wolframite_79	79	20.5954	x	x	0.1036	x	x	x
wolframite_80	80	20.9236	x	x	0.0433	x	x	x
wolframite_81	81	20.9682	x	x	0.1123	x	x	x
wolframite_82	82	20.7487	x	x	0.1176	x	x	x
wolframite_83	83	20.5848	x	x	0.0436	x	x	x
wolframite_84	84	20.9973	x	x	0.095	x	x	x
wolframite_85	85	20.915	x	x	0.0238	x	x	x
wolframite_86	86	20.7079	x	x	0.1097	x	x	x
wolframite_87	87	21.0739	x	x	0.1076	x	x	x
wolframite_88	88	21.0007	x	x	0.1149	x	x	x
wolframite_89	89	21.028	x	x	0.0997	x	x	x
wolframite_90	90	20.8415	x	x	0.0928	x	x	x
wolframite_91	91	21.0181	x	x	0.069	x	x	x
wolframite_92	92	20.8052	x	x	0.1141	x	x	x
wolframite_93	93	20.7476	x	x	0.0801	x	x	x
wolframite_94	94	20.9975	x	x	0.1151	x	x	x

wolframite_95	95	20.6899	x	x	0.1046	x	x	x
wolframite_97	97	20.6721	x	x	0.0942	x	x	x
wolframite_98	98	20.8841	x	x	0.0869	x	x	x
wolframite_99	99	20.8557	x	x	0.0759	x	x	x
wolframite_100	100	20.5941	x	x	0.1071	x	x	x
wolframite_101	101	20.7911	x	x	0.0975	x	x	x
wolframite_102	102	20.7897	x	x	0.102	x	x	x
wolframite_103	103	20.7338	x	x	0.1116	x	x	x
wolframite_104	104	20.5754	x	x	0.0844	x	x	x
wolframite_105	105	20.524	x	x	0.1092	x	x	x
wolframite_106	106	20.7136	x	x	0.1218	x	x	x
wolframite_107	107	20.981	x	x	0.0987	x	x	x
wolframite_108	108	20.8502	x	x	0.1035	x	x	x
wolframite_110	110	20.6687	x	x	0.1089	x	x	x
wolframite_111	111	20.6419	x	x	0.1016	x	x	x
wolframite_112	112	20.4729	x	x	0.084	x	x	x
wolframite_113	113	19.3447	x	x	0.2485	x	x	x

wolframite_114	114	20.5554	x	x	0.0812	x	x	x
wolframite_115	115	20.7309	x	x	0.1081	x	x	x
wolframite_116	116	20.6897	x	x	0.1009	x	x	x
wolframite_117	117	20.7802	x	x	0.0967	x	x	x
wolframite_118	118	20.5179	x	x	0.0763	x	x	x
wolframite_119	119	20.8216	x	x	0.1021	x	x	x
wolframite_120	120	20.6596	x	x	0.1075	x	x	x
wolframite_121	121	20.8315	x	x	0.0928	x	x	x
wolframite_122	122	20.4261	x	x	0.1275	x	x	x
wolframite_123	123	20.3453	x	x	0.0909	x	x	x
wolframite_124	124	20.4355	x	x	0.097	x	x	x
wolframite_125	125	20.5449	x	x	0.1016	x	x	x
wolframite_126	126	20.634	x	x	0.1103	x	x	x
wolframite_127	127	20.4659	x	x	0.1028	x	x	x
wolframite_128	128	20.7359	x	x	0.108	x	x	x
wolframite_129	129	20.6757	x	x	0.1158	x	x	x
wolframite_130	130	20.706	x	x	0.103	x	x	x

wolframite_131	131	20.5939	x	x	0.0774	x	x	x
wolframite_132	132	20.5445	x	x	0.1128	x	x	x
wolframite_133	133	20.6266	x	x	0.0849	x	x	x
wolframite_134	134	20.6273	x	x	0.1006	x	x	x
wolframite_135	135	20.7552	x	x	0.1001	x	x	x
wolframite_136	136	20.6966	x	x	0.0948	x	x	x
wolframite_137	137	20.4616	x	x	0.0849	x	x	x
wolframite_138	138	20.9468	x	x	0.104	x	x	x
wolframite_139	139	20.3384	x	x	0.0945	x	x	x
wolframite_140	140	20.7516	x	x	0.1178	x	x	x
wolframite_141	141	20.9488	x	x	0.0994	x	x	x
wolframite_142	142	20.784	x	x	0.0881	x	x	x
wolframite_143	143	20.4494	x	x	0.0994	x	x	x
wolframite_144	144	20.4773	x	x	0.0887	x	x	x
wolframite_145	145	20.6911	x	x	0.108	x	x	x
wolframite_146	146	20.7857	x	x	0.1026	x	x	x
wolframite_147	147	20.5038	x	x	0.1079	x	x	x

wolframite_148	148	20.7791	x	x	0.0878	x	x	x
wolframite_149	149	21.0675	x	x	0.1082	x	x	x
wolframite_150	150	20.7866	x	x	0.0871	x	x	x
wolframite_151	151	19.8069	x	x	0.3368	x	x	x
wolframite_153	153	21.0096	x	x	0.0834	x	x	x
wolframite_154	154	20.4533	x	x	0.0933	x	x	x
wolframite_155	155	20.7016	x	x	0.1094	x	x	x
wolframite_156	156	20.9114	x	x	0.0849	x	x	x
wolframite_157	157	20.759	x	x	0.115	x	x	x
wolframite_158	158	20.6025	x	x	0.1074	x	x	x
wolframite_159	159	20.7348	x	x	0.0869	x	x	x
wolframite_160	160	20.5588	x	x	0.0903	x	x	x
wolframite_161	161	20.7066	x	x	0.0798	x	x	x
wolframite_162	162	20.5568	x	x	0.0857	x	x	x
wolframite_163	163	20.8144	x	x	0.1033	x	x	x
wolframite_164	164	20.6843	x	x	0.1014	x	x	x
wolframite_165	165	20.823	x	x	0.1084	x	x	x

wolframite_166	166	20.7969	x	x	0.1003	x	x	x
wolframite_168	168	21.0215	x	x	0.105	x	x	x
wolframite_169	169	20.7286	x	x	0.1165	x	x	x
wolframite_170	170	20.3863	x	x	0.0844	x	x	x
wolframite_171	171	20.6855	x	x	0.1253	x	x	x
wolframite_172	172	20.0416	x	x	0.1456	x	x	x
wolframite_173	173	20.3515	x	x	0.0859	x	x	x
wolframite_174	174	20.4792	x	x	0.1038	x	x	x
wolframite_175	175	20.7364	x	x	0.091	x	x	x
wolframite_177	177	20.1161	x	x	0.0877	x	x	x
wolframite_178	178	20.6237	x	x	0.0972	x	x	x
wolframite_179	179	20.6127	x	x	0.1061	x	x	x
wolframite_180	180	21.0369	x	x	0.0916	x	x	x
wolframite_181	181	20.5253	x	x	0.0998	x	x	x
wolframite_182	182	20.7193	x	x	0.1097	x	x	x
wolframite_183	183	20.6383	x	x	0.0716	x	x	x
wolframite_184	184	20.6424	x	x	0.0909	x	x	x

wolframite_185	185	20.7239	x	x	0.1067	x	x	x
wolframite_186	186	20.6968	x	x	0.1	x	x	x
wolframite_187	187	20.8391	x	x	0.1078	x	x	x
wolframite_188	188	20.538	x	x	0.1025	x	x	x
wolframite_189	189	20.6784	x	x	0.0946	x	x	x
wolframite_190	190	20.6917	x	x	0.1061	x	x	x
wolframite_191	191	20.5203	x	x	0.113	x	x	x
wolframite_192	192	20.8434	x	x	0.0856	x	x	x
wolframite_193	193	20.677	x	x	0.0995	x	x	x
wolframite_194	194	20.4193	x	x	0.0983	x	x	x
wolframite_195	195	20.4324	x	x	0.0916	x	x	x
wolframite_196	196	20.336	x	x	0.0799	x	x	x
wolframite_197	197	20.5786	x	x	0.1127	x	x	x
wolframite_198	198	20.4422	x	x	0.0936	x	x	x
wolframite_199	199	20.6491	x	x	0.11	x	x	x
wolframite_201	201	20.4847	x	x	0.1089	x	x	x
wolframite_202	202	20.7587	x	x	0.0895	x	x	x

wolframite_203	203	20.7666	x	x	0.0965	x	x	x
wolframite_204	204	19.8717	x	x	0.0458	x	x	x
wolframite_205	205	20.2845	x	x	0.0773	x	x	x
wolframite_206	206	20.6255	x	x	0.0947	x	x	x
wolframite_207	207	20.6975	x	x	0.113	x	x	x
wolframite_208	208	20.6647	x	x	0.096	x	x	x
wolframite_209	209	20.6733	x	x	0.0905	x	x	x
wolframite_210	210	20.5471	x	x	0.1117	x	x	x
wolframite_213	213	20.8734	x	x	0.0833	x	x	x
wolframite_214	214	20.151	x	x	0.0962	x	x	x
wolframite_215	215	20.4556	x	x	0.0747	x	x	x
wolframite_216	216	20.2339	x	x	0.1041	x	x	x
wolframite_217	217	20.5496	x	x	0.0326	x	x	x
wolframite_218	218	20.3911	x	x	0.0853	x	x	x
wolframite_219	219	20.4679	x	x	0.1019	x	x	x
wolframite_220	220	20.9874	x	x	0.094	x	x	x
wolframite_221	221	20.8879	x	x	0.1054	x	x	x

wolframite_222	222	20.4546	x	x	0.0923	x	x	x
wolframite_223	223	20.7206	x	x	0.0766	x	x	x
wolframite_224	224	20.6502	x	x	0.0993	x	x	x
wolframite_225	225	20.5014	x	x	0.1056	x	x	x
wolframite_226	226	20.7386	x	x	0.0953	x	x	x
wolframite_227	227	20.8036	x	x	0.1087	x	x	x
wolframite_228	228	20.7208	x	x	0.1171	x	x	x
wolframite_229	229	20.5101	x	x	0.0856	x	x	x
wolframite_230	230	20.5481	x	x	0.1052	x	x	x
wolframite_231	231	21.131	x	x	0.1159	x	x	x
wolframite_232	232	20.1922	x	x	0.0855	x	x	x
wolframite_233	233	20.6389	x	x	0.0709	x	x	x
wolframite_234	234	20.2993	x	x	0.0874	x	x	x
wolframite_235	235	20.7873	x	x	0.0841	x	x	x
wolframite_236	236	20.7221	x	x	0.0807	x	x	x
wolframite_237	237	20.0812	x	x	0.1075	x	x	x
wolframite_238	238	20.88	x	x	0.0986	x	x	x

wolframite_68	1	20.8093	x	x	0.0642	x	x	x
wolframite_69	2	20.7174	x	x	0.0832	x	x	x
wolframite_70	3	20.6481	x	x	0.1124	x	x	x
wolframite_71	4	20.6469	x	x	0.1099	x	x	x
wolframite_72	5	20.7011	x	x	0.1285	x	x	x
wolframite_73	6	20.8503	x	x	0.1086	x	x	x
wolframite_74	7	20.7139	x	x	0.1184	x	x	x
wolframite_2	2	20.9873	x	x	0.0942	x	x	x
wolframite_3	3	20.7133	x	x	0.1139	x	x	x
wolframite_4	4	20.7209	x	x	0.0947	x	x	x
wolframite_5	5	20.8727	x	x	0.1156	x	x	x
wolframite_7	7	20.415	x	x	0.1013	x	x	x
wolframite_8	8	20.7959	x	x	0.0896	x	x	x
wolframite_9	9	21.0494	x	x	0.1042	x	x	x
wolframite_10	10	20.5072	x	x	0.0913	x	x	x
wolframite_11	11	20.548	x	x	0.0918	x	x	x
wolframite_12	12	20.6085	x	x	0.0968	x	x	x

wolframite_13	13	20.4913	x	x	0.1057	x	x	x
wolframite_14	14	20.8964	x	x	0.0874	x	x	x
wolframite_15	15	20.6888	x	x	0.0919	x	x	x
wolframite_16	16	20.985	x	x	0.0934	x	x	x
wolframite_17	17	20.9735	x	x	0.0817	x	x	x
wolframite_18	18	20.8224	x	x	0.103	x	x	x
wolframite_19	19	20.5114	x	x	0.1061	x	x	x
wolframite_20	20	20.7481	x	x	0.0804	x	x	x
wolframite_21	21	20.805	x	x	0.0999	x	x	x
wolframite_22	22	20.6589	x	x	0.098	x	x	x
wolframite_23	23	20.9049	x	x	0.0931	x	x	x
wolframite_24	24	20.6161	x	x	0.084	x	x	x
wolframite_25	25	20.5618	x	x	0.0957	x	x	x
wolframite_26	26	20.7151	x	x	0.0996	x	x	x
wolframite_27	27	20.9034	x	x	0.0431	x	x	x
wolframite_28	28	20.877	x	x	0.114	x	x	x
wolframite_29	29	20.5217	x	x	0.0872	x	x	x

wolframite_30	30	20.7152	x	x	0.0208	x	x	x
wolframite_31	31	20.6947	x	x	0.0812	x	x	x
wolframite_32	32	20.6061	x	x	0.0729	x	x	x
wolframite_33	33	20.9774	x	x	0.0528	x	x	x
wolframite_34	34	20.802	x	x	0.0286	x	x	x
wolframite_35	35	21.0155	x	x	0.1027	x	x	x
wolframite_36	36	20.7666	x	x	0.0984	x	x	x
wolframite_37	37	20.8867	x	x	0.1027	x	x	x
wolframite_38	38	20.7231	x	x	0.1278	x	x	x
wolframite_39	39	20.7518	x	x	0.127	x	x	x
wolframite_40	40	20.46	x	x	0.1028	x	x	x
wolframite_41	41	20.4644	x	x	0.082	x	x	x
wolframite_42	42	20.7512	x	x	0.0635	x	x	x
wolframite_43	43	20.7765	x	x	0.0559	x	x	x
wolframite_45	45	20.7703	x	x	0.099	x	x	x
wolframite_46	46	20.6419	x	x	0.082	x	x	x
wolframite_47	47	20.5647	x	x	0.1084	x	x	x

wolframite_48	48	20.6957	x	x	0.1234	x	x	x
wolframite_49	49	20.8059	x	x	0.1032	x	x	x
wolframite_50	50	20.4637	x	x	0.0876	x	x	x
wolframite_51	51	20.8717	x	x	0.0834	x	x	x
wolframite_52	52	20.8548	x	x	0.0988	x	x	x
wolframite_53	53	20.5563	x	x	0.0912	x	x	x
wolframite_54	54	20.7026	x	x	0.0859	x	x	x
wolframite_55	55	20.707	x	x	0.1154	x	x	x
wolframite_56	56	20.5151	x	x	0.0972	x	x	x
wolframite_S20_61	336	20.673	0.0026	0.0002	0.0973	0.0004	0.0001	0.0002
wolframite_S20_62	337	21.1189	0.0003	0.0269	0.1046	0.0001	0.0001	0.0002
wolframite_S20_65	340	19.9673	0.0003	0.0002	0.0956	0.0001	0.0001	0.0002
wolframite_S20_66	341	21.367	0.0517	0.0002	0.1235	0.0015	0.0001	0.0002
wolframite_S20_67	342	21.1808	0.0959	0.0129	0.0878	0.0111	0.0001	0.0002
wolframite_S20_68	343	20.9706	0.0777	0.0388	0.0991	0.0001	0.0001	0.0002
wolframite_S20_69	344	21.1383	0.0003	0.003	0.0652	0.0001	0.0001	0.0002
wolframite_S20_70	345	20.8569	0.0221	0.0002	0.0774	0.0001	0.0001	0.0002

wolframite_S20_71	346	20.9946	0.0815	0.008	0.0999	0.0001	0.0001	0.0002
wolframite_S20_72	347	21.22	0.0364	0.0002	0.1111	0.0031	0.0001	0.0002
wolframite_S20_73	348	21.2094	0.0214	0.0002	0.0487	0.0001	0.0001	0.0002
wolframite_S20_74	349	21.4467	0.0969	0.0002	0.124	0.0004	0.0001	0.0002
wolframite_S20_75	350	21.1022	0.0155	0.0182	0.0927	0.0164	0.0001	0.0002
wolframite_S20_76	351	20.996	0.0003	0.0002	0.1038	0.0001	0.0001	0.0002
wolframite_S20_77	352	20.7728	0.1242	0.0139	0.1094	0.0004	0.0001	0.0002
wolframite_S20_78	353	20.6531	0.0155	0.0372	0.0993	0.0001	0.0001	0.0002
wolframite_S20_79	354	20.8997	0.0713	0.0002	0.1086	0.0172	0.0001	0.0002
wolframite_S20_80	355	21.0103	0.1128	0.0097	0.0927	0.0001	0.0001	0.0002
wolframite_S20_81	356	21.2835	0.1584	0.0707	0.0901	0.0001	0.0001	0.0002
wolframite_S20_82	357	20.7582	0.0168	0.0002	0.1445	0.0184	0.0001	0.0002
wolframite_S20_83	358	20.7443	0.0858	0.0002	0.0763	0.0001	0.0001	0.0002
wolframite_S20_84	359	21.1074	0.0003	0.0002	0.0591	0.0001	0.0001	0.0002
wolframite_S20_85	360	20.7795	0.0595	0.4025	0.1201	0.0001	0.0001	0.0002
wolframite_S20_86	361	21.1634	0.0544	0.0002	0.0857	0.0001	0.0001	0.0002
wolframite_S20_87	362	21.3222	0.0234	0.0213	0.1096	0.0001	0.0001	0.0002

wolframite_S20_88	363	20.8776	0.0003	0.0346	0.0979	0.0001	0.0001	0.0002
wolframite_S20_89	364	20.8543	0.0039	0.0002	0.097	0.0019	0.0001	0.0002
wolframite_S20_90	365	21.0066	0.0065	0.0002	0.0897	0.0053	0.0001	0.0002
wolframite_S20_91	366	20.9459	0.1247	0.0045	0.0869	0.0126	0.0001	0.0002
wolframite_S20_92	367	20.8979	0.0026	0.0024	0.0915	0.0001	0.0001	0.0002
wolframite_S20_93	368	21.2325	0.039	0.0002	0.1222	0.0057	0.0001	0.0002
wolframite_S20_94	369	20.6151	0.0465	0.0002	0.1061	0.0054	0.0001	0.0002
wolframite_S20_95	370	20.9389	0.0003	0.0008	0.0889	0.0001	0.0001	0.0002
wolframite_S20_96	371	21.0343	0.0207	0.0162	0.0898	0.0001	0.0001	0.0002
wolframite_S20_97	372	20.8654	0.0427	0.0002	0.1039	0.0001	0.0001	0.0002
wolframite_S20_98	373	20.8539	0.0362	0.027	0.1184	0.0001	0.0001	0.0002
wolframite_S20_99	374	20.9561	0.0763	0.0096	0.0792	0.0001	0.0001	0.0002
wolframite_S20_100	375	20.8868	0.1071	0.0002	0.1099	0.0046	0.0001	0.0002
wolframite_S20_101	376	20.6149	0.0555	0.0105	0.0992	0.0001	0.0001	0.0002
wolframite_S20_102	377	20.9943	0.0376	0.0002	0.0994	0.0001	0.0001	0.0002
wolframite_S20_103	378	20.9812	0.0559	0.0002	0.1049	0.0001	0.0001	0.0002
wolframite_S20_104	379	21.0288	0.0299	0.0002	0.1177	0.0001	0.0001	0.0002

wolframite_S20_105	380	20.7754	0.0003	0.0179	0.1252	0.0046	0.0001	0.0002
wolframite_S20_106	381	20.7095	0.0003	0.0221	0.0729	0.0027	0.0001	0.0002
wolframite_S20_107	382	21.0537	0.0272	0.0002	0.1133	0.0001	0.0001	0.0002
wolframite_S20_108	383	20.9419	0.0003	0.0051	0.1118	0.0001	0.0001	0.0002
wolframite_S20_109	384	21.1314	0.0003	0.0026	0.1173	0.0001	0.0001	0.0002

Label	W%(Cl)	W%(K)	W%(Ca)	W%(Ti)	W%(Cr)	W%(Mn)	W%(Fe)	W%(Mo)	W%(W)
wolframite_68	x	x	x	x	x	5.299	12.0727	x	60.3882
wolframite_69	x	x	x	x	x	5.7902	11.2431	x	60.3509
wolframite_70	x	x	x	x	x	4.8478	12.2862	x	59.9184
wolframite_71	x	x	x	x	x	4.2732	13.1297	x	59.6355
wolframite_72	x	x	x	x	x	4.3629	13.2385	x	59.5765
wolframite_73	x	x	x	x	x	4.3966	13.1064	x	60.3058
wolframite_74	x	x	x	x	x	4.3008	13.3645	x	59.582
wolframite_75	x	x	x	x	x	4.8942	12.2457	x	60.0058
wolframite_76	x	x	x	x	x	4.5494	12.407	x	58.7549
wolframite_77	x	x	x	x	x	3.2739	14.0111	x	60.3782

wolframite_78	x	x	x	x	x	5.2725	12.4315	x	59.3788
wolframite_79	x	x	x	x	x	3.4028	13.5525	x	61.3299
wolframite_80	x	x	x	x	x	3.3537	14.0271	x	60.1107
wolframite_81	x	x	x	x	x	4.7774	12.2287	x	60.2593
wolframite_82	x	x	x	x	x	3.3019	13.9847	x	59.356
wolframite_83	x	x	x	x	x	4.7127	11.5446	x	57.7046
wolframite_84	x	x	x	x	x	4.6594	12.1125	x	58.6347
wolframite_85	x	x	x	x	x	4.9258	12.1651	x	60.0414
wolframite_86	x	x	x	x	x	4.8775	11.9906	x	59.4463
wolframite_87	x	x	x	x	x	3.1965	13.6528	x	60.9407
wolframite_88	x	x	x	x	x	4.7249	12.5918	x	59.8473
wolframite_89	x	x	x	x	x	4.6417	12.5339	x	60.3739
wolframite_90	x	x	x	x	x	3.2134	14.2588	x	60.7644
wolframite_91	x	x	x	x	x	2.5228	11.1046	x	61.4146
wolframite_92	x	x	x	x	x	3.1825	14.1491	x	60.6325
wolframite_93	x	x	x	x	x	3.2369	13.5697	x	57.9208
wolframite_94	x	x	x	x	x	4.3521	12.7246	x	59.4051

wolframite_95	x	x	x	x	x	3.4381	13.7605	x	60.3022
wolframite_96	x	x	x	x	x	4.6798	12.5581	x	59.3344
wolframite_97	x	x	x	x	x	3.3028	13.5938	x	59.6583
wolframite_98	x	x	x	x	x	4.879	12.5368	x	60.5393
wolframite_99	x	x	x	x	x	3.4041	13.8906	x	59.4159
wolframite_100	x	x	x	x	x	3.1643	13.7261	x	59.5625
wolframite_2	x	x	x	x	x	5.1569	12.2791	x	59.6349
wolframite_3	x	x	x	x	x	5.3787	12.2691	x	60.0558
wolframite_4	x	x	x	x	x	5.2346	12.2287	x	59.6136
wolframite_5	x	x	x	x	x	5.2492	12.0898	x	59.8947
wolframite_6	x	x	x	x	x	5.2136	11.8753	x	59.3123
wolframite_7	x	x	x	x	x	5.0049	12.2469	x	59.5534
wolframite_8	x	x	x	x	x	6.1675	11.5469	x	58.942
wolframite_9	x	x	x	x	x	5.2206	12.5039	x	60.0013
wolframite_10	x	x	x	x	x	5.3008	11.9828	x	60.2253
wolframite_11	x	x	x	x	x	4.5473	11.0282	x	57.2911
wolframite_12	x	x	x	x	x	5.0378	12.6589	x	60.3088

wolframite_13	x	x	x	x	x	5.1418	12.4426	x	59.7642
wolframite_14	x	x	x	x	x	5.2975	12.1125	x	60.2683
wolframite_15	x	x	x	x	x	5.7032	12.1549	x	59.8442
wolframite_16	x	x	x	x	x	5.0904	12.2722	x	59.231
wolframite_17	x	x	x	x	x	5.2388	12.5085	x	60.0094
wolframite_18	x	x	x	x	x	5.0486	12.0919	x	61.2415
wolframite_19	x	x	x	x	x	5.0019	12.2879	x	59.0849
wolframite_20	x	x	x	x	x	5.0435	12.6472	x	60.2404
wolframite_21	x	x	x	x	x	5.2646	12.2262	x	59.8388
wolframite_22	x	x	x	x	x	5.6298	12.1189	x	60.2899
wolframite_23	x	x	x	x	x	5.4414	12.3532	x	59.7715
wolframite_24	x	x	x	x	x	5.4482	12.3629	x	61.0578
wolframite_25	x	x	x	x	x	5.1136	12.1224	x	59.8463
wolframite_26	x	x	x	x	x	5.4626	12.0833	x	60.4708
wolframite_27	x	x	x	x	x	5.4349	11.866	x	60.5055
wolframite_28	x	x	x	x	x	5.535	12.3216	x	60.2782
wolframite_29	x	x	x	x	x	5.3063	12.3858	x	59.2142

wolframite_30	x	x	x	x	x	5.0398	11.9019	x	60.6482
wolframite_31	x	x	x	x	x	5.247	12.0237	x	61.3462
wolframite_32	x	x	x	x	x	6.8442	10.7338	x	59.6356
wolframite_33	x	x	x	x	x	5.1107	12.2635	x	60.0677
wolframite_34	x	x	x	x	x	5.3379	11.9564	x	59.5698
wolframite_35	x	x	x	x	x	5.2313	12.2042	x	59.4682
wolframite_36	x	x	x	x	x	5.3024	12.3713	x	60.3969
wolframite_37	x	x	x	x	x	5.3041	11.6238	x	58.0071
wolframite_38	x	x	x	x	x	5.3819	12.1348	x	59.6099
wolframite_39	x	x	x	x	x	5.2587	12.1641	x	60.1162
wolframite_40	x	x	x	x	x	5.148	12.143	x	59.5249
wolframite_41	x	x	x	x	x	5.1794	11.9396	x	59.104
wolframite_42	x	x	x	x	x	5.1772	12.0566	x	60.6749
wolframite_43	x	x	x	x	x	5.1821	12.0991	x	60.9482
wolframite_44	x	x	x	x	x	5.1039	11.9879	x	59.8187
wolframite_45	x	x	x	x	x	5.286	12.0843	x	60.5274
wolframite_46	x	x	x	x	x	5.1011	11.9972	x	60.9706

wolframite_47	x	x	x	x	x	5.2025	11.9021	x	59.7271
wolframite_48	x	x	x	x	x	5.1404	11.9664	x	60.5934
wolframite_49	x	x	x	x	x	5.0465	12.0071	x	59.3026
wolframite_50	x	x	x	x	x	5.285	12.2911	x	61.1546
wolframite_51	x	x	x	x	x	5.3298	12.1439	x	60.5902
wolframite_52	x	x	x	x	x	5.4187	12.2435	x	60.9956
wolframite_53	x	x	x	x	x	5.0871	11.8166	x	59.8873
wolframite_54	x	x	x	x	x	5.2375	12.1302	x	59.7141
wolframite_55	x	x	x	x	x	5.048	11.8157	x	60.4902
wolframite_56	x	x	x	x	x	5.3145	12.1507	x	60.4883
wolframite_57	x	x	x	x	x	5.5743	11.874	x	58.8886
wolframite_60	x	x	x	x	x	6.7517	10.2137	x	57.3059
wolframite_61	x	x	x	x	x	6.9554	10.2723	x	59.3856
wolframite_62	x	x	x	x	x	8.4926	8.7841	x	59.2003
wolframite_63	x	x	x	x	x	4.9358	12.1262	x	58.4624
wolframite_64	x	x	x	x	x	10.6929	6.9948	x	59.5112
wolframite_65	x	x	x	x	x	8.4998	9.1175	x	60.11

wolframite_67	x	x	x	x	x	4.8762	12.0721	x	61.2328
wolframite_68	x	x	x	x	x	5.0885	12.1478	x	60.3815
wolframite_69	x	x	x	x	x	5.2726	12.3369	x	61.6292
wolframite_70	x	x	x	x	x	5.2697	12.5845	x	60.1173
wolframite_71	x	x	x	x	x	5.1714	12.26	x	60.8276
wolframite_73	x	x	x	x	x	5.2041	12.6456	x	60.9155
wolframite_75	x	x	x	x	x	4.8611	12.4865	x	60.6247
wolframite_76	x	x	x	x	x	5.1236	12.0383	x	60.4553
wolframite_77	x	x	x	x	x	4.9993	12.6616	x	60.311
wolframite_78	x	x	x	x	x	4.9052	12.8557	x	61.4874
wolframite_79	x	x	x	x	x	6.2344	10.9815	x	60.8645
wolframite_80	x	x	x	x	x	4.9677	12.4072	x	61.1935
wolframite_81	x	x	x	x	x	5.1635	12.6173	x	60.0201
wolframite_82	x	x	x	x	x	5.0573	12.2077	x	60.537
wolframite_83	x	x	x	x	x	5.2457	13.0261	x	59.3116
wolframite_85	x	x	x	x	x	5.3025	12.651	x	61.0036
wolframite_86	x	x	x	x	x	5.0879	12.3216	x	61.1369

wolframite_87	x	x	x	x	x	4.9623	12.3197	x	61.4239
wolframite_88	x	x	x	x	x	4.8831	12.2164	x	59.806
wolframite_89	x	x	x	x	x	5.2987	12.4558	x	59.7628
wolframite_90	x	x	x	x	x	4.8869	12.453	x	60.7799
wolframite_93	x	x	x	x	x	5.1571	12.4893	x	60.337
wolframite_94	x	x	x	x	x	4.9157	12.5133	x	61.8651
wolframite_95	x	x	x	x	x	5.3348	12.3344	x	59.3917
wolframite_96	x	x	x	x	x	5.1397	12.6802	x	61.482
wolframite_97	x	x	x	x	x	7.5465	9.9886	x	61.1343
wolframite_98	x	x	x	x	x	5.1313	12.2261	x	61.2449
wolframite_99	x	x	x	x	x	5.237	12.4801	x	60.4923
wolframite_100	x	x	x	x	x	5.056	12.2613	x	60.4701
wolframite_101	x	x	x	x	x	5.1278	12.6189	x	61.5313
wolframite_102	x	x	x	x	x	5.2318	12.229	x	61.7483
wolframite_103	x	x	x	x	x	4.524	9.4394	x	60.8494
wolframite_104	x	x	x	x	x	5.0188	11.9012	x	60.19
wolframite_105	x	x	x	x	x	5.4068	12.1502	x	60.802

wolframite_106	x	x	x	x	x	5.177	12.2326	x	60.0162
wolframite_107	x	x	x	x	x	5.4527	12.3227	x	61.9341
wolframite_108	x	x	x	x	x	5.0832	12.3232	x	61.5568
wolframite_109	x	x	x	x	x	5.2942	12.4154	x	60.4009
wolframite_110	x	x	x	x	x	5.0268	12.2446	x	60.3003
wolframite_111	x	x	x	x	x	5.2083	12.2824	x	61.7202
wolframite_112	x	x	x	x	x	5.1911	12.3758	x	61.8587
wolframite_113	x	x	x	x	x	5.0696	12.4576	x	61.571
wolframite_114	x	x	x	x	x	4.916	12.5396	x	61.2041
wolframite_115	x	x	x	x	x	4.9743	12.4424	x	61.1503
wolframite_116	x	x	x	x	x	5.2012	11.9328	x	60.1219
wolframite_117	x	x	x	x	x	5.2451	12.227	x	60.9255
wolframite_118	x	x	x	x	x	5.0903	12.4388	x	61.1118
wolframite_120	x	x	x	x	x	5.2599	11.7449	x	62.0509
wolframite_121	x	x	x	x	x	5.5261	12.3353	x	59.9328
wolframite_122	x	x	x	x	x	4.9723	12.3737	x	60.9296
wolframite_124	x	x	x	x	x	5.0994	12.0624	x	60.107

wolframite_125	x	x	x	x	x	4.9592	11.9797	x	60.4899
wolframite_126	x	x	x	x	x	5.0755	12.2813	x	61.1768
wolframite_127	x	x	x	x	x	4.9915	11.9713	x	61.6465
wolframite_128	x	x	x	x	x	5.0973	12.1593	x	60.769
wolframite_129	x	x	x	x	x	5.091	12.298	x	60.7141
wolframite_130	x	x	x	x	x	5.4109	11.9078	x	60.742
wolframite_131	x	x	x	x	x	5.4503	11.9797	x	60.0702
wolframite_132	x	x	x	x	x	5.018	11.879	x	61.1001
wolframite_133	x	x	x	x	x	4.9059	12.472	x	61.7306
wolframite_134	x	x	x	x	x	5.1224	12.1403	x	59.5923
wolframite_135	x	x	x	x	x	5.0623	12.3065	x	60.7545
wolframite_136	x	x	x	x	x	6.1023	11.323	x	60.3978
wolframite_138	x	x	x	x	x	6.3913	11.0208	x	61.0159
wolframite_139	x	x	x	x	x	5.5211	11.9581	x	61.2964
wolframite_140	x	x	x	x	x	7.3895	10.0215	x	61.7858
wolframite_141	x	x	x	x	x	7.3137	9.7373	x	59.4665
wolframite_142	x	x	x	x	x	5.4708	11.928	x	60.6426

wolframite_144	x	x	x	x	x	6.298	10.8999	x	61.4031
wolframite_145	x	x	x	x	x	7.4172	9.5414	x	59.965
wolframite_146	x	x	x	x	x	6.4289	10.8079	x	60.1736
wolframite_147	x	x	x	x	x	6.3966	10.6783	x	61.7477
wolframite_148	x	x	x	x	x	5.265	11.7936	x	60.4235
wolframite_149	x	x	x	x	x	5.2935	11.9167	x	61.4404
wolframite_151	x	x	x	x	x	7.3433	10.5214	x	62.0986
wolframite_152	x	x	x	x	x	5.2855	11.885	x	60.7314
wolframite_154	x	x	x	x	x	5.0922	12.0556	x	60.9728
wolframite_155	x	x	x	x	x	5.3398	11.9253	x	61.4297
wolframite_156	x	x	x	x	x	11.133	6.3025	x	61.9337
wolframite_157	x	x	x	x	x	7.567	10.1076	x	60.4385
wolframite_158	x	x	x	x	x	5.1786	11.4438	x	60.0348
wolframite_159	x	x	x	x	x	6.8901	10.4549	x	61.042
wolframite_160	x	x	x	x	x	8.399	9.0791	x	61.1625
wolframite_161	x	x	x	x	x	9.9991	7.9879	x	60.6089
wolframite_162	x	x	x	x	x	5.3762	12.0386	x	59.8625

wolframite_163	x	x	x	x	x	5.4574	12.2195	x	61.0238
wolframite_164	x	x	x	x	x	9.0557	8.8502	x	57.5846
wolframite_165	x	x	x	x	x	5.319	12.5051	x	60.8239
wolframite_168	x	x	x	x	x	5.3462	11.9601	x	61.7017
wolframite_169	x	x	x	x	x	5.2978	12.3847	x	61.5555
wolframite_170	x	x	x	x	x	8.3115	9.1241	x	61.3545
wolframite_171	x	x	x	x	x	5.3325	12.216	x	60.0213
wolframite_172	x	x	x	x	x	9.2614	7.1404	x	61.0914
wolframite_173	x	x	x	x	x	5.1882	12.082	x	60.5963
wolframite_174	x	x	x	x	x	5.4205	11.5611	x	61.587
wolframite_175	x	x	x	x	x	4.2491	12.8172	x	58.7987
wolframite_176	x	x	x	x	x	4.386	12.7122	x	59.5301
wolframite_177	x	x	x	x	x	7.5462	9.6806	x	59.5826
wolframite_178	x	x	x	x	x	4.364	12.4351	x	60.063
wolframite_179	x	x	x	x	x	4.2039	12.8186	x	59.9923
wolframite_180	x	x	x	x	x	4.4027	12.4806	x	59.9398
wolframite_181	x	x	x	x	x	4.2941	12.8087	x	59.8611

wolframite_182	x	x	x	x	x	4.103	12.7698	x	59.0819
wolframite_183	x	x	x	x	x	4.1711	13.0448	x	59.9085
wolframite_184	x	x	x	x	x	3.909	11.8116	x	56.2644
wolframite_185	x	x	x	x	x	4.3936	12.843	x	60.5814
wolframite_186	x	x	x	x	x	4.3289	12.817	x	59.7496
wolframite_187	x	x	x	x	x	4.247	12.9385	x	60.4726
wolframite_188	x	x	x	x	x	4.4142	12.4679	x	59.1648
wolframite_189	x	x	x	x	x	4.48	13.0255	x	60.109
wolframite_190	x	x	x	x	x	4.3022	12.8796	x	61.3222
wolframite_191	x	x	x	x	x	6.2146	11.1157	x	60.5866
wolframite_194	x	x	x	x	x	4.1701	12.4491	x	57.4335
wolframite_195	x	x	x	x	x	5.4709	11.8896	x	59.3384
wolframite_196	x	x	x	x	x	4.3849	12.7215	x	59.5927
wolframite_197	x	x	x	x	x	4.3049	12.9389	x	60.1164
wolframite_198	x	x	x	x	x	4.403	13.0376	x	58.8954
wolframite_199	x	x	x	x	x	6.1544	11.0898	x	60.8543
wolframite_200	x	x	x	x	x	4.3312	12.5991	x	59.9933

wolframite_1	0.0301	0.0001	0.0073	0.0098	0.0001	5.0587	12.1538	0.0002	60.0806
wolframite_2	0.028	0.0001	0.0001	0.0001	0.0001	4.4977	12.8769	0.0002	59.6965
wolframite_4	0.0001	0.0029	0.0218	0.0001	0.0001	4.5141	13.1838	0.0218	60.2194
wolframite_5	0.0001	0.0126	0.0327	0.0001	0.0086	4.3185	12.3379	0.0218	59.4587
wolframite_6	0.0001	0.0107	0.0336	0.0231	0.0001	4.2585	12.7239	0.0002	60.3076
wolframite_7	0.0001	0.0001	0.0309	0.0001	0.0001	4.4463	12.7301	0.138	59.418
wolframite_8	0.0409	0.0447	0.0508	0.0107	0.0001	4.197	12.6218	0.0002	59.2673
wolframite_9	0.0151	0.0107	0.0001	0.0027	0.0001	5.022	11.8828	0.0582	59.3807
wolframite_10	0.0495	0.0253	0.0345	0.0479	0.0001	4.0407	12.8704	0.0727	60.8042
wolframite_15	0.0237	0.001	0.0172	0.0001	0.0001	5.125	11.6597	0.0436	59.3538
wolframite_19	0.0043	0.0019	0.0445	0.0586	0.0001	4.1684	12.5536	0.0002	58.8878
wolframite_20	0.0001	0.0136	0.0218	0.0001	0.0001	4.1601	13.0554	0.0582	60.4581
wolframite_21	0.0151	0.0243	0.0299	0.0001	0.011	4.2113	13.0095	0.0218	60.1783
wolframite_22	0.0065	0.0214	0.0009	0.0408	0.0074	4.165	13.1097	0.0002	60.0798
wolframite_23	0.0387	0.0233	0.0001	0.0266	0.0147	4.3861	13.3055	0.1161	59.553
wolframite_24	0.0001	0.0001	0.0309	0.0001	0.0001	4.1966	13.016	0.2396	60.0405
wolframite_25	0.0538	0.0001	0.0001	0.0001	0.0025	6.0971	10.9866	0.0944	60.7835

wolframite_26	0.0452	0.0292	0.04	0.0133	0.0001	4.292	12.5736	0.0002	59.369
wolframite_27	0.0043	0.0262	0.0454	0.0435	0.0001	4.1366	12.6452	0.0002	58.7931
wolframite_28	0.0022	0.0001	0.0127	0.0001	0.0001	4.3235	12.6835	0.0002	59.7565
wolframite_29	0.0086	0.0001	0.0091	0.0001	0.0001	4.5479	13.0423	0.1671	60.2995
wolframite_30	0.0108	0.0204	0.0145	0.0337	0.0001	4.2125	12.6842	0.0073	60.4527
wolframite_31	0.0001	0.0087	0.0063	0.0266	0.0001	6.7568	10.6286	0.0002	59.5572
wolframite_32	0.0172	0.0291	0.0127	0.0195	0.0196	4.2958	12.7383	0.0436	59.8619
wolframite_33	0.0001	0.0117	0.0001	0.0001	0.0061	4.0902	12.8478	0.0002	59.9301
wolframite_34	0.0001	0.0087	0.0499	0.0001	0.0001	4.1546	12.618	0.0002	60.9144
wolframite_35	0.0001	0.0233	0.0636	0.0187	0.0282	4.423	12.6641	0.109	60.0439
wolframite_36	0.0001	0.0311	0.0318	0.0001	0.0001	4.4089	12.7992	0.1743	60.3867
wolframite_37	0.0086	0.0243	0.0027	0.0044	0.0159	4.3798	13.0164	0.0002	60.0786
wolframite_38	0.0237	0.0136	0.0254	0.0001	0.0001	4.3505	12.7566	0.0727	60.1389
wolframite_39	0.0001	0.0001	0.0209	0.008	0.0001	4.19	12.9593	0.0002	59.5558
wolframite_40	0.0001	0.0001	0.0445	0.0328	0.038	4.0875	12.8609	0.1527	61.0638
wolframite_41	0.0236	0.0184	0.0154	0.0027	0.0233	7.2005	9.9086	0.0073	58.8879
wolframite_42	0.0001	0.0001	0.01	0.0001	0.0417	5.2229	11.3225	0.0945	60.1461

wolframite_44	0.0001	0.0136	0.0036	0.0001	0.0001	4.2919	12.7458	0.0145	60.6131
wolframite_45	0.0086	0.0049	0.0127	0.0044	0.0001	4.2057	13.0208	0.0002	59.711
wolframite_49	0.0001	0.0321	0.8058	0.0436	0.0037	4.0481	11.9085	0.1236	60.6568
wolframite_50	0.0108	0.0456	0.029	0.0001	0.0001	4.2847	12.6092	0.138	58.925
wolframite_51	0.0065	0.0146	0.0445	0.0133	0.0037	4.1626	12.4462	0.0002	59.0562
wolframite_52	0.0194	0.0301	0.0209	0.0115	0.0086	4.3865	12.9103	0.0145	60.6458
wolframite_53	0.0001	0.001	0.0001	0.0001	0.0135	4.1999	12.9975	0.1381	60.4589
wolframite_54	0.0129	0.0253	0.0345	0.0284	0.0012	4.2644	12.859	0.1018	59.9706
wolframite_55	0.0001	0.0194	0.0299	0.0275	0.0111	7.7186	9.6101	0.0725	59.5382
wolframite_57	0.0001	0.0175	0.0345	0.0248	0.0001	4.261	12.7289	0.1307	59.9748
wolframite_59	0.0001	0.0001	0.0345	0.0001	0.0001	4.2128	12.663	0.0727	59.9857
wolframite_60	0.0001	0.0175	0.0218	0.0001	0.0001	5.3123	11.639	0.0872	59.3771
wolframite_61	0.0107	0.0116	0.0344	0.0222	0.016	6.4286	10.4632	0.0002	59.9714
wolframite_62	0.0107	0.0243	0.0001	0.0001	0.0012	4.2638	12.9728	0.0291	59.0668
wolframite_63	0.0043	0.0058	0.0372	0.0001	0.0001	4.4016	12.3875	0.0002	59.8805
wolframite_64	0.0193	0.0087	0.0263	0.0266	0.0001	4.2477	12.6964	0.0002	58.3155
wolframite_65	0.0001	0.0233	0.0172	0.0089	0.0049	4.3232	12.8151	0.1017	60.3547

wolframite_66	0.0001	0.0039	0.0371	0.0416	0.0159	7.0825	9.729	0.0002	59.5174
wolframite_67	0.0279	0.0223	0.0109	0.0195	0.0001	6.9291	9.7696	0.0002	60.0462
wolframite_68	0.0001	0.0204	0.0254	0.0222	0.0037	4.3455	12.5881	0.0145	59.5108
wolframite_70	0.0129	0.0107	0.0082	0.0097	0.0135	5.4922	11.4946	0.0002	60.0575
wolframite_71	0.0108	0.0233	0.0245	0.0497	0.0233	5.1485	11.6957	0.0873	61.1818
wolframite_72	0.0215	0.0223	0.0001	0.0018	0.0001	4.1573	12.9334	0.1453	60.5092
wolframite_73	0.0022	0.0136	0.0272	0.0001	0.0001	4.7207	12.2058	0.0727	61.1053
wolframite_74	0.0001	0.0272	0.0001	0.016	0.0172	4.3287	12.6712	0.0654	60.4811
wolframite_75	0.0301	0.0204	0.0227	0.0257	0.0001	4.1188	12.4417	0.0002	59.9801
wolframite_76	0.0001	0.0001	0.0027	0.0001	0.0001	4.0943	12.6392	0.1816	59.6359
wolframite_77	0.0001	0.0001	0.0145	0.0381	0.0001	4.2978	12.3375	0.0002	59.062
wolframite_78	0.0258	0.0001	0.0001	0.0613	0.0025	4.277	13.1233	0.0002	60.0858
wolframite_79	0.0001	0.0116	0.0001	0.0001	0.0001	4.0265	12.6519	0.0945	59.4362
wolframite_80	0.0129	0.0281	0.0001	0.0567	0.0086	6.1352	10.7049	0.0145	58.509
wolframite_81	0.0022	0.0446	0.0091	0.0001	0.0001	4.4031	12.6183	0.0002	61.1888
wolframite_82	0.0301	0.0039	0.0272	0.0001	0.0282	4.3432	12.8159	0.0002	60.1345
wolframite_83	0.0001	0.033	0.01	0.0417	0.0001	4.1863	12.929	0.0002	59.3026

wolframite_84	0.0387	0.0058	0.0001	0.0426	0.0001	4.2132	12.8789	0.0002	59.9953
wolframite_85	0.0043	0.0136	0.0263	0.0001	0.0001	4.3535	12.7865	0.1163	60.0468
wolframite_86	0.0108	0.0001	0.0001	0.0612	0.0294	4.382	12.7044	0.0002	59.4237
wolframite_87	0.0001	0.0146	0.0272	0.0204	0.011	4.3032	12.9677	0.0582	61.2524
wolframite_88	0.0001	0.0001	0.0299	0.047	0.0086	4.5311	12.7562	0.0002	59.452
wolframite_93	0.0001	0.0001	0.0136	0.039	0.027	5.0342	11.9298	0.0002	59.6197
wolframite_94	0.0001	0.0155	0.0001	0.0195	0.0147	5.932	11.0992	0.0002	60.4387
wolframite_95	0.0022	0.0001	0.0109	0.0399	0.0208	4.3442	12.6761	0.0145	59.8678
wolframite_96	0.0022	0.0417	0.0372	0.0577	0.0001	4.3445	12.801	0.0002	60.1829
wolframite_98	0.0021	0.0136	0.0236	0.0001	0.0184	6.1771	10.8301	0.0002	59.6604
wolframite_99	0.0001	0.0078	0.0363	0.0683	0.0049	4.5628	12.2625	0.029	59.0055
wolframite_101	0.043	0.0001	0.0263	0.0001	0.0001	6.408	10.3124	0.0002	59.0138
wolframite_102	0.0001	0.0233	0.0227	0.0372	0.0001	6.1653	10.9065	0.0002	60.0058
wolframite_103	0.0001	0.0136	0.0001	0.0772	0.0184	4.3403	12.5658	0.0002	59.4973
wolframite_104	0.0237	0.0001	0.0001	0.008	0.0001	4.0821	12.7186	0.0654	59.5222
wolframite_105	0.0151	0.035	0.0091	0.0071	0.0086	4.198	12.5738	0.2469	59.0832
wolframite_106	0.0001	0.0058	0.0245	0.0195	0.027	4.2837	12.6968	0.0145	58.0294

wolframite_107	0.0172	0.0252	0.0281	0.0001	0.011	4.1503	12.8504	0.0799	59.1468
wolframite_108	0.0065	0.0204	0.0154	0.0001	0.0001	4.121	12.8492	0.0291	58.5998
wolframite_109	0.0001	0.0379	0.0408	0.0479	0.0001	4.3105	12.7591	0.0218	59.2931
wolframite_110	0.0001	0.0165	0.0327	0.024	0.0001	4.1838	12.6678	0.0002	59.1847
wolframite_112	0.0108	0.0068	0.0227	0.0115	0.0001	4.2906	12.9262	0.0363	59.6155
wolframite_113	0.0043	0.0146	0.0218	0.0001	0.0001	4.0689	12.6072	0.0364	59.1315
wolframite_114	0.0001	0.0001	0.0018	0.016	0.0209	3.9633	12.5796	0.1017	58.2285
wolframite_116	0.028	0.0087	0.0054	0.0533	0.0001	4.2648	12.7518	0.0654	59.1357
wolframite_117	0.0001	0.0233	0.0001	0.0302	0.0172	4.2482	12.8581	0.0002	59.993
wolframite_118	0.0001	0.0001	0.0001	0.024	0.0208	3.8196	12.8963	0.0291	59.7559
wolframite_119	0.0172	0.0049	0.0073	0.0001	0.0001	6.5348	10.402	0.1017	60.069
wolframite_1	0.0033	0.0001	0.0001	0.0001	0.0209	4.3991	12.688	0.0002	59.9884
wolframite_2	0.0001	0.0001	0.0591	0.0158	0.0085	3.3336	13.6162	0.0002	60.3533
wolframite_5	0.005	0.0293	0.0443	0.0001	0.0095	4.2885	12.5808	0.1126	60.04
wolframite_6	0.0001	0.0353	0.0001	0.0001	0.0001	3.3898	13.5747	0.0675	59.1464
wolframite_8	0.0033	0.003	0.045	0.0482	0.0001	3.3643	13.5355	0.0844	58.3558
wolframite_9	0.0001	0.0001	0.0197	0.0282	0.0001	3.1728	13.7541	0.0002	59.0765

wolframite_1	0.0366	0.0211	0.5012	0.0117	0.0076	4.1777	12.0385	0.0675	60.2696
wolframite_2	0.0001	0.0128	0.0436	0.0412	0.0001	3.3439	13.1607	0.0002	60.3771
wolframite_5	0.0001	0.0001	0.0316	0.0185	0.0001	4.2152	12.6005	0.0281	58.5206
wolframite_6	0.0117	0.0045	0.0119	0.011	0.0247	3.3867	13.3743	0.0002	58.8688
wolframite_7	0.0001	0.0113	0.0001	0.011	0.0047	3.5246	13.0126	0.0002	58.4556
wolframite_8	0.0001	0.003	0.0169	0.011	0.0066	3.5559	13.5705	0.0002	59.0761
wolframite_9	0.0001	0.0128	0.0204	0.0199	0.0001	3.2822	13.3561	0.0788	58.921
wolframite_10	0.0001	0.0001	0.0077	0.0268	0.0047	3.3482	13.3568	0.0002	58.4295
wolframite_11	0.0133	0.0015	0.0239	0.0001	0.0076	3.0614	13.3715	0.0002	58.4885
wolframite_14	0.01	0.0001	0.0084	0.0124	0.0038	3.4433	13.3123	0.0731	59.0361
wolframite_15	0.0133	0.0001	0.0001	0.0391	0.0237	3.3141	12.9719	0.0507	58.7717
wolframite_16	0.0166	0.0263	0.0154	0.0529	0.0001	3.4794	13.552	0.0787	58.9746
wolframite_17	0.0066	0.0001	0.059	0.0241	0.0001	5.283	12.6407	0.0002	56.5912
wolframite_18	0.0001	0.006	0.0001	0.0001	0.0001	4.4908	12.4485	0.0002	60.1403
wolframite_19	0.0166	0.0001	0.0049	0.0001	0.0001	3.4513	13.8208	0.0002	59.1878
wolframite_20	0.0133	0.0001	0.0351	0.0227	0.0114	3.3414	13.9766	0.0002	58.2012
wolframite_21	0.0067	0.0218	0.1138	0.0069	0.0001	3.469	13.3324	0.0002	58.5721

wolframite_22	0.0333	0.0083	0.026	0.0001	0.0001	3.2896	13.1576	0.0002	59.4428
wolframite_23	0.0117	0.0113	0.0154	0.0137	0.0066	3.3166	13.0028	0.0394	59.8143
wolframite_25	0.0001	0.0015	0.047	0.0364	0.0104	3.5919	13.2255	0.0002	58.8819
wolframite_26	0.0017	0.0113	0.0098	0.0158	0.0123	3.3561	13.234	0.0563	59.8843
wolframite_27	0.0001	0.0001	0.0204	0.0001	0.0133	3.5166	13.3449	0.0002	57.8261
wolframite_28	0.0001	0.018	0.0176	0.0282	0.0001	3.2529	13.2926	0.0002	59.2553
wolframite_29	0.005	0.0001	0.0309	0.0055	0.0001	3.4359	13.3372	0.0619	59.1379
wolframite_30	0.0183	0.0001	0.0161	0.0001	0.0001	3.4217	13.1996	0.0002	58.5427
wolframite_31	0.0001	0.0165	0.7123	0.029	0.0001	2.9442	15.1098	0.0948	53.599
wolframite_32	0.0001	0.006	0.0001	0.0001	0.0001	3.5395	13.1167	0.0225	59.0693
wolframite_33	0.025	0.0105	0.0001	0.0399	0.0038	3.4735	13.2225	0.045	59.9167
wolframite_34	0.0083	0.0053	0.0001	0.0001	0.0001	3.4594	13.3259	0.0901	59.2978
wolframite_35	0.0001	0.0113	0.0063	0.0213	0.0066	3.5038	13.2649	0.0338	58.8623
wolframite_36	0.0266	0.0001	0.0001	0.0082	0.0133	4.6886	12.0841	0.0002	58.6841
wolframite_37	0.015	0.0158	0.0001	0.0001	0.0001	4.5072	12.0475	0.0002	58.7187
wolframite_38	0.0001	0.0001	0.0001	0.0076	0.0076	3.5163	13.1165	0.0281	58.3183
wolframite_39	0.0067	0.0053	0.0119	0.0001	0.0001	3.3145	13.2683	0.0169	58.9213

wolframite_40	0.015	0.0001	0.0056	0.022	0.0038	3.3442	13.0298	0.062	58.5464
wolframite_41	0.0001	0.0053	0.0281	0.0357	0.0001	3.6114	12.8542	0.0002	57.8495
wolframite_42	0.0083	0.0001	0.0001	0.033	0.0001	3.4183	12.8939	0.0225	58.8812
wolframite_43	0.0001	0.015	0.0218	0.0474	0.0001	3.3393	13.0602	0.0676	60.209
wolframite_44	0.0001	0.0001	0.0169	0.0323	0.0161	3.5903	13.1095	0.0002	59.4658
wolframite_45	0.025	0.0256	0.0105	0.0001	0.0001	3.5454	13.2413	0.0002	59.8999
wolframite_46	0.01	0.0098	0.0211	0.0001	0.0001	3.3034	13.0937	0.0002	59.1905
wolframite_47	0.0033	0.0256	0.3648	0.0179	0.0001	3.2798	12.739	0.0002	58.8374
wolframite_48	0.0001	0.0105	0.0126	0.0001	0.0095	3.3071	13.2457	0.107	59.5597
wolframite_49	0.0001	0.0001	0.0513	0.0001	0.0001	4.3595	12.5276	0.1013	60.0224
wolframite_50	0.0267	0.0429	0.0001	0.0001	0.0001	3.4135	13.1383	0.0901	59.4062
wolframite_51	0.0001	0.0001	2.3856	0.0575	0.0001	2.9548	11.4089	0.0393	58.5855
wolframite_52	0.015	0.0083	0.0288	0.0041	0.0001	3.3015	13.135	0.0957	58.7381
wolframite_53	0.0001	0.0075	0.1229	0.0001	0.0085	3.3195	13.2079	0.0394	57.9375
wolframite_54	0.0001	0.0008	0.0506	0.0048	0.0009	3.4666	13.285	0.0901	60.3132
wolframite_55	0.0333	0.0218	0.0316	0.0001	0.0001	3.4581	13.3387	0.0002	59.0884
wolframite_56	0.0001	0.0001	0.0225	0.0069	0.0001	3.3308	13.4923	0.0002	57.836

wolframite_57	0.0017	0.0001	0.0232	0.0433	0.0199	4.1804	12.6121	0.0338	59.4295
wolframite_58	0.0001	0.0278	0.0218	0.0001	0.0001	3.3538	13.4625	0.118	57.8498
wolframite_59	0.0001	0.0203	1.145	0.0283	0.0114	3.281	12.6849	0.0002	59.4685
wolframite_60	0.01	0.0015	0.0063	0.0213	0.0001	3.6219	13.1452	0.0002	58.8703
wolframite_61	0.0033	0.0001	2.2109	0.0312	0.0048	3.4063	11.3088	0.0506	59.5009
wolframite_62	0.0001	0.0001	0.0001	0.0206	0.0028	3.3445	13.4753	0.0002	58.5438
wolframite_63	0.0001	0.0083	0.0267	0.0001	0.0001	3.6597	13.382	0.0002	58.912
wolframite_64	0.0167	0.0286	0.0001	0.0001	0.0266	3.5511	13.1613	0.0002	59.2144
wolframite_65	0.0001	0.0075	0.0091	0.0378	0.0001	3.3451	12.921	0.0002	59.3665
wolframite_66	0.0001	0.0218	0.0183	0.0001	0.0085	3.4055	13.0084	0.0282	58.4617
wolframite_67	0.01	0.0001	0.0204	0.0172	0.0095	3.521	12.6845	0.0451	58.5435
wolframite_68	0.0183	0.0001	0.0253	0.0268	0.0266	3.3888	13.3738	0.0002	58.9866
wolframite_69	0.0001	0.0135	0.04	0.0001	0.0001	4.3125	12.9819	0.0002	56.8583
wolframite_70	0.0001	0.0038	0.0239	0.0001	0.0001	3.3846	13.2393	0.0563	58.7889
wolframite_71	0.0001	0.0001	0.0119	0.0275	0.0114	3.547	13.1029	0.0675	58.5716
wolframite_73	0.0167	0.0143	0.045	0.0001	0.0218	3.4075	12.8428	0.0789	59.5748
wolframite_74	0.0017	0.0188	0.0984	0.0467	0.0001	3.6098	13.0593	0.0056	58.7583

wolframite_75	0.0001	0.006	0.0358	0.0165	0.0142	4.0304	12.4652	0.0002	59.5877
wolframite_79	0.0033	0.0038	0.0001	0.0096	0.0001	3.4585	13.1065	0.0002	59.7448
wolframite_80	0.0001	0.0001	0.0007	0.0001	0.0009	3.4826	13.0018	0.0002	59.7223
wolframite_81	0.025	0.0001	0.0351	0.0399	0.0142	3.4799	13.5444	0.0002	59.2805
wolframite_82	0.0083	0.0068	0.0091	0.0001	0.0161	3.4118	13.2088	0.0619	59.2949
wolframite_83	0.0133	0.0023	0.1209	0.0062	0.0142	2.9307	14.0567	0.0002	57.0245
wolframite_84	0.0083	0.0001	0.0316	0.046	0.0001	3.3346	13.4861	0.0002	58.4943
wolframite_86	0.0466	0.0263	0.0049	0.0124	0.0001	3.8184	13.2759	0.0563	59.3865
wolframite_87	0.0117	0.0001	0.0001	0.0001	0.0199	3.418	13.0735	0.0002	60.3593
wolframite_88	0.0001	0.0001	0.0001	0.0165	0.0057	3.4679	12.7762	0.0002	59.0631
wolframite_92	0.0001	0.0008	0.0105	0.0048	0.0001	3.4512	13.175	0.0338	58.1701
wolframite_93	0.01	0.0001	0.0001	0.0309	0.0057	3.5007	13.0181	0.0394	58.2487
wolframite_94	0.0083	0.0008	0.0253	0.0289	0.0142	3.3216	13.2852	0.0225	59.1602
wolframite_95	0.0001	0.0778	0.2543	0.0663	0.0001	5.564	15.5023	0.0002	48.775
wolframite_96	0.0266	0.0256	0.0176	0.044	0.0001	3.247	13.2111	0.0002	58.4295
wolframite_97	0.0001	0.0098	0.0001	0.0288	0.0076	3.4187	13.3218	0.0056	59.8586
wolframite_98	0.0001	0.003	0.0084	0.0666	0.0076	3.4084	13.1269	0.0788	59.3624

wolframite_99	0.0117	0.003	0.0035	0.0515	0.0047	3.3379	13.2578	0.0732	59.1802
wolframite_100	0.0001	0.0001	0.0302	0.022	0.0001	3.4727	13.2469	0.0507	60.3684
wolframite_101	0.0183	0.0038	0.0001	0.0185	0.0085	3.4284	13.4462	0.0002	59.6961
wolframite_102	0.0001	0.0113	0.0001	0.0001	0.0001	3.2604	12.9126	0.0002	59.1489
wolframite_103	0.0017	0.0075	0.0161	0.0288	0.0001	3.5799	13.0016	0.0002	58.709
wolframite_104	0.0001	0.0001	0.0323	0.024	0.0114	3.4559	13.1895	0.0002	58.4472
wolframite_105	0.0117	0.0083	0.0001	0.0137	0.0009	3.4117	12.7948	0.0002	60.0997
wolframite_106	0.0001	0.0173	0.0169	0.0001	0.0275	3.3666	13.1471	0.0113	59.6003
wolframite_107	0.0283	0.0196	0.026	0.0001	0.0001	3.4691	12.9354	0.0563	59.118
wolframite_108	0.0001	0.0128	0.0225	0.0048	0.0001	3.3371	13.2026	0.0002	58.8963
wolframite_109	0.0083	0.0256	0.0028	0.0082	0.0237	3.5161	12.9518	0.0002	58.7418
wolframite_110	0.0001	0.0001	0.014	0.0117	0.0001	4.1455	12.313	0.0002	59.5067
wolframite_111	0.02	0.0001	0.0001	0.0185	0.0246	3.4234	13.2995	0.0394	59.2205
wolframite_112	0.0017	0.0001	0.0063	0.0158	0.0001	3.2714	13.021	0.062	59.3183
wolframite_113	0.0001	0.0001	0.0295	0.0392	0.0038	3.3328	13.3184	0.0002	60.2197
wolframite_115	0.0117	0.0001	0.0098	0.0419	0.0001	3.2935	13.1082	0.0002	58.4123
wolframite_116	0.0067	0.0045	0.0001	0.0371	0.0001	3.2031	13.0389	0.1182	59.1123

wolframite_117	0.0183	0.0001	0.0001	0.0001	0.0001	3.4643	13.0913	0.0957	59.1813
wolframite_118	0.0183	0.0001	0.0001	0.0001	0.0001	3.3076	12.7844	0.0002	58.7037
wolframite_119	0.0167	0.0105	0.0232	0.0199	0.0001	3.3986	13.2549	0.0002	58.6813
wolframite_120	0.02	0.0135	0.0133	0.0062	0.0001	3.5344	13.1221	0.135	58.5996
wolframite_121	0.0001	0.0105	0.0001	0.0001	0.0114	3.2415	13.7284	0.0562	57.8416
wolframite_122	0.04	0.0001	0.0162	0.0001	0.0001	3.3365	12.9091	0.0002	58.9716
wolframite_123	0.0283	0.0135	0.0001	0.0001	0.0028	3.7368	13.3166	0.0619	59.3064
wolframite_124	0.0001	0.0001	0.0063	0.0076	0.0001	3.2925	13.3056	0.0002	58.7775
wolframite_125	0.01	0.0008	0.0316	0.0001	0.0001	3.2612	13.7244	0.0786	57.0852
wolframite_126	0.0033	0.0001	0.0351	0.0165	0.0001	3.4379	13.4208	0.0282	60.5432
wolframite_127	0.0167	0.0098	0.0127	0.0001	0.0199	3.2735	13.3508	0.0338	58.3989
wolframite_128	0.0133	0.0188	0.0098	0.0001	0.0001	3.5089	13.3093	0.0169	57.8327
wolframite_129	0.0001	0.0001	0.0001	0.0103	0.0294	3.2395	13.4719	0.0563	58.3607
wolframite_130	0.015	0.0128	0.007	0.033	0.0009	3.4089	13.1472	0.0732	58.5793
wolframite_131	0.02	0.0226	0.0127	0.0076	0.0209	3.5907	12.9816	0.0676	58.7219
wolframite_132	0.0001	0.015	0.0133	0.0001	0.0001	4.1524	12.3954	0.0002	58.5976
wolframite_133	0.0001	0.0001	0.0001	0.0001	0.0001	3.619	13.2087	0.0002	60.6107

wolframite_134	0.0001	0.0045	0.0344	0.0007	0.0001	3.6555	12.9715	0.0282	59.3606
wolframite_135	0.0233	0.0045	0.007	0.0021	0.0001	3.5074	13.0168	0.0507	59.7653
wolframite_136	0.0333	0.0113	0.0001	0.0419	0.0001	3.4164	13.1563	0.0002	59.6761
wolframite_137	0.0217	0.0001	0.0281	0.046	0.0001	3.3666	13.3135	0.0225	60.2735
wolframite_138	0.0001	0.0001	0.0084	0.0227	0.0171	3.5404	13.4793	0.0002	59.4561
wolframite_139	0.015	0.0128	0.0309	0.0612	0.0001	3.4047	13.1122	0.0225	59.004
wolframite_140	0.0001	0.0323	0.007	0.0001	0.0001	3.3937	12.9431	0.0619	58.6661
wolframite_141	0.005	0.015	0.0232	0.0598	0.0001	3.5677	13.2006	0.0002	59.5604
wolframite_142	0.0033	0.0001	0.0001	0.0687	0.0001	3.4711	13.3776	0.0281	59.5842
wolframite_143	0.0083	0.0001	0.0042	0.0295	0.0294	3.5553	13.2853	0.0563	58.9907
wolframite_144	0.0117	0.0068	0.0119	0.066	0.0085	3.3932	13.3367	0.0002	59.1606
wolframite_145	0.0001	0.0075	0.0001	0.0227	0.0001	3.2193	13.2343	0.0451	60.6599
wolframite_146	0.0001	0.0308	0.0001	0.0001	0.0001	3.2277	12.7692	0.0002	58.1235
wolframite_147	0.0067	0.0023	0.0246	0.0001	0.0001	3.5338	13.2069	0.0002	58.1944
wolframite_149	0.025	0.0001	0.0155	0.0001	0.0256	3.4822	13.2996	0.1069	58.8793
wolframite_150	0.0001	0.0001	0.0001	0.0001	0.0284	3.3901	13.2761	0.0056	59.7667
wolframite_151	0.0001	0.003	0.0105	0.0001	0.0085	3.4984	13.1282	0.0056	59.6036

wolframite_152	0.005	0.0376	0.026	0.0062	0.0001	4.3732	12.22	0.0731	57.7761
wolframite_156	0.0283	0.0001	0.0028	0.0055	0.0066	3.4065	13.5157	0.0002	59.4188
wolframite_157	0.0001	0.0308	0.0421	0.0001	0.0104	4.1293	12.5229	0.0113	59.0096
wolframite_158	0.0233	0.0038	0.0098	0.0281	0.0001	4.3173	12.294	0.1125	58.945
wolframite_159	0.0266	0.0218	0.0001	0.0117	0.0076	3.3331	13.2596	0.1181	58.5472
wolframite_160	0.01	0.0001	0.0162	0.0001	0.0123	3.255	12.9558	0.0113	58.6613
wolframite_162	0.0133	0.0001	0.0302	0.0515	0.0009	3.4209	12.9096	0.0169	58.7457
wolframite_163	0.0117	0.0001	0.0133	0.0007	0.0001	3.5115	13.2671	0.0113	59.072
wolframite_164	0.0001	0.0001	0.0239	0.0041	0.0047	3.3118	13.0198	0.0282	58.8885
wolframite_165	0.0183	0.0158	0.0001	0.0419	0.0001	3.4065	13.1623	0.0002	59.1892
wolframite_166	0.0001	0.0001	0.0091	0.0048	0.0001	3.3186	13.1912	0.0957	58.0379
wolframite_167	0.0001	0.0001	0.0386	0.024	0.0085	3.3266	13.097	0.0002	59.797
wolframite_168	0.0001	0.0001	0.0091	0.0096	0.0104	3.4148	12.9378	0.0002	58.8657
wolframite_169	0.0266	0.0001	0.0001	0.013	0.0001	3.2658	13.2385	0.0002	59.2177
wolframite_170	0.0117	0.0001	0.0148	0.0357	0.0028	3.2893	13.1346	0.0507	60.5154
wolframite_171	0.0133	0.0218	0.0176	0.0001	0.0001	3.5107	12.9385	0.0113	59.1565
wolframite_173	0.0001	0.0001	0.0091	0.0337	0.0001	3.2356	13.6718	0.0113	59.4384

wolframite_176	0.0167	0.0001	0.0042	0.0137	0.0001	3.1571	13.3527	0.0394	59.731
wolframite_177	0.0001	0.0045	0.0267	0.0062	0.0142	3.3782	13.1297	0.0056	59.0871
wolframite_178	0.0033	0.1667	0.0148	0.0001	0.0001	3.7859	13.6604	0.0783	53.0701
wolframite_179	0.0001	0.0105	0.007	0.0296	0.0001	3.6198	13.3774	0.0225	58.3428
wolframite_180	0.0001	0.015	0.0119	0.0001	0.0001	3.3661	13.2947	0.0169	59.3934
wolframite_181	0.0266	0.0128	0.0267	0.011	0.0001	3.3025	13.2502	0.0002	58.2309
wolframite_182	0.0001	0.0001	0.0393	0.0027	0.0001	3.2028	12.7231	0.0002	55.5697
wolframite_183	0.0133	0.0001	0.0001	0.0405	0.0057	3.3702	13.3221	0.0002	59.5491
wolframite_185	0.0166	0.0008	0.0225	0.0667	0.0001	3.6061	13.1272	0.1012	58.4067
wolframite_187	0.0417	0.0001	0.0105	0.0103	0.0001	3.3371	12.9814	0.0563	58.5382
wolframite_188	0.0133	0.0001	0.0042	0.0316	0.0001	3.4204	13.1517	0.0732	59.1755
wolframite_189	0.0367	0.0001	0.0253	0.0014	0.0001	3.2646	12.8895	0.107	58.2059
wolframite_190	0.0233	0.0001	0.0001	0.0467	0.0001	3.4398	13.2534	0.0169	58.0919
wolframite_191	0.045	0.0143	0.0001	0.0192	0.0104	3.6123	13.363	0.0002	60.1626
wolframite_192	0.005	0.0113	0.0302	0.0172	0.0076	3.3807	13.3535	0.0056	59.7563
wolframite_193	0.0001	0.0008	0.0288	0.1409	0.0152	3.4259	13.201	0.0169	57.8958
wolframite_194	0.0117	0.0128	0.0218	0.0001	0.0047	3.2723	13.4756	0.0056	59.4866

wolframite_195	0.0001	0.0098	0.0035	0.0282	0.0001	3.4926	13.3748	0.0619	60.7374
wolframite_197	0.0001	0.009	0.0133	0.0364	0.0001	3.2109	13.1976	0.0451	60.1638
wolframite_198	0.0167	0.0001	0.0001	0.0385	0.0001	3.2613	13.1711	0.0902	59.7025
wolframite_199	0.0067	0.0256	0.0028	0.0096	0.0001	3.5148	13.4721	0.0002	58.9402
wolframite_200	0.0367	0.0001	0.026	0.0234	0.0001	3.5679	12.9554	0.0002	59.2696
wolframite_201	0.0266	0.0045	0.0183	0.0302	0.0001	3.7933	13.353	0.0225	60.6772
wolframite_204	0.0001	0.0001	0.0162	0.0103	0.0001	4.0028	12.6284	0.0056	58.5457
wolframite_205	0.0217	0.0001	0.0001	0.0165	0.0001	3.4091	13.3728	0.045	60.0883
wolframite_206	0.0001	0.0278	0.0183	0.0158	0.0275	3.512	13.2537	0.0002	58.3516
wolframite_207	0.0314	0.0293	6.844	0.017	0.0235	2.3146	9.517	0.0445	53.8279
wolframite_208	0.0001	0.0023	0.019	0.0055	0.0001	3.4868	13.0946	0.0563	59.6454
wolframite_209	0.01	0.0001	0.0133	0.0206	0.0057	3.286	13.0216	0.0845	58.9073
wolframite_210	0.0001	0.0001	0.0001	0.0474	0.0001	3.3819	12.9599	0.0002	59.9406
wolframite_211	0.02	0.015	0.0056	0.0165	0.0256	3.4731	13.2822	0.0956	58.563
wolframite_212	0.0117	0.0001	0.026	0.0001	0.0038	3.4742	13.0057	0.0002	58.5743
wolframite_213	0.0001	0.0001	0.0049	0.0309	0.0001	3.5306	13.0293	0.0002	59.4047
wolframite_214	0.0001	0.0001	0.0492	0.0021	0.0133	4.1188	12.3852	0.0002	58.5976

wolframite_215	0.0017	0.0023	0.0001	0.0227	0.0066	3.346	13.3199	0.0281	57.6147
wolframite_216	0.015	0.006	0.0126	0.0234	0.0001	3.3979	12.7365	0.0002	59.6589
wolframite_217	0.0217	0.0001	0.0001	0.0371	0.019	3.4568	13.0728	0.0281	58.9526
wolframite_218	0.0001	0.003	0.0211	0.0001	0.0001	3.302	13.316	0.0676	59.3928
wolframite_219	0.025	0.0001	0.0042	0.0014	0.0057	3.2267	13.5414	0.0563	59.7678
wolframite_220	0.0001	0.0001	0.0035	0.0316	0.0038	3.3635	13.0737	0.0002	58.6287
wolframite_221	0.02	0.0113	0.0274	0.0199	0.0303	3.0971	13.1561	0.0002	58.225
wolframite_222	0.0267	0.0001	0.0056	0.0206	0.0275	3.5331	12.9374	0.0002	59.2319
wolframite_225	0.0001	0.0098	0.0001	0.0055	0.0038	3.4959	12.9638	0.0002	59.4888
wolframite_226	0.0001	0.0001	0.0155	0.0103	0.0028	3.4487	12.8892	0.0225	58.3322
wolframite_227	0.0017	0.0001	0.0014	0.0062	0.0001	3.291	12.3577	0.0564	58.3067
wolframite_229	0.0001	0.0218	0.0232	0.0001	0.0001	4.2626	12.4471	0.0113	60.1426
wolframite_230	0.03	0.0001	0.0365	0.0021	0.0001	6.95	9.9821	0.0899	59.7363
wolframite_231	0.0216	0.0001	0.0231	0.0219	0.0001	6.9465	10.1254	0.0002	58.962
wolframite_232	0.0001	0.0001	0.0001	0.0131	0.0001	3.3662	13.3034	0.0002	58.5917
wolframite_233	0.0001	0.0001	0.0001	0.0172	0.0009	3.4779	13.2918	0.0113	60.032
wolframite_234	0.0066	0.018	0.6677	0.0345	0.0172	3.6403	13.8527	0.0336	54.1262

wolframite_235	0.0283	0.003	0.0239	0.0001	0.0047	3.4804	13.3536	0.0002	59.5022
wolframite_236	0.0217	0.0203	0.0134	0.0001	0.0076	3.3396	13.5056	0.0957	59.4106
wolframite_237	0.0001	0.0195	0.0548	0.0055	0.0066	3.3699	13.2904	0.0002	60.4364
wolframite_238	0.0001	0.0105	0.5174	0.0392	0.0001	7.6488	8.9594	0.0281	59.2956
wolframite_239	0.0283	0.0001	0.0232	0.0096	0.0161	3.4956	13.2284	0.0002	58.648
wolframite_240	0.0317	0.012	0.0001	0.0001	0.0114	3.2964	13.4284	0.045	59.5285
wolframite_242	0.01	0.0001	0.0288	0.0014	0.0001	3.4489	13.4477	0.0225	58.7293
wolframite_243	0.0001	0.0001	0.0169	0.0103	0.0001	3.4958	13.1328	0.0002	59.3433
wolframite_244	0.0001	0.003	0.2389	0.0351	0.0133	3.5157	12.9866	0.0002	57.9345
wolframite_245	0.0001	0.0023	0.0133	0.0158	0.0001	3.6378	12.9221	0.0002	59.2097
wolframite_246	0.0233	0.0001	0.0302	0.0001	0.0001	4.124	12.4511	0.0002	59.4366
wolframite_247	0.0067	0.0128	0.0154	0.0281	0.0001	4.1438	12.6031	0.0002	58.5153
wolframite_248	0.0001	0.006	0.0001	0.0385	0.0076	3.3329	13.1971	0.0675	58.1583
wolframite_249	0.0167	0.006	0.0035	0.0001	0.0001	3.3869	13.3444	0.0225	59.3656
wolframite_250	0.0001	0.0113	0.0323	0.0227	0.0001	3.4415	13.3219	0.0002	59.7139
wolframite_251	0.0017	0.0128	0.0001	0.0021	0.0001	3.528	13.3947	0.0002	59.9803
wolframite_252	0.0117	0.0053	0.0049	0.0001	0.0001	3.6025	13.3001	0.0619	60.1778

wolframite_253	0.03	0.0001	0.0001	0.0001	0.0001	3.41	13.1132	0.0563	58.079
wolframite_254	0.0001	0.0001	0.0119	0.0089	0.0133	3.6528	13.3462	0.0675	58.5962
wolframite_255	0.0001	0.0278	0.0197	0.0001	0.0266	3.4985	13.4059	0.0002	59.9052
wolframite_256	0.0117	0.0038	0.0211	0.0069	0.0028	3.4745	13.3653	0.0169	59.3688
wolframite_257	0.0001	0.006	0.014	0.0001	0.0104	3.464	13.2166	0.0002	59.4023
wolframite_258	0.0001	0.0001	0.0001	0.0001	0.0047	3.9165	12.7722	0.0002	58.8583
wolframite_259	0.0001	0.0053	0.0154	0.0001	0.0001	3.4517	13.6194	0.0002	60.038
wolframite_260	0.0383	0.0001	0.0001	0.0288	0.0009	3.2733	13.117	0.0002	59.9783
wolframite_261	0.015	0.003	0.0001	0.0001	0.0001	3.4975	13.2896	0.0002	59.491
wolframite_262	0.0001	0.0001	0.0232	0.0001	0.0076	3.441	13.329	0.0225	58.905
wolframite_263	0.0283	0.0001	0.0001	0.0261	0.0028	3.3786	13.1151	0.0901	59.6941
wolframite_264	0.0233	0.0173	0.0001	0.0151	0.0001	4.377	12.2835	0.0002	58.6378
wolframite_265	0.0001	0.006	0.0316	0.0001	0.0104	4.216	12.4161	0.0113	59.6697
wolframite_266	0.0033	0.009	0.0001	0.0234	0.019	3.7208	12.8448	0.0338	58.7981
wolframite_267	0.0001	0.0143	0.0001	0.0234	0.0152	4.0296	12.5332	0.0002	58.7976
wolframite_268	0.03	0.0135	0.0246	0.0247	0.0228	3.6279	12.7269	0.0732	59.4802
wolframite_269	0.0067	0.0001	0.0098	0.0001	0.0019	3.384	13.2833	0.0002	59.7238

wolframite_270	0.0001	0.0045	0.0001	0.0082	0.0001	3.532	13.0638	0.045	58.0634
wolframite_271	0.0001	0.003	0.0183	0.0001	0.0095	3.5814	13.1915	0.0056	58.8981
wolframite_272	0.0001	0.0001	0.0211	0.0254	0.0001	3.612	13.2562	0.0002	59.751
wolframite_273	0.0033	0.0001	0.0218	0.0001	0.0332	4.2012	12.4217	0.1069	59.3214
wolframite_274	0.0001	0.021	0.0001	0.0001	0.0001	4.2175	12.1876	0.0619	58.596
wolframite_275	0.0001	0.0001	0.0162	0.0199	0.0001	3.5498	12.8515	0.0002	59.122
wolframite_276	0.0017	0.0001	0.0001	0.0343	0.0123	3.574	12.7054	0.0002	59.0898
wolframite_277	0.0133	0.0001	0.0204	0.0337	0.0001	3.4592	13.1496	0.0002	58.0415
wolframite_278	0.0167	0.0113	0.0001	0.0172	0.0095	3.3956	13.2097	0.0619	58.7959
wolframite_280	0.035	0.0105	0.0035	0.0027	0.0001	3.3177	13.1815	0.0002	59.3296
wolframite_282	0.0001	0.015	0.0183	0.0001	0.0001	3.3946	13.1604	0.0002	58.9678
wolframite_283	0.0001	0.0001	0.0001	0.0001	0.0019	3.3425	12.8724	0.107	59.1278
wolframite_284	0.0001	0.0001	0.0001	0.0001	0.0095	3.3743	12.7635	0.0002	59.5653
wolframite_285	0.0001	0.006	0.007	0.0392	0.0256	3.2249	13.2217	0.0507	58.9053
wolframite_286	0.0001	0.0001	0.0001	0.013	0.0057	3.4675	12.869	0.1013	57.9701
wolframite_287	0.0033	0.0053	0.0001	0.0117	0.0152	3.3941	13.1197	0.0002	58.9624
wolframite_288	0.005	0.0173	0.0344	0.0041	0.0001	3.4446	12.794	0.0901	58.2915

wolframite_289	0.0217	0.0023	0.033	0.0117	0.0001	3.1941	13.0578	0.0002	58.7951
wolframite_290	0.025	0.0068	0.0232	0.0001	0.0104	3.4947	12.823	0.0282	58.9711
wolframite_291	0.0001	0.0098	0.0415	0.0206	0.0001	3.2881	13.0425	0.1014	59.2563
wolframite_292	0.0033	0.003	0.0365	0.0001	0.0001	4.4923	12.4212	0.0394	60.0538
wolframite_293	0.0001	0.015	0.0001	0.0419	0.0001	3.3332	12.9404	0.0002	58.7429
wolframite_294	0.0001	0.0158	0.0267	0.0137	0.0001	3.7373	13.5453	0.0394	59.9643
wolframite_75	x	x	x	x	x	4.8942	12.2457	x	60.0058
wolframite_76	x	x	x	x	x	4.5494	12.407	x	58.7549
wolframite_77	x	x	x	x	x	3.2739	14.0111	x	60.3782
wolframite_78	x	x	x	x	x	5.2725	12.4315	x	59.3788
wolframite_79	x	x	x	x	x	3.4028	13.5525	x	61.3299
wolframite_80	x	x	x	x	x	3.3537	14.0271	x	60.1107
wolframite_81	x	x	x	x	x	4.7774	12.2287	x	60.2593
wolframite_82	x	x	x	x	x	3.3019	13.9847	x	59.356
wolframite_83	x	x	x	x	x	4.7127	11.5446	x	57.7046
wolframite_84	x	x	x	x	x	4.6594	12.1125	x	58.6347
wolframite_85	x	x	x	x	x	4.9258	12.1651	x	60.0414

wolframite_86	x	x	x	x	x	4.8775	11.9906	x	59.4463
wolframite_87	x	x	x	x	x	3.1965	13.6528	x	60.9407
wolframite_88	x	x	x	x	x	4.7249	12.5918	x	59.8473
wolframite_89	x	x	x	x	x	4.6417	12.5339	x	60.3739
wolframite_90	x	x	x	x	x	3.2134	14.2588	x	60.7644
wolframite_91	x	x	x	x	x	2.5228	11.1046	x	61.4146
wolframite_92	x	x	x	x	x	3.1825	14.1491	x	60.6325
wolframite_93	x	x	x	x	x	3.2369	13.5697	x	57.9208
wolframite_94	x	x	x	x	x	4.3521	12.7246	x	59.4051
wolframite_95	x	x	x	x	x	3.4381	13.7605	x	60.3022
wolframite_96	x	x	x	x	x	4.6798	12.5581	x	59.3344
wolframite_97	x	x	x	x	x	3.3028	13.5938	x	59.6583
wolframite_98	x	x	x	x	x	4.879	12.5368	x	60.5393
wolframite_99	x	x	x	x	x	3.4041	13.8906	x	59.4159
wolframite_100	x	x	x	x	x	3.1643	13.7261	x	59.5625
wolframite_239	x	x	x	x	x	4.1878	13.7767	x	59.215
wolframite_240	x	x	x	x	x	4.1746	13.617	x	59.8239

wolframite_241	x	x	x	x	x	4.1143	13.429	x	59.78
wolframite_242	x	x	x	x	x	4.0589	13.8859	x	59.258
wolframite_243	x	x	x	x	x	4.2346	13.6879	x	59.9828
wolframite_244	x	x	x	x	x	4.2532	13.9135	x	60.4773
wolframite_245	x	x	x	x	x	4.2485	13.7116	x	59.5094
wolframite_246	x	x	x	x	x	4.5537	13.5774	x	61.1809
wolframite_247	x	x	x	x	x	4.0365	13.5894	x	59.4195
wolframite_248	x	x	x	x	x	4.2383	13.3211	x	60.6631
wolframite_249	x	x	x	x	x	4.0765	13.9904	x	56.523
wolframite_250	x	x	x	x	x	4.4044	12.9203	x	58.9439
wolframite_251	x	x	x	x	x	4.3781	13.3876	x	59.5114
wolframite_252	x	x	x	x	x	4.2556	13.378	x	58.7662
wolframite_253	x	x	x	x	x	4.1775	13.5523	x	59.1928
wolframite_254	x	x	x	x	x	4.1281	13.2542	x	58.6667
wolframite_255	x	x	x	x	x	3.3415	13.1653	x	51.0249
wolframite_256	x	x	x	x	x	4.2731	13.4645	x	60.2275
wolframite_257	x	x	x	x	x	4.3598	13.8139	x	59.0338

wolframite_258	x	x	x	x	x	4.0071	13.5008	x	60.5812
wolframite_259	x	x	x	x	x	4.0675	13.8938	x	61.4859
wolframite_260	x	x	x	x	x	4.2268	13.7401	x	59.0685
wolframite_261	x	x	x	x	x	4.1344	13.665	x	60.8124
wolframite_262	x	x	x	x	x	4.2171	13.7199	x	60.8723
wolframite_263	x	x	x	x	x	4.1164	13.5878	x	59.2587
wolframite_264	x	x	x	x	x	4.0209	13.0907	x	57.2574
wolframite_265	x	x	x	x	x	4.1354	13.4938	x	58.4086
wolframite_266	x	x	x	x	x	3.9958	13.5436	x	59.8767
wolframite_267	x	x	x	x	x	4.181	13.7144	x	60.7819
wolframite_268	x	x	x	x	x	4.1401	13.5339	x	60.3039
wolframite_269	x	x	x	x	x	3.7799	13.3917	x	58.5966
wolframite_270	x	x	x	x	x	4.2128	13.6355	x	60.4283
wolframite_271	x	x	x	x	x	4.131	13.7136	x	59.0918
wolframite_272	x	x	x	x	x	4.1867	13.3207	x	58.1437
wolframite_273	x	x	x	x	x	4.0344	13.841	x	59.8253
wolframite_274	x	x	x	x	x	4.2662	13.1219	x	58.5618

wolframite_275	x	x	x	x	x	3.8715	13.6942	x	60.4914
wolframite_276	x	x	x	x	x	3.8774	13.5271	x	58.3266
wolframite_277	x	x	x	x	x	4.0318	13.3472	x	60.3317
wolframite_278	x	x	x	x	x	4.1366	13.4437	x	61.1118
wolframite_279	x	x	x	x	x	4.0689	13.4014	x	59.0365
wolframite_280	x	x	x	x	x	4.0525	13.451	x	59.379
wolframite_281	x	x	x	x	x	4.0086	13.4949	x	61.0452
wolframite_282	x	x	x	x	x	4.376	13.6658	x	59.3
wolframite_283	x	x	x	x	x	4.4121	13.3453	x	59.5659
wolframite_284	x	x	x	x	x	4.3266	13.5708	x	60.0508
wolframite_285	x	x	x	x	x	4.1276	13.5615	x	59.9047
wolframite_286	x	x	x	x	x	3.9829	14.0059	x	59.0622
wolframite_287	x	x	x	x	x	4.2255	13.6334	x	58.1638
wolframite_288	x	x	x	x	x	3.9175	13.4762	x	61.0817
wolframite_289	x	x	x	x	x	4.1603	13.3859	x	58.3549
wolframite_290	x	x	x	x	x	4.5291	13.4546	x	59.4479
wolframite_291	x	x	x	x	x	4.3155	13.6043	x	58.2481

wolframite_292	x	x	x	x	x	4.49	13.2692	x	59.1882
wolframite_57	x	x	x	x	x	5.3024	12.066	x	60.0245
wolframite_58	x	x	x	x	x	5.3587	11.3997	x	59.6317
wolframite_59	x	x	x	x	x	5.2515	12.5342	x	60.7887
wolframite_60	x	x	x	x	x	7.57	10.0655	x	60.1578
wolframite_61	x	x	x	x	x	5.3122	12.3621	x	59.0896
wolframite_62	x	x	x	x	x	5.152	12.5217	x	60.0095
wolframite_63	x	x	x	x	x	5.5355	12.2958	x	59.7275
wolframite_64	x	x	x	x	x	5.2386	12.3563	x	58.1769
wolframite_65	x	x	x	x	x	5.1724	12.2989	x	59.9374
wolframite_66	x	x	x	x	x	5.192	12.1469	x	60.3224
wolframite_67	x	x	x	x	x	5.2436	12.4602	x	59.5704
wolframite_68	x	x	x	x	x	5.0626	12.4003	x	58.6612
wolframite_69	x	x	x	x	x	5.0545	12.255	x	59.7093
wolframite_70	x	x	x	x	x	5.4775	12.6153	x	60.806
wolframite_71	x	x	x	x	x	5.1082	12.3305	x	59.7204
wolframite_72	x	x	x	x	x	5.0079	12.4184	x	59.7434

wolframite_73	x	x	x	x	x	5.6115	12.1744	x	58.2989
wolframite_74	x	x	x	x	x	5.1961	12.5355	x	59.5965
wolframite_75	x	x	x	x	x	5.0567	12.783	x	61.6882
wolframite_76	x	x	x	x	x	5.1684	12.4982	x	60.1586
wolframite_77	x	x	x	x	x	5.534	12.2972	x	61.2785
wolframite_78	x	x	x	x	x	5.3422	12.4368	x	60.2742
wolframite_79	x	x	x	x	x	5.3873	12.2783	x	59.1454
wolframite_80	x	x	x	x	x	12.2452	6.0265	x	59.765
wolframite_81	x	x	x	x	x	4.984	12.5017	x	60.7562
wolframite_82	x	x	x	x	x	4.9664	12.2752	x	60.1702
wolframite_83	x	x	x	x	x	10.5092	7.0406	x	59.2902
wolframite_84	x	x	x	x	x	5.3801	12.608	x	60.3529
wolframite_85	x	x	x	x	x	5.3786	12.5785	x	60.2512
wolframite_86	x	x	x	x	x	5.0194	12.1945	x	60.0632
wolframite_87	x	x	x	x	x	5.4558	12.4879	x	60.6617
wolframite_88	x	x	x	x	x	7.18	10.2746	x	60.8684
wolframite_89	x	x	x	x	x	5.0761	12.749	x	60.6429

wolframite_90	x	x	x	x	x	5.1996	12.4759	x	60.1079
wolframite_91	x	x	x	x	x	6.4917	11.4155	x	60.5666
wolframite_92	x	x	x	x	x	5.2249	12.7242	x	59.6143
wolframite_93	x	x	x	x	x	5.3087	12.2349	x	59.923
wolframite_94	x	x	x	x	x	5.1254	12.6337	x	60.5588
wolframite_95	x	x	x	x	x	5.268	12.4248	x	59.4771
wolframite_97	x	x	x	x	x	5.2869	12.5531	x	59.2735
wolframite_98	x	x	x	x	x	5.2119	12.6185	x	60.1159
wolframite_99	x	x	x	x	x	5.328	12.5281	x	60.0046
wolframite_100	x	x	x	x	x	5.2671	12.2792	x	59.2649
wolframite_101	x	x	x	x	x	5.1544	12.4979	x	59.9294
wolframite_102	x	x	x	x	x	5.4386	12.045	x	60.0926
wolframite_103	x	x	x	x	x	5.3728	12.2253	x	59.7297
wolframite_104	x	x	x	x	x	5.38	12.1288	x	59.2893
wolframite_105	x	x	x	x	x	5.3464	11.9705	x	59.2411
wolframite_106	x	x	x	x	x	5.097	12.6351	x	59.4846
wolframite_107	x	x	x	x	x	5.1075	12.7063	x	60.4774

wolframite_108	x	x	x	x	x	4.9227	12.5964	x	60.2908
wolframite_110	x	x	x	x	x	5.3048	12.318	x	59.4612
wolframite_111	x	x	x	x	x	5.2478	12.131	x	59.6456
wolframite_112	x	x	x	x	x	7.5732	10.3506	x	58.4025
wolframite_113	x	x	x	x	x	5.9803	12.4145	x	53.1786
wolframite_114	x	x	x	x	x	4.7742	12.4342	x	59.5616
wolframite_115	x	x	x	x	x	5.2549	12.4071	x	59.6592
wolframite_116	x	x	x	x	x	5.1185	12.3827	x	59.6989
wolframite_117	x	x	x	x	x	5.0955	12.4762	x	59.9788
wolframite_118	x	x	x	x	x	5.3323	12.1539	x	59.1154
wolframite_119	x	x	x	x	x	5.0234	12.5899	x	60.0796
wolframite_120	x	x	x	x	x	4.9707	12.7193	x	59.3621
wolframite_121	x	x	x	x	x	4.9615	12.3232	x	60.5027
wolframite_122	x	x	x	x	x	5.0944	12.178	x	58.8737
wolframite_123	x	x	x	x	x	6.8439	10.4074	x	58.6477
wolframite_124	x	x	x	x	x	7.2136	10.3851	x	58.59
wolframite_125	x	x	x	x	x	5.2481	12.3978	x	58.9813

wolframite_126	x	x	x	x	x	5.3519	12.2082	x	59.3927
wolframite_127	x	x	x	x	x	5.3938	12.1356	x	58.8005
wolframite_128	x	x	x	x	x	5.4378	12.1248	x	59.7845
wolframite_129	x	x	x	x	x	5.4258	12.2067	x	59.4578
wolframite_130	x	x	x	x	x	5.489	12.0267	x	59.7334
wolframite_131	x	x	x	x	x	5.7465	11.896	x	59.2244
wolframite_132	x	x	x	x	x	5.2319	12.5687	x	58.7819
wolframite_133	x	x	x	x	x	5.2714	12.2027	x	59.5245
wolframite_134	x	x	x	x	x	5.2292	12.3063	x	59.4207
wolframite_135	x	x	x	x	x	5.481	12.4166	x	59.5099
wolframite_136	x	x	x	x	x	5.5196	12.0346	x	59.6749
wolframite_137	x	x	x	x	x	5.7244	11.9013	x	58.7177
wolframite_138	x	x	x	x	x	5.3755	12.3045	x	60.4749
wolframite_139	x	x	x	x	x	4.8053	12.3718	x	58.7303
wolframite_140	x	x	x	x	x	5.1926	12.4015	x	59.7898
wolframite_141	x	x	x	x	x	5.18	12.1154	x	60.9197
wolframite_142	x	x	x	x	x	5.0581	12.5242	x	60.004

wolframite_143	x	x	x	x	x	5.2901	12.1657	x	58.8287
wolframite_144	x	x	x	x	x	5.1613	12.158	x	59.1146
wolframite_145	x	x	x	x	x	5.3692	12.183	x	59.6258
wolframite_146	x	x	x	x	x	5.1557	12.3689	x	60.0358
wolframite_147	x	x	x	x	x	5.0511	12.3496	x	59.0807
wolframite_148	x	x	x	x	x	5.1442	12.3663	x	60.0634
wolframite_149	x	x	x	x	x	5.2982	12.4596	x	60.8427
wolframite_150	x	x	x	x	x	5.2876	12.4403	x	59.8528
wolframite_151	x	x	x	x	x	5.2793	12.7975	x	55.088
wolframite_153	x	x	x	x	x	5.2025	12.3695	x	60.8891
wolframite_154	x	x	x	x	x	5.1626	12.0937	x	59.0803
wolframite_155	x	x	x	x	x	5.1717	12.2656	x	59.7923
wolframite_156	x	x	x	x	x	5.3826	12.3289	x	60.3527
wolframite_157	x	x	x	x	x	5.2448	12.3233	x	59.8527
wolframite_158	x	x	x	x	x	5.1692	12.3622	x	59.3143
wolframite_159	x	x	x	x	x	5.2887	12.0066	x	60.1294
wolframite_160	x	x	x	x	x	5.0652	12.2414	x	59.4384

wolframite_161	x	x	x	x	x	5.5221	12.2588	x	59.5025
wolframite_162	x	x	x	x	x	5.1751	12.3192	x	59.2343
wolframite_163	x	x	x	x	x	5.2698	12.3479	x	60.0396
wolframite_164	x	x	x	x	x	5.1344	12.4734	x	59.5594
wolframite_165	x	x	x	x	x	5.2345	12.4061	x	60.0353
wolframite_166	x	x	x	x	x	5.1636	12.4278	x	60.0113
wolframite_168	x	x	x	x	x	6.4644	11.6906	x	60.2175
wolframite_169	x	x	x	x	x	5.1301	11.9557	x	60.2639
wolframite_170	x	x	x	x	x	5.2602	12.3372	x	58.4701
wolframite_171	x	x	x	x	x	5.2458	12.218	x	59.6597
wolframite_172	x	x	x	x	x	5.7477	12.5483	x	56.2199
wolframite_173	x	x	x	x	x	5.2727	12.378	x	58.2742
wolframite_174	x	x	x	x	x	5.6982	11.8434	x	58.8304
wolframite_175	x	x	x	x	x	5.3371	12.0545	x	60.019
wolframite_177	x	x	x	x	x	5.3346	11.9804	x	57.7353
wolframite_178	x	x	x	x	x	5.1028	12.4876	x	59.3574
wolframite_179	x	x	x	x	x	5.6524	11.9181	x	59.3049

wolframite_180	x	x	x	x	x	5.2362	12.6876	x	60.5862
wolframite_181	x	x	x	x	x	5.093	12.3941	x	59.0877
wolframite_182	x	x	x	x	x	5.3775	12.0002	x	59.9208
wolframite_183	x	x	x	x	x	4.9106	12.2785	x	59.9221
wolframite_184	x	x	x	x	x	5.3819	12.258	x	59.3855
wolframite_185	x	x	x	x	x	5.238	12.4253	x	59.635
wolframite_186	x	x	x	x	x	5.3365	12.1984	x	59.6872
wolframite_187	x	x	x	x	x	5.3458	12.0007	x	60.4194
wolframite_188	x	x	x	x	x	5.006	12.2142	x	59.4239
wolframite_189	x	x	x	x	x	5.0351	12.2204	x	59.9424
wolframite_190	x	x	x	x	x	4.9694	12.3523	x	59.8929
wolframite_191	x	x	x	x	x	8.2873	9.4685	x	58.6824
wolframite_192	x	x	x	x	x	9.2696	9.0063	x	59.4007
wolframite_193	x	x	x	x	x	8.8529	8.9223	x	59.2851
wolframite_194	x	x	x	x	x	5.3617	12.1039	x	58.7042
wolframite_195	x	x	x	x	x	5.0716	12.0386	x	59.1665
wolframite_196	x	x	x	x	x	5.3521	12.205	x	58.3315

wolframite_197	x	x	x	x	x	5.3657	12.1025	x	59.2753
wolframite_198	x	x	x	x	x	6.9362	11.083	x	58.1674
wolframite_199	x	x	x	x	x	5.0587	12.6339	x	59.3113
wolframite_201	x	x	x	x	x	5.428	12.0852	x	58.8746
wolframite_202	x	x	x	x	x	5.2962	12.0407	x	60.1686
wolframite_203	x	x	x	x	x	5.3663	12.2087	x	59.9187
wolframite_204	x	x	x	x	x	8.3225	7.4184	x	58.5777
wolframite_205	x	x	x	x	x	5.1559	12.2974	x	58.258
wolframite_206	x	x	x	x	x	5.2384	12.6648	x	59.0252
wolframite_207	x	x	x	x	x	5.455	12.1315	x	59.5986
wolframite_208	x	x	x	x	x	5.2285	12.7298	x	59.1115
wolframite_209	x	x	x	x	x	5.0282	12.6012	x	59.5232
wolframite_210	x	x	x	x	x	5.1696	12.4651	x	58.978
wolframite_213	x	x	x	x	x	5.4441	12.3693	x	60.0981
wolframite_214	x	x	x	x	x	5.0379	11.867	x	58.3031
wolframite_215	x	x	x	x	x	8.7818	8.7316	x	58.788
wolframite_216	x	x	x	x	x	5.2163	12.0756	x	58.1727

wolframite_217	x	x	x	x	x	10.1305	7.789	x	58.7842
wolframite_218	x	x	x	x	x	5.2864	12.1966	x	58.6112
wolframite_219	x	x	x	x	x	5.5432	12.1897	x	58.5847
wolframite_220	x	x	x	x	x	5.3633	12.2228	x	60.7589
wolframite_221	x	x	x	x	x	5.1414	12.4383	x	60.36
wolframite_222	x	x	x	x	x	5.2556	12.5101	x	58.5273
wolframite_223	x	x	x	x	x	5.4971	12.3423	x	59.5003
wolframite_224	x	x	x	x	x	5.1664	12.591	x	59.2696
wolframite_225	x	x	x	x	x	5.0823	12.1778	x	59.231
wolframite_226	x	x	x	x	x	5.1776	12.1309	x	60.1104
wolframite_227	x	x	x	x	x	5.9946	11.777	x	59.8025
wolframite_228	x	x	x	x	x	7.1517	10.6159	x	59.4478
wolframite_229	x	x	x	x	x	7.0675	10.506	x	58.9345
wolframite_230	x	x	x	x	x	7.6584	9.8902	x	59.0471
wolframite_231	x	x	x	x	x	7.2656	10.5812	x	60.933
wolframite_232	x	x	x	x	x	8.6025	8.8276	x	57.8468
wolframite_233	x	x	x	x	x	9.1555	8.5594	x	59.2721

wolframite_234	x	x	x	x	x	7.9553	9.284	x	58.4734
wolframite_235	x	x	x	x	x	8.0505	9.8452	x	59.6289
wolframite_236	x	x	x	x	x	8.3691	9.3637	x	59.5607
wolframite_237	x	x	x	x	x	6.6749	11.0674	x	57.0582
wolframite_238	x	x	x	x	x	6.3507	11.292	x	60.2558
wolframite_68	x	x	x	x	x	5.299	12.0727	x	60.3882
wolframite_69	x	x	x	x	x	5.7902	11.2431	x	60.3509
wolframite_70	x	x	x	x	x	4.8478	12.2862	x	59.9184
wolframite_71	x	x	x	x	x	4.2732	13.1297	x	59.6355
wolframite_72	x	x	x	x	x	4.3629	13.2385	x	59.5765
wolframite_73	x	x	x	x	x	4.3966	13.1064	x	60.3058
wolframite_74	x	x	x	x	x	4.3008	13.3645	x	59.582
wolframite_2	x	x	x	x	x	7.831	9.8536	x	60.6051
wolframite_3	x	x	x	x	x	5.9223	11.6952	x	59.6141
wolframite_4	x	x	x	x	x	6.9761	10.3018	x	60.0451
wolframite_5	x	x	x	x	x	5.0845	12.6134	x	60.1473
wolframite_7	x	x	x	x	x	5.293	12.1932	x	58.6587

wolframite_8	x	x	x	x	x	5.369	12.5166	x	59.7079
wolframite_9	x	x	x	x	x	5.2301	12.6957	x	60.6001
wolframite_10	x	x	x	x	x	5.2952	11.9442	x	59.3078
wolframite_11	x	x	x	x	x	6.7603	10.8107	x	59.0725
wolframite_12	x	x	x	x	x	7.0115	10.3021	x	59.5696
wolframite_13	x	x	x	x	x	7.2149	10.0949	x	59.0985
wolframite_14	x	x	x	x	x	8.2684	9.4991	x	60.1753
wolframite_15	x	x	x	x	x	7.0365	10.6846	x	59.4417
wolframite_16	x	x	x	x	x	7.2384	10.0615	x	61.0311
wolframite_17	x	x	x	x	x	5.3111	12.3202	x	60.6879
wolframite_18	x	x	x	x	x	5.2316	12.4839	x	59.9644
wolframite_19	x	x	x	x	x	6.4495	10.8341	x	59.2175
wolframite_20	x	x	x	x	x	5.4189	12.2613	x	59.7722
wolframite_21	x	x	x	x	x	10.8209	6.9234	x	59.7724
wolframite_22	x	x	x	x	x	7.2545	10.0183	x	59.8001
wolframite_23	x	x	x	x	x	7.8093	9.7584	x	60.421
wolframite_24	x	x	x	x	x	7.8749	9.7855	x	59.2345

wolframite_25	x	x	x	x	x	7.8877	9.5091	x	59.2863
wolframite_26	x	x	x	x	x	5.1853	12.3848	x	59.7223
wolframite_27	x	x	x	x	x	7.0531	10.7662	x	60.2786
wolframite_28	x	x	x	x	x	8.0914	9.424	x	60.3138
wolframite_29	x	x	x	x	x	6.8676	10.5464	x	59.1538
wolframite_30	x	x	x	x	x	6.3808	11.0911	x	60.0075
wolframite_31	x	x	x	x	x	6.2416	11.4113	x	59.5808
wolframite_32	x	x	x	x	x	13.9543	3.7216	x	59.0967
wolframite_33	x	x	x	x	x	10.1265	7.5338	x	60.6566
wolframite_34	x	x	x	x	x	6.5715	11.2206	x	59.9654
wolframite_35	x	x	x	x	x	5.4991	12.1917	x	60.7274
wolframite_36	x	x	x	x	x	6.9364	10.5063	x	60.0308
wolframite_37	x	x	x	x	x	5.1583	12.0391	x	60.7813
wolframite_38	x	x	x	x	x	5.1636	12.2563	x	59.8473
wolframite_39	x	x	x	x	x	5.2824	12.5502	x	59.5043
wolframite_40	x	x	x	x	x	6.805	10.4865	x	59.0136
wolframite_41	x	x	x	x	x	8.6578	8.9949	x	58.6529

wolframite_42	x	x	x	x	x	7.2413	10.1281	x	60.1347
wolframite_43	x	x	x	x	x	7.8546	9.6028	x	60.1428
wolframite_45	x	x	x	x	x	5.6594	11.8183	x	60.0284
wolframite_46	x	x	x	x	x	5.6017	12.2893	x	59.1269
wolframite_47	x	x	x	x	x	5.4748	12.0817	x	59.1338
wolframite_48	x	x	x	x	x	5.4147	12.1564	x	59.5829
wolframite_49	x	x	x	x	x	7.2519	10.0599	x	60.3073
wolframite_50	x	x	x	x	x	6.2703	11.4208	x	58.6375
wolframite_51	x	x	x	x	x	6.8959	11.1339	x	59.8275
wolframite_52	x	x	x	x	x	7.2746	10.4395	x	60.0639
wolframite_53	x	x	x	x	x	5.1741	12.2247	x	59.3235
wolframite_54	x	x	x	x	x	6.6715	10.7982	x	59.7922
wolframite_55	x	x	x	x	x	5.1931	12.2899	x	59.747
wolframite_56	x	x	x	x	x	5.1543	12.3887	x	58.9929
wolframite_S20_61	0.005	0.0001	0.028	0.0328	0.0047	5.1526	11.6668	0.14	60.171
wolframite_S20_62	0.0001	0.0247	0.028	0.0362	0.0142	5.2898	12.1534	0.0112	61.1559
wolframite_S20_65	0.0099	0.0001	0.0154	0.002	0.0001	6.6713	9.9495	0.0002	57.8441

wolframite_S20_66	0.0001	0.015	0.0482	0.026	0.0001	4.9736	12.1105	0.0002	62.459
wolframite_S20_67	0.0066	0.0022	0.0001	0.0034	0.0001	5.21	11.8479	0.0056	61.8673
wolframite_S20_68	0.005	0.0127	0.0001	0.08	0.0001	5.0488	11.9141	0.1232	60.9358
wolframite_S20_69	0.0083	0.0179	0.0266	0.0001	0.0057	5.1358	12.2932	0.1231	61.4086
wolframite_S20_70	0.0001	0.0001	0.0001	0.0287	0.017	5.3606	11.7054	0.0002	60.7281
wolframite_S20_71	0.0133	0.0157	0.0335	0.0075	0.018	5.0864	12.2452	0.0002	60.7572
wolframite_S20_72	0.0315	0.0001	0.0454	0.0328	0.018	5.3804	12.1995	0.0002	61.3296
wolframite_S20_73	0.0001	0.0135	1.719	0.0001	0.0001	5.6819	9.4799	0.0784	61.641
wolframite_S20_74	0.0099	0.012	0.0266	0.0506	0.0321	5.0754	12.5332	0.028	61.9862
wolframite_S20_75	0.0001	0.0097	0.0482	0.0465	0.0001	5.0655	12.1946	0.028	61.2621
wolframite_S20_76	0.0001	0.0112	0.0217	0.0001	0.0001	5.6567	11.6537	0.0002	61.0105
wolframite_S20_77	0.0001	0.0001	0.0098	0.0001	0.0001	5.874	11.5321	0.0002	59.8493
wolframite_S20_78	0.0001	0.0001	0.0105	0.0212	0.0076	4.8797	12.1773	0.0224	59.8843
wolframite_S20_79	0.0001	0.0075	0.0224	0.0048	0.0001	5.1404	12.0233	0.1455	60.5301
wolframite_S20_80	0.0001	0.0001	0.007	0.0001	0.0236	5.2135	11.8979	0.0002	61.096
wolframite_S20_81	0.0133	0.0374	0.0147	0.0001	0.0001	5.413	12.2636	0.0002	61.3581
wolframite_S20_82	0.0033	0.0172	0.0189	0.0239	0.0265	4.9128	12.5231	0.0002	59.6527

wolframite_S20_83	0.0564	0.009	0.0434	0.0198	0.0001	5.2093	11.7122	0.0002	60.2964
wolframite_S20_84	0.0166	0.0172	0.0133	0.054	0.0001	8.2556	9.1615	0.0002	61.2714
wolframite_S20_85	0.4523	0.1289	0.0294	0.0315	0.0028	4.8851	11.8515	0.0002	59.4964
wolframite_S20_86	0.005	0.0262	0.0378	0.0157	0.0113	5.1607	12.0872	0.0002	61.5721
wolframite_S20_87	0.0099	0.0172	0.0203	0.015	0.0104	5.3206	11.9418	0.0896	62.1072
wolframite_S20_88	0.0001	0.0001	0.0147	0.013	0.0001	5.3648	11.6397	0.0952	60.8098
wolframite_S20_89	0.005	0.0001	0.0175	0.0253	0.016	5.0044	11.6234	0.0336	61.1369
wolframite_S20_90	0.0001	0.0052	0.0189	0.0178	0.0161	5.0544	12.0951	0.0002	61.1789
wolframite_S20_91	0.0001	0.021	0.0001	0.0315	0.0001	5.2688	11.8301	0.0112	60.802
wolframite_S20_92	0.0083	0.0097	0.0238	0.0314	0.0001	5.1486	11.9151	0.0112	60.8642
wolframite_S20_93	0.0414	0.0217	0.0329	0.0451	0.0001	5.4928	12.0357	0.0002	61.3961
wolframite_S20_94	0.0132	0.0045	0.0321	0.0089	0.0227	5.0589	12.3008	0.0002	59.3097
wolframite_S20_95	0.0017	0.0001	0.0224	0.0273	0.0047	5.188	12.2944	0.0002	60.5975
wolframite_S20_96	0.0001	0.0262	0.0056	0.0001	0.0132	5.1626	12.103	0.0002	61.1587
wolframite_S20_97	0.0001	0.0001	0.014	0.0001	0.0095	5.0965	11.9779	0.0002	60.7122
wolframite_S20_98	0.0365	0.0015	0.0133	0.0417	0.0001	5.0726	12.3044	0.0728	60.1438
wolframite_S20_99	0.0199	0.0001	0.0175	0.0007	0.0001	5.0641	12.086	0.0392	60.9517

wolframite_S20_100	0.0066	0.0001	0.014	0.0075	0.0001	4.9504	12.2546	0.0002	60.5271
wolframite_S20_101	0.0017	0.0001	0.0119	0.0001	0.0076	5.0566	12.5204	0.0168	59.1763
wolframite_S20_102	0.0414	0.0037	0.0028	0.0001	0.0009	5.3254	12.1117	0.084	60.7708
wolframite_S20_103	0.0001	0.0172	0.0175	0.0001	0.0001	5.5347	12.1991	0.0839	60.3423
wolframite_S20_104	0.0282	0.0001	0.0189	0.0109	0.0001	5.2811	11.7069	0.0897	61.3331
wolframite_S20_105	0.0248	0.0045	0.0363	0.0001	0.0001	5.342	11.9417	0.0002	60.0745
wolframite_S20_106	0.0149	0.0001	0.0252	0.0034	0.0019	4.9106	12.3065	0.0616	60.0172
wolframite_S20_107	0.0001	0.0001	0.0322	0.0001	0.0151	5.2161	12.0177	0.0392	61.1884
wolframite_S20_108	0.0001	0.009	0.0238	0.0001	0.0123	5.365	12.1415	0.0224	60.5167
wolframite_S20_109	0.0133	0.0075	0.0336	0.026	0.0104	5.4419	11.7	0.0002	61.5772

Muscovite EMPA data

Label	No	W%(O)	W%(F)	W%(Na)	W%(Mg)	W%(Al)	W%(Si)	W%(P)	W%(Cl)	W%(K)	W%(Ca)
muscovite_1	1	41.7759	0.6265	0.2508	0.867	15.5536	20.2133	0.0037	0.005	8.3834	0.0892
muscovite_2	2	43.145	1.4455	0.236	0.8661	16.3486	20.601	0.0018	0.0001	8.296	0.0154
muscovite_3	3	43.5166	1.0676	0.4079	0.5875	17.2166	20.6005	0.0073	0.0001	8.052	0.0138
muscovite_4	4	42.9877	1.1766	0.4203	0.5354	17.2115	20.0912	0.022	0.0001	8.1373	0.0001

muscovite_5	5	43.4647	0.8826	0.4597	0.502	17.7074	20.2837	0.022	0.0199	8.1565	0.0001
muscovite_6	6	43.231	0.9972	0.4407	0.5852	17.1837	20.3678	0.0001	0.0001	8.121	0.0001
muscovite_7	7	43.59	0.7935	0.3247	0.564	17.7175	20.4286	0.011	0.0265	8.0787	0.0032
muscovite_8	8	43.4776	0.9214	0.4069	0.483	17.5628	20.4419	0.0001	0.0116	8.1214	0.0001
muscovite_9	9	43.3111	1.172	0.4296	0.5366	17.2914	20.3453	0.0037	0.0099	7.9535	0.0001
muscovite_10	10	42.5263	0.9013	0.2332	0.8579	15.315	20.8085	0.0237	0.0264	8.478	0.0519
muscovite_11	11	43.1527	1.0285	0.4718	0.5132	17.5379	20.0629	0.0001	0.0001	8.059	0.0001
muscovite_12	12	43.821	0.9218	0.1375	1.6908	14.649	21.9567	0.0073	0.0001	8.2159	0.0001
muscovite_13	13	43.6106	0.9241	0.3918	0.5818	17.5787	20.6197	0.0001	0.0249	7.7059	0.0001
muscovite_14	14	42.7651	0.946	0.3924	0.5434	17.0288	20.157	0.0183	0.005	8.1413	0.0187
muscovite_15	15	43.2424	1.0963	0.4224	0.5927	17.2296	20.2698	0.022	0.0066	8.246	0.0001
muscovite_16	16	43.4872	1.4316	0.4898	0.656	16.9664	20.5103	0.0146	0.0166	8.0733	0.013
muscovite_17	17	43.3945	1.0533	0.3923	0.4658	17.4479	20.3754	0.0001	0.0182	8.1345	0.0049
muscovite_18	18	43.4657	0.6162	0.4078	0.4914	17.8129	20.1936	0.0128	0.0001	8.3993	0.0001
muscovite_19	19	43.6988	0.9588	0.3757	0.48	17.9643	20.3874	0.044	0.0216	7.8532	0.0195
muscovite_1	24	42.2307	1.0198	0.33	0.7502	16.3112	19.8786	0.0182	0.0347	8.314	0.0413
muscovite_2	25	43.3177	1.6068	0.1893	0.9028	16.1535	20.956	0.0001	0.0001	7.971	0.0001

muscovite_3	26	43.6233	1.0763	0.3838	0.6112	17.4034	20.6969	0.0367	0.0001	7.5945	0.0001
muscovite_4	27	42.8744	1.2373	0.3982	0.5682	17.2813	20.1487	0.0001	0.0001	7.4978	0.0001
muscovite_5	28	43.1845	0.9224	0.4778	0.4775	17.5651	20.4085	0.0129	0.0017	7.4717	0.0049
muscovite_6	29	43.1927	1.2013	0.4504	0.6345	17.3165	20.3566	0.0165	0.0033	7.2409	0.0001
muscovite_7	30	43.1286	0.8817	0.2819	0.5941	17.6803	20.4769	0.0001	0.0216	6.8261	0.0008
muscovite_8	31	43.1848	0.97	0.3809	0.4854	17.7379	20.3378	0.0147	0.0001	7.1291	0.0001
muscovite_9	32	43.3878	1.2627	0.3856	0.5193	17.5485	20.5089	0.0129	0.0083	7.1372	0.0001
muscovite_10	33	41.6887	0.6723	0.2101	0.8075	15.4366	20.5074	0.011	0.0116	7.2059	0.055
muscovite_11	34	43.3005	1.2623	0.3271	0.4834	17.9542	20.3603	0.0111	0.0183	6.5016	0.0001
muscovite_12	35	43.5478	1.06	0.0063	2.0045	13.7447	22.9686	0.0001	0.0333	6.1203	0.0001
muscovite_13	36	43.6124	1.0039	0.2741	0.6348	17.7689	21.0424	0.0111	0.0434	5.9503	0.0001
muscovite_14	37	43.4386	0.9913	0.3975	0.566	17.3815	20.5021	0.0001	0.0116	7.848	0.0001
muscovite_15	38	43.4144	1.1713	0.4363	0.5744	17.447	20.3746	0.0147	0.0001	7.8148	0.0001
muscovite_16	39	43.1317	1.454	0.3512	0.6879	16.9279	20.5614	0.0001	0.0001	7.0768	0.0202
muscovite_17	40	43.3452	1.0261	0.2701	0.5476	17.5491	20.4803	0.0202	0.0116	7.383	0.0024
muscovite_18	41	42.8848	0.7393	0.2955	0.5085	17.6173	20.3117	0.0037	0.0299	7.2118	0.0001
muscovite_19	42	43.4439	0.9226	0.2811	0.4965	17.8965	20.7119	0.0222	0.0083	6.6039	0.0413

muscovite_21	44	42.9509	1.6154	0.32	0.7164	16.9094	20.1511	0.0001	0.0083	7.6937	0.0154
muscovite_22	45	43.018	1.1279	0.4583	0.5207	17.4804	19.9998	0.0001	0.0132	7.9763	0.0001
muscovite_23	46	42.9744	1.2018	0.339	0.7474	16.7625	20.3677	0.0001	0.0182	7.8442	0.0203
muscovite_24	47	42.6947	1.0639	0.4777	0.4295	17.5258	19.7383	0.0366	0.0099	7.835	0.0001
muscovite_25	48	42.4077	0.8228	0.33	0.6661	16.8387	19.9049	0.0128	0.0165	8.1893	0.0001
muscovite_26	49	43.0064	1.2834	0.4494	0.568	17.223	20.0471	0.0055	0.0248	7.9847	0.0001
muscovite_27	50	42.847	0.9353	0.3865	0.5711	17.2659	20.0363	0.0001	0.005	8.1026	0.0001
muscovite_28	51	43.2147	1.293	0.4632	0.4722	17.5571	20.087	0.011	0.0001	7.978	0.0001
muscovite_29	52	43.7481	0.8497	0.4002	0.5452	17.7652	20.5069	0.0001	0.0001	8.016	0.0001
muscovite_30	53	43.5291	0.8172	0.4087	0.4748	17.8327	20.3194	0.011	0.0099	8.1973	0.0057
muscovite_31	54	42.7812	0.7705	0.317	0.4894	17.3222	19.9123	0.022	0.0017	8.3022	0.0001
muscovite_32	55	42.1715	0.8651	0.4463	0.5068	17.1892	19.5639	0.0001	0.0033	8.009	0.0001
muscovite_33	56	42.2384	0.887	0.369	0.4644	17.1761	19.6354	0.0001	0.0132	8.3051	0.0001
muscovite_34	57	41.9168	0.952	0.1254	1.6585	14.0369	20.76	0.0001	0.0001	8.0896	0.0001
muscovite_35	58	42.4562	0.5077	0.326	0.8046	16.6667	20.1882	0.0001	0.0066	8.0628	0.0154
muscovite_36	59	42.5672	0.6171	0.3467	0.5292	17.348	19.8711	0.011	0.0166	8.0176	0.0016
muscovite_37	60	42.6973	0.7818	0.3919	0.5882	17.0202	20.0882	0.022	0.0001	8.3237	0.0001

muscovite_38	61	42.2325	1.11	0.3881	0.5332	17.064	19.6857	0.0055	0.0199	7.7636	0.0211
muscovite_39	62	41.8681	0.6485	0.3694	0.5495	16.9377	19.6258	0.0001	0.0001	7.9852	0.0001
muscovite_40	63	41.9692	0.7657	0.3575	0.5812	17.0205	19.5332	0.0073	0.0182	8.0537	0.0122
muscovite_41	64	42.9413	1.2858	0.4637	0.504	17.5145	19.7909	0.0201	0.0001	8.0913	0.0001
muscovite_42	65	42.3752	1.055	0.5342	0.4563	17.2323	19.5579	0.0091	0.0298	8.1976	0.0032
muscovite_43	66	42.3069	1.0982	0.4123	0.5311	17.1438	19.6253	0.0238	0.0232	8.0357	0.0211
muscovite_44	67	42.4771	1.3345	0.4034	0.536	17.0127	19.7833	0.0001	0.0099	8.1448	0.0001
muscovite_45	68	42.4682	1.5405	0.4675	0.6832	16.5643	19.8129	0.0001	0.0001	8.0311	0.0001
muscovite_46	69	42.6477	1.357	0.4039	0.6686	16.7428	19.9973	0.0001	0.0083	7.945	0.0001
muscovite_47	70	42.3158	0.7394	0.36	0.4732	17.3023	19.8569	0.0001	0.0199	7.7383	0.017
muscovite_48	71	42.3487	0.7542	0.3553	0.5046	17.3328	19.781	0.0018	0.0132	7.9019	0.0203
muscovite_49	72	42.0547	1.0115	0.4447	0.4928	16.7973	19.6009	0.0256	0.0033	8.2477	0.0089
muscovite_50	73	42.3468	1.1253	0.3458	0.9354	15.9273	20.215	0.0001	0.0215	8.2729	0.0001
muscovite_51	74	42.1464	0.7384	0.4637	0.4308	17.1853	19.6809	0.0001	0.0017	7.9989	0.0001
muscovite_52	75	42.1954	1.2315	0.471	0.4124	16.8574	19.5536	0.0001	0.0116	8.3408	0.0001
muscovite_53	76	42.4868	0.9393	0.3038	0.8467	16.405	20.1126	0.0001	0.0182	8.3587	0.0001
muscovite_54	77	42.2995	1.1364	0.501	0.324	17.4602	19.4193	0.0037	0.0215	8.2483	0.0001

muscovite_55	78	42.3192	1.0974	0.1689	1.0845	15.8186	20.2542	0.0018	0.0033	8.3592	0.0235
muscovite_56	79	42.1658	0.8355	0.3401	0.5295	17.1241	19.56	0.0001	0.0001	8.2978	0.0001
muscovite_57	80	42.4021	0.7733	0.4456	0.463	17.2578	19.6678	0.0274	0.0001	8.321	0.0001
muscovite_58	81	42.2518	1.2165	0.4012	0.6059	16.9144	19.6721	0.0001	0.005	7.8856	0.0001
muscovite_59	82	42.9466	1.2313	0.4883	0.4554	17.2407	20.0706	0.0001	0.0001	7.931	0.0081
muscovite_60	83	42.3541	1.0694	0.2427	0.7943	16.3498	20.0789	0.011	0.0132	8.1987	0.0001
muscovite_61	84	42.0073	1.1408	0.4337	0.4401	16.9577	19.6159	0.0037	0.0265	7.8334	0.0001
muscovite_62	85	42.6791	0.6217	0.3708	0.447	17.5825	19.7708	0.0001	0.0001	8.2964	0.0001
muscovite_63	86	43.0236	0.828	0.437	0.4343	17.5532	20.0946	0.0001	0.0066	8.2412	0.0097
muscovite_64	87	42.8699	0.7249	0.3447	0.5887	17.2253	20.0327	0.0001	0.0215	8.6311	0.013
muscovite_65	88	43.49	1.0532	0.3944	0.4514	17.6377	20.3275	0.0055	0.0083	7.984	0.0235
muscovite_66	89	41.6278	1.2977	0.4539	0.4107	16.6115	19.5706	0.0073	0.0215	7.4666	0.0008
muscovite_67	90	42.9579	0.6822	0.3547	0.4695	17.5706	20.0005	0.0238	0.0083	8.3422	0.0001
muscovite_68	91	42.4801	0.8634	0.3513	0.5779	17.0803	19.9342	0.0147	0.0132	7.8809	0.0381
muscovite_69	92	42.7233	0.9483	0.4884	0.4435	17.2928	19.9122	0.0165	0.0001	8.239	0.0187
muscovite_70	93	42.7794	1.0882	0.2315	0.7502	16.5648	20.3552	0.0055	0.0033	8.072	0.0275
muscovite_71	94	42.1783	0.8606	0.4064	0.532	16.8688	19.7758	0.0001	0.0199	8.1792	0.0001

muscovite_72	95	42.0321	1.2651	0.4992	0.5047	16.9035	19.4626	0.0073	0.005	8.0746	0.0001
muscovite_73	96	42.4186	1.0166	0.4628	0.3144	17.484	19.7434	0.0001	0.0001	7.9731	0.0001
muscovite_74	97	42.2718	0.7842	0.3356	0.5762	16.932	19.8235	0.0001	0.0001	8.1242	0.0227
muscovite_75	98	41.9727	1.0205	0.4012	0.5398	16.8865	19.4745	0.0329	0.0017	8.103	0.0001
muscovite_76	99	43.2892	0.9896	0.4524	0.5296	17.5831	20.1326	0.0055	0.0066	8.195	0.0049
muscovite_77	100	43.2131	0.9159	0.3519	0.5126	17.6576	20.1893	0.0073	0.0001	7.9162	0.0162
muscovite_78	101	42.4765	0.6193	0.3539	0.6036	17.1313	19.899	0.0055	0.0066	8.36	0.0195
muscovite_79	102	42.0809	0.6623	0.4503	0.3726	17.6213	19.2626	0.0219	0.0001	8.2691	0.0001
muscovite_80	103	42.9201	0.6759	0.3818	0.5571	17.3476	20.0776	0.0018	0.0001	8.3395	0.0001
muscovite_81	104	42.9245	0.6864	0.3558	0.5199	17.7016	19.8461	0.022	0.0001	8.1834	0.0001
muscovite_82	105	42.6696	1.0092	0.4886	0.3312	17.7079	19.6652	0.0037	0.0001	8.0521	0.0001
muscovite_83	106	42.3996	1.0479	0.473	0.4646	17.4868	19.5067	0.011	0.005	8.0055	0.0001
muscovite_84	107	41.8505	0.9395	0.4531	0.3463	17.3491	19.2818	0.0001	0.0132	8.1053	0.0024
muscovite_85	108	42.992	0.7082	0.2827	0.6788	17.3244	20.1493	0.0001	0.0265	8.0907	0.0251
muscovite_86	109	42.4422	0.9562	0.3624	0.5442	17.0551	19.735	0.0001	0.0116	8.4717	0.017
muscovite_87	110	42.5616	0.8126	0.392	0.5331	17.4805	19.6631	0.0091	0.0001	8.3464	0.0001
muscovite_88	111	42.6643	0.9642	0.2757	0.7106	17.0234	19.9396	0.0091	0.0298	8.0949	0.0316

muscovite_89	112	42.6763	0.7844	0.2385	0.7945	16.4537	20.4594	0.0001	0.0083	7.9336	0.0146
muscovite_90	113	42.6362	1.0078	0.101	0.8038	16.9684	21.248	0.0002	0.0419	4.4779	0.0129
muscovite_91	114	42.1317	1.0535	0.3549	0.4708	16.9617	19.6671	0.0037	0.0066	8.1416	0.0365
muscovite_92	115	42.2675	1.1116	0.4382	0.4561	17.4273	19.441	0.0146	0.0116	7.9276	0.0186
muscovite_93	116	42.4	1.0329	0.4209	0.4055	17.4027	19.5715	0.011	0.0248	8.2497	0.0081
muscovite_94	117	42.051	0.8026	0.3595	0.5143	16.9804	19.66	0.0001	0.0265	8.2052	0.0001
muscovite_95	118	42.3434	0.9135	0.4228	0.3683	17.3992	19.7652	0.0073	0.0298	7.8692	0.0001
muscovite_96	119	42.2661	1.2393	0.1583	0.4043	17.7075	20.5115	0.0391	0.0001	4.5835	0.0178
muscovite_97	120	41.7973	0.8419	0.3904	0.4002	17.0338	19.3161	0.0274	0.0182	8.3691	0.0001
muscovite_98	121	41.4599	0.87	0.3866	0.5107	16.9135	19.1743	0.0001	0.0165	8.0765	0.0057
muscovite_99	122	41.5011	1.1044	0.4439	0.4153	16.9273	19.2286	0.0128	0.0001	7.9861	0.0057
muscovite_100	123	42.7683	0.7917	0.2849	0.6869	16.8432	20.3092	0.0001	0.0232	8.1176	0.0001

Label	W%(Ti)	W%(Cr)	W%(Mn)	W%(Fe)	W%(Mo)	W%(W)	Ox%(O)	Ox%(F)	Ox%(Na)	Ox%(Mg)	Ox%(Al)
muscovite_1	0.1428	0.0001	0.027	1.4973	0.07	0.0002	0	0.8902	0.3381	1.4376	29.3874
muscovite_2	0.1734	0.0001	0.0432	1.1575	0.0001	0.1486	0	2.0542	0.3182	1.436	30.8895
muscovite_3	0.2021	0.0001	0.0351	1.1261	0.0001	0.0458	0	1.5172	0.5498	0.9742	32.5294

muscovite_4	0.1319	0.0001	0.0755	1.2049	0.027	0.0002	0	1.6721	0.5665	0.8878	32.5198
muscovite_5	0.1091	0.0001	0.0108	1.0415	0.0001	0.0686	0	1.2542	0.6196	0.8323	33.4569
muscovite_6	0.1742	0.0271	0.0001	1.2323	0.0001	0.0002	0	1.4171	0.5941	0.9703	32.4673
muscovite_7	0.1717	0.0001	0.0378	1.0669	0.0216	0.0229	0	1.1276	0.4377	0.9352	33.4759
muscovite_8	0.1202	0.0001	0.0324	1.1323	0.0001	0.0002	0	1.3094	0.5485	0.8009	33.1836
muscovite_9	0.0778	0.0049	0.0513	1.489	0.0648	0.0002	0	1.6655	0.5791	0.8898	32.6709
muscovite_10	0.0693	0.0111	0.0323	2.0729	0.0001	0.0002	0	1.2808	0.3143	1.4224	28.9365
muscovite_11	0.1175	0.0001	0.0566	1.2312	0.0001	0.1372	0	1.4616	0.6359	0.8509	33.1365
muscovite_12	0.21	0.0037	0.0323	2.2493	0.0162	0.3539	0	1.31	0.1854	2.8035	27.6782
muscovite_13	0.138	0.0049	0.054	1.1449	0.0001	0.0002	0	1.3132	0.5282	0.9646	33.2137
muscovite_14	0.1338	0.0001	0.0486	1.053	0.0594	0.0229	0	1.3443	0.529	0.9009	32.1746
muscovite_15	0.1218	0.0062	0.0378	1.2056	0.0001	0.0002	0	1.558	0.5694	0.9827	32.5541
muscovite_16	0.0659	0.0012	0.0405	1.5633	0.0001	0.0002	0	2.0344	0.6602	1.0877	32.0568
muscovite_17	0.1209	0.0001	0.0108	1.2342	0.0001	0.0915	0	1.4969	0.5288	0.7723	32.9666
muscovite_18	0.1329	0.0086	0.027	0.9354	0.0324	0.3202	0	0.8757	0.5497	0.8148	33.6561
muscovite_19	0.1041	0.0001	0.0001	1.0355	0.0703	0.0002	0	1.3625	0.5064	0.7958	33.9423
muscovite_1	0.1594	0.0111	0.0511	1.5418	0.0269	0.1483	0	1.4493	0.4448	1.2439	30.8188

muscovite_2	0.115	0.0001	0.0783	1.3433	0.0001	0.0458	0	2.2834	0.2551	1.4969	30.5208
muscovite_3	0.1819	0.0025	0.0378	1.0896	0.027	0.0002	0	1.5294	0.5173	1.0134	32.8825
muscovite_4	0.1116	0.0049	0.0378	1.314	0.0001	0.0002	0	1.7583	0.5367	0.9421	32.6518
muscovite_5	0.0787	0.0123	0.0324	1.0724	0.0001	0.0002	0	1.3107	0.6441	0.7917	33.1879
muscovite_6	0.1453	0.0197	0.0486	1.5013	0.0108	0.0002	0	1.7071	0.6071	1.052	32.7183
muscovite_7	0.1497	0.0001	0.1	1.083	0.0054	0.0002	0	1.253	0.38	0.9851	33.4057
muscovite_8	0.1022	0.0001	0.0431	1.1325	0.0487	0.1715	0	1.3785	0.5134	0.8048	33.5145
muscovite_9	0.0574	0.0001	0.0081	1.4966	0.0108	0.0229	0	1.7943	0.5197	0.861	33.1566
muscovite_10	0.0784	0.0001	0.0592	2.1893	0.0054	0.1371	0	0.9553	0.2832	1.3388	29.1663
muscovite_11	0.1005	0.0001	0.0001	1.3576	0.0002	0.206	0	1.7938	0.441	0.8015	33.9232
muscovite_12	0.123	0.0122	0.0835	2.6409	0.0163	0.0801	0	1.5063	0.0085	3.3236	25.9695
muscovite_13	0.1674	0.0049	0.0405	1.1273	0.0002	0.0688	0	1.4266	0.3695	1.0525	33.5731
muscovite_14	0.1395	0.0098	0.0001	1.1446	0.0486	0.2515	0	1.4087	0.5358	0.9384	32.841
muscovite_15	0.1344	0.0037	0.0351	1.2712	0.0001	0.0002	0	1.6645	0.5881	0.9523	32.9647
muscovite_16	0.1064	0.0001	0.0297	1.6886	0.0811	0.0002	0	2.0662	0.4733	1.1405	31.9839
muscovite_17	0.098	0.0001	0.0135	1.2363	0.0162	0.2173	0	1.4581	0.3641	0.9079	33.1578
muscovite_18	0.1345	0.0001	0.0001	0.981	0.0001	0.0573	0	1.0506	0.3984	0.8432	33.2867

muscovite_19	0.0905	0.0086	0.0216	1.073	0.0109	0.0002	0	1.311	0.3789	0.8233	33.8141
muscovite_21	0.1141	0.0012	0.0459	1.6151	0.0001	0.0002	0	2.2955	0.4313	1.1879	31.9491
muscovite_22	0.1107	0.0062	0.0782	1.2313	0.0324	0.0002	0	1.6028	0.6177	0.8633	33.028
muscovite_23	0.1606	0.0025	0.0297	1.4868	0.0001	0.0229	0	1.7078	0.457	1.2392	31.6715
muscovite_24	0.082	0.0098	0.0486	1.296	0.0001	0.1258	0	1.5119	0.6439	0.7122	33.1137
muscovite_25	0.1732	0.0135	0.1321	1.2115	0.0001	0.0002	0	1.1693	0.4449	1.1045	31.8155
muscovite_26	0.1977	0.0049	0.0512	1.2339	0.0001	0.1029	0	1.8238	0.6057	0.9417	32.5416
muscovite_27	0.1699	0.0074	0.0324	1.1946	0.0001	0.0002	0	1.3291	0.521	0.9468	32.6227
muscovite_28	0.1243	0.0001	0.0081	1.2372	0.0001	0.0002	0	1.8375	0.6244	0.7829	33.1728
muscovite_29	0.2335	0.0185	0.0189	1.0868	0.0001	0.0002	0	1.2074	0.5395	0.904	33.566
muscovite_30	0.0965	0.0062	0.0297	0.9584	0.0648	0.0002	0	1.1613	0.5509	0.7873	33.6935
muscovite_31	0.1039	0.0001	0.0593	1.2001	0.0378	0.3311	0	1.0949	0.4273	0.8114	32.7291
muscovite_32	0.1259	0.0001	0.0647	1.028	0.054	0.297	0	1.2294	0.6015	0.8404	32.4778
muscovite_33	0.0905	0.0172	0.0647	1.0637	0.0001	0.0002	0	1.2605	0.4974	0.7701	32.453
muscovite_34	0.2087	0.0049	0.0806	2.7952	0.0107	0.0002	0	1.3528	0.1691	2.7499	26.5216
muscovite_35	0.1699	0.0222	0.0081	1.2712	0.0001	0.0002	0	0.7215	0.4394	1.3341	31.4905
muscovite_36	0.1327	0.0062	0.0405	1.2908	0.0001	0.0686	0	0.8769	0.4673	0.8775	32.7778

muscovite_37	0.0821	0.0001	0.0378	1.1656	0.0001	0.0002	0	1.1109	0.5282	0.9753	32.1583
muscovite_38	0.1867	0.0049	0.0162	1.2906	0.0001	0.0229	0	1.5774	0.5232	0.8841	32.2411
muscovite_39	0.1057	0.0001	0.027	1.2291	0.0001	0.0002	0	0.9216	0.498	0.9111	32.0026
muscovite_40	0.1209	0.0037	0.0027	1.1592	0.0647	0.1028	0	1.0881	0.4819	0.9636	32.159
muscovite_41	0.136	0.0025	0.0001	1.3078	0.0001	0.0002	0	1.8272	0.6251	0.8357	33.0924
muscovite_42	0.0684	0.0001	0.0512	1.1702	0.0001	0.2968	0	1.4992	0.7201	0.7565	32.5591
muscovite_43	0.1116	0.0012	0.0405	1.187	0.0216	0.0002	0	1.5607	0.5558	0.8806	32.392
muscovite_44	0.1428	0.0001	0.0485	1.155	0.0001	0.0002	0	1.8964	0.5437	0.8887	32.1442
muscovite_45	0.1012	0.0001	0.0161	1.7091	0.0484	0.2396	0	2.1892	0.6301	1.1328	31.297
muscovite_46	0.1122	0.0001	0.0323	1.7559	0.0001	0.0002	0	1.9283	0.5444	1.1085	31.6344
muscovite_47	0.0812	0.0001	0.0324	1.1233	0.0378	0.0002	0	1.0507	0.4853	0.7846	32.6914
muscovite_48	0.0939	0.0001	0.0755	1.0441	0.0486	0.0002	0	1.0718	0.479	0.8367	32.7491
muscovite_49	0.1352	0.016	0.0485	1.1341	0.0001	0.1827	0	1.4374	0.5995	0.817	31.7373
muscovite_50	0.2602	0.0001	0.0081	1.3341	0.0323	0.1142	0	1.5991	0.4661	1.551	30.0935
muscovite_51	0.0718	0.0001	0.0377	1.1247	0.0647	0.1143	0	1.0493	0.6251	0.7144	32.4703
muscovite_52	0.0346	0.0049	0.0081	1.732	0.0001	0.137	0	1.7501	0.6349	0.6838	31.8508
muscovite_53	0.2189	0.0037	0.089	1.2584	0.0001	0.0002	0	1.3348	0.4095	1.4038	30.996

muscovite_54	0.049	0.0025	0.0566	1.2293	0.0001	0.0002	0	1.6148	0.6754	0.5373	32.9898
muscovite_55	0.1504	0.0049	0.0404	1.4111	0.0001	0.0457	0	1.5595	0.2276	1.7982	29.8881
muscovite_56	0.1014	0.0025	0.0269	1.1489	0.0323	0.1599	0	1.1873	0.4585	0.8779	32.3547
muscovite_57	0.0735	0.0001	0.0001	1.2406	0.0754	0.0571	0	1.0989	0.6007	0.7677	32.6073
muscovite_58	0.2053	0.0001	0.0243	1.2754	0.0001	0.16	0	1.7287	0.5408	1.0047	31.9584
muscovite_59	0.0599	0.0074	0.0189	1.5734	0.0162	0.0571	0	1.7497	0.6583	0.755	32.5751
muscovite_60	0.1258	0.0001	0.0189	1.5189	0.0215	0.0002	0	1.5197	0.3271	1.317	30.8918
muscovite_61	0.0642	0.0025	0.0216	1.3942	0.0001	0.0002	0	1.6212	0.5846	0.7298	32.0403
muscovite_62	0.0456	0.0062	0.0189	1.1143	0.0216	0.3084	0	0.8835	0.4998	0.7411	33.2209
muscovite_63	0.055	0.0086	0.0513	1.0417	0.0378	0.0002	0	1.1766	0.5891	0.7201	33.1654
muscovite_64	0.115	0.0001	0.0243	1.0563	0.0269	0.0002	0	1.0301	0.4647	0.9761	32.546
muscovite_65	0.0042	0.0025	0.097	1.4306	0.0001	0.1486	0	1.4966	0.5316	0.7485	33.3251
muscovite_66	0.0692	0.0001	0.0135	1.6438	0.0162	0.0002	0	1.8441	0.6118	0.6809	31.3862
muscovite_67	0.0508	0.0001	0.0297	1.1008	0.0647	0.0686	0	0.9695	0.4781	0.7785	33.1983
muscovite_68	0.1268	0.0062	0.0594	1.2593	0.0216	0.0002	0	1.227	0.4735	0.9582	32.2719
muscovite_69	0.0719	0.0086	0.0081	1.1999	0.0431	0.0002	0	1.3476	0.6583	0.7354	32.6736
muscovite_70	0.0735	0.0001	0.0512	1.5394	0.0001	0.0343	0	1.5464	0.312	1.2438	31.298

muscovite_71	0.0812	0.0001	0.0027	1.3881	0.0001	0.0002	0	1.223	0.5478	0.882	31.8723
muscovite_72	0.0819	0.0001	0.0485	1.327	0.0001	0.1371	0	1.7978	0.6729	0.8369	31.9379
muscovite_73	0.0364	0.0012	0.0189	0.9855	0.0001	0.0343	0	1.4446	0.6238	0.5212	33.0347
muscovite_74	0.1403	0.0012	0.0593	1.2605	0.0377	0.0457	0	1.1143	0.4523	0.9554	31.9917
muscovite_75	0.1241	0.0001	0.0404	1.2274	0.0431	0.1941	0	1.4503	0.5408	0.895	31.9058
muscovite_76	0.0575	0.0001	0.0162	1.3744	0.0001	0.0002	0	1.4063	0.6098	0.878	33.222
muscovite_77	0.0879	0.0001	0.0324	1.1474	0.0001	0.0915	0	1.3016	0.4743	0.8499	33.3627
muscovite_78	0.0795	0.0123	0.0001	1.0517	0.0001	0.0002	0	0.8801	0.4771	1.0008	32.3684
muscovite_79	0.0381	0.0001	0.0459	1.1429	0.0593	0.0002	0	0.9412	0.6069	0.6179	33.2941
muscovite_80	0.0812	0.0001	0.0378	1.1995	0.027	0.0686	0	0.9605	0.5147	0.9238	32.7771
muscovite_81	0.093	0.0001	0.0593	1.0138	0.0001	0.32	0	0.9755	0.4796	0.862	33.4459
muscovite_82	0.0101	0.0001	0.0135	1.1641	0.0054	0.2286	0	1.4341	0.6586	0.5492	33.4577
muscovite_83	0.0591	0.0001	0.0001	1.3422	0.0001	0.0229	0	1.4892	0.6376	0.7703	33.0401
muscovite_84	0.0304	0.0001	0.0054	1.1649	0.0001	0.0002	0	1.3351	0.6108	0.5741	32.7798
muscovite_85	0.2191	0.0025	0.0216	1.1853	0.0001	0.0002	0	1.0064	0.3811	1.1255	32.7332
muscovite_86	0.159	0.0025	0.0054	1.118	0.0485	0.0572	0	1.3588	0.4886	0.9024	32.2243
muscovite_87	0.1015	0.0001	0.0081	0.9921	0.0916	0.0114	0	1.1547	0.5285	0.8839	33.0282

muscovite_88	0.1589	0.0001	0.0243	1.3052	0.0001	0.1257	0	1.3702	0.3716	1.1782	32.1644
muscovite_89	0.1597	0.0001	0.0485	1.3888	0.0001	0.1943	0	1.1147	0.3215	1.3173	31.088
muscovite_90	0.1528	0.0001	0.0756	1.4048	0.0002	0.0002	0	1.4321	0.1361	1.3327	32.0605
muscovite_91	0.0921	0.0001	0.0647	1.2043	0.0001	0.0002	0	1.4971	0.4785	0.7807	32.0478
muscovite_92	0.0963	0.0001	0.0458	1.2584	0.0162	0.0002	0	1.5796	0.5907	0.7563	32.9277
muscovite_93	0.0448	0.0099	0.0001	1.1602	0.0539	0.0229	0	1.4678	0.5674	0.6724	32.8812
muscovite_94	0.0254	0.0049	0.0001	1.2858	0.0001	0.0002	0	1.1406	0.4846	0.8527	32.0832
muscovite_95	0.0677	0.0001	0.0001	1.0666	0.0001	0.0002	0	1.2981	0.57	0.6107	32.8745
muscovite_96	0.0651	0.0001	0.0189	1.0862	0.0109	0.0803	0	1.7611	0.2134	0.6703	33.457
muscovite_97	0.0583	0.0037	0.0539	1.2677	0.0001	0.0457	0	1.1963	0.5262	0.6636	32.1841
muscovite_98	0.0642	0.0185	0.0647	1.0898	0.0108	0.1713	0	1.2363	0.5212	0.8467	31.9568
muscovite_99	0.0693	0.0012	0.0189	1.1108	0.0001	0.0002	0	1.5694	0.5984	0.6886	31.9828
muscovite_100	0.2309	0.0001	0.0809	1.0245	0.0324	0.0002	0	1.125	0.384	1.1389	31.824

Label	Ox%(Si)	Ox%(P)	Ox%(Cl)	Ox%(K)	Ox%(Ca)	Ox%(Ti)	Ox%(Cr)	Ox%(Mn)	Ox%(Fe)	Ox%(Mo)	Ox%(W)
muscovite_1	43.2421	0.0084	0.0061	11.8136	0.1248	0.2144	0.0002	0.0348	1.9263	0.0816	0.0002

muscovite_2	44.0714	0.0042	0.0002	11.6904	0.0216	0.2602	0.0002	0.0557	1.4891	0.0002	0.1874
muscovite_3	44.0704	0.0168	0.0002	11.3466	0.0193	0.3034	0.0002	0.0453	1.4487	0.0002	0.0577
muscovite_4	42.9808	0.0503	0.0002	11.4668	0.0002	0.198	0.0002	0.0975	1.55	0.0315	0.0002
muscovite_5	43.3926	0.0504	0.0244	11.4938	0.0002	0.1637	0.0002	0.0139	1.3399	0.0002	0.0865
muscovite_6	43.5726	0.0003	0.0002	11.4438	0.0002	0.2615	0.0479	0.0002	1.5853	0.0002	0.0002
muscovite_7	43.7027	0.0252	0.0325	11.3842	0.0045	0.2578	0.0002	0.0488	1.3725	0.0252	0.0289
muscovite_8	43.7312	0.0003	0.0142	11.4444	0.0002	0.1805	0.0002	0.0419	1.4567	0.0002	0.0002
muscovite_9	43.5244	0.0084	0.0122	11.2078	0.0002	0.1167	0.0087	0.0662	1.9156	0.0756	0.0002
muscovite_10	44.5154	0.0544	0.0324	11.9468	0.0726	0.104	0.0196	0.0418	2.6668	0.0002	0.0002
muscovite_11	42.9204	0.0003	0.0002	11.3564	0.0002	0.1763	0.0002	0.0731	1.5839	0.0002	0.173
muscovite_12	46.9718	0.0168	0.0002	11.5775	0.0002	0.3152	0.0065	0.0417	2.8937	0.0189	0.4463
muscovite_13	44.1115	0.0003	0.0305	10.8588	0.0002	0.2071	0.0087	0.0698	1.4729	0.0002	0.0002
muscovite_14	43.1217	0.042	0.0061	11.4725	0.0261	0.2008	0.0002	0.0628	1.3546	0.0693	0.0289
muscovite_15	43.363	0.0503	0.0081	11.6199	0.0002	0.1829	0.0109	0.0488	1.551	0.0002	0.0002
muscovite_16	43.8775	0.0335	0.0203	11.3766	0.0181	0.099	0.0022	0.0523	2.0111	0.0002	0.0002
muscovite_17	43.5888	0.0003	0.0223	11.4628	0.0068	0.1815	0.0002	0.0139	1.5877	0.0002	0.1154
muscovite_18	43.2	0.0294	0.0002	11.836	0.0002	0.1995	0.0153	0.0348	1.2034	0.0378	0.4038

muscovite_19	43.6145	0.1009	0.0264	11.0665	0.0273	0.1563	0.0002	0.0002	1.3322	0.082	0.0002
muscovite_1	42.5259	0.0418	0.0425	11.7158	0.0578	0.2393	0.0196	0.066	1.9835	0.0314	0.187
muscovite_2	44.8309	0.0003	0.0002	11.2325	0.0002	0.1726	0.0002	0.101	1.7282	0.0002	0.0577
muscovite_3	44.2766	0.0841	0.0002	10.7019	0.0002	0.273	0.0044	0.0488	1.4017	0.0316	0.0002
muscovite_4	43.1039	0.0003	0.0002	10.5656	0.0002	0.1675	0.0087	0.0488	1.6904	0.0002	0.0002
muscovite_5	43.6596	0.0295	0.002	10.5288	0.0068	0.1181	0.0218	0.0418	1.3797	0.0002	0.0002
muscovite_6	43.5487	0.0379	0.0041	10.2036	0.0002	0.218	0.0348	0.0627	1.9314	0.0126	0.0002
muscovite_7	43.806	0.0003	0.0265	9.6191	0.0011	0.2248	0.0002	0.1291	1.3933	0.0063	0.0002
muscovite_8	43.5085	0.0337	0.0002	10.046	0.0002	0.1534	0.0002	0.0557	1.4569	0.0569	0.2163
muscovite_9	43.8745	0.0295	0.0102	10.0575	0.0002	0.0862	0.0002	0.0105	1.9253	0.0126	0.0289
muscovite_10	43.8712	0.0252	0.0142	10.1543	0.077	0.1177	0.0002	0.0765	2.8165	0.0063	0.1729
muscovite_11	43.5565	0.0253	0.0224	9.1618	0.0002	0.1508	0.0002	0.0002	1.7465	0.0002	0.2598
muscovite_12	49.1365	0.0003	0.0408	8.6244	0.0002	0.1846	0.0217	0.1078	3.3975	0.019	0.101
muscovite_13	45.0157	0.0254	0.0532	8.3849	0.0002	0.2512	0.0087	0.0523	1.4503	0.0002	0.0867
muscovite_14	43.8599	0.0003	0.0142	11.0591	0.0002	0.2093	0.0174	0.0002	1.4724	0.0568	0.3171
muscovite_15	43.5871	0.0336	0.0002	11.0124	0.0002	0.2017	0.0065	0.0453	1.6354	0.0002	0.0002
muscovite_16	43.9868	0.0003	0.0002	9.9724	0.0283	0.1597	0.0002	0.0383	2.1724	0.0947	0.0002

muscovite_17	43.8132	0.0463	0.0142	10.4039	0.0034	0.1471	0.0002	0.0174	1.5905	0.019	0.274
muscovite_18	43.4526	0.0084	0.0367	10.1626	0.0002	0.2019	0.0002	0.0002	1.2621	0.0002	0.0722
muscovite_19	44.3086	0.0508	0.0102	9.306	0.0578	0.1358	0.0153	0.0279	1.3804	0.0127	0.0002
muscovite_21	43.1089	0.0003	0.0101	10.8417	0.0215	0.1712	0.0022	0.0592	2.0778	0.0002	0.0002
muscovite_22	42.7853	0.0003	0.0162	11.2399	0.0002	0.1661	0.0109	0.101	1.5841	0.0378	0.0002
muscovite_23	43.5723	0.0003	0.0223	11.0538	0.0284	0.2411	0.0044	0.0383	1.9128	0.0002	0.0289
muscovite_24	42.2259	0.084	0.0122	11.0408	0.0002	0.1231	0.0174	0.0627	1.6672	0.0002	0.1587
muscovite_25	42.5822	0.0293	0.0203	11.5401	0.0002	0.26	0.024	0.1706	1.5586	0.0002	0.0002
muscovite_26	42.8865	0.0126	0.0304	11.2518	0.0002	0.2968	0.0087	0.0662	1.5873	0.0002	0.1298
muscovite_27	42.8634	0.0003	0.0061	11.4178	0.0002	0.255	0.0131	0.0418	1.5368	0.0002	0.0002
muscovite_28	42.9719	0.0252	0.0002	11.2423	0.0002	0.1866	0.0002	0.0105	1.5916	0.0002	0.0002
muscovite_29	43.87	0.0003	0.0002	11.2959	0.0002	0.3504	0.0327	0.0244	1.3982	0.0002	0.0002
muscovite_30	43.469	0.0252	0.0122	11.5513	0.0079	0.1448	0.0109	0.0383	1.2329	0.0756	0.0002
muscovite_31	42.5982	0.0503	0.002	11.6991	0.0002	0.156	0.0002	0.0765	1.5439	0.0441	0.4176
muscovite_32	41.8527	0.0003	0.0041	11.286	0.0002	0.189	0.0002	0.0835	1.3225	0.063	0.3745
muscovite_33	42.0057	0.0003	0.0162	11.7032	0.0002	0.1358	0.0305	0.0836	1.3685	0.0002	0.0002
muscovite_34	44.4115	0.0003	0.0002	11.3995	0.0002	0.3133	0.0087	0.1041	3.596	0.0125	0.0002

muscovite_35	43.1883	0.0003	0.0081	11.3617	0.0216	0.255	0.0392	0.0104	1.6354	0.0002	0.0002
muscovite_36	42.5101	0.0252	0.0203	11.2981	0.0023	0.1992	0.0109	0.0522	1.6605	0.0002	0.0865
muscovite_37	42.9744	0.0503	0.0002	11.7294	0.0002	0.1232	0.0002	0.0488	1.4995	0.0002	0.0002
muscovite_38	42.1134	0.0126	0.0243	10.9402	0.0295	0.2802	0.0087	0.0209	1.6603	0.0002	0.0288
muscovite_39	41.9853	0.0003	0.0002	11.2525	0.0002	0.1586	0.0002	0.0348	1.5812	0.0002	0.0002
muscovite_40	41.7871	0.0168	0.0223	11.3489	0.017	0.1814	0.0065	0.0035	1.4913	0.0755	0.1297
muscovite_41	42.3384	0.0461	0.0002	11.4019	0.0002	0.2042	0.0044	0.0002	1.6825	0.0002	0.0002
muscovite_42	41.8399	0.0209	0.0365	11.5517	0.0045	0.1027	0.0002	0.0661	1.5055	0.0002	0.3743
muscovite_43	41.984	0.0545	0.0284	11.3236	0.0295	0.1675	0.0022	0.0522	1.5271	0.0252	0.0002
muscovite_44	42.3221	0.0003	0.0122	11.4774	0.0002	0.2144	0.0002	0.0627	1.4859	0.0002	0.0002
muscovite_45	42.3855	0.0003	0.0002	11.3172	0.0002	0.1519	0.0002	0.0208	2.1987	0.0565	0.3022
muscovite_46	42.7799	0.0003	0.0101	11.1958	0.0002	0.1684	0.0002	0.0417	2.2589	0.0002	0.0002
muscovite_47	42.4796	0.0003	0.0244	10.9045	0.0238	0.1218	0.0002	0.0418	1.445	0.0441	0.0002
muscovite_48	42.3171	0.0042	0.0162	11.1351	0.0284	0.1409	0.0002	0.0975	1.3433	0.0567	0.0002
muscovite_49	41.9319	0.0586	0.0041	11.6224	0.0125	0.2029	0.0283	0.0626	1.4589	0.0002	0.2304
muscovite_50	43.2457	0.0003	0.0263	11.6578	0.0002	0.3906	0.0002	0.0104	1.7163	0.0377	0.144
muscovite_51	42.1031	0.0003	0.002	11.2718	0.0002	0.1078	0.0002	0.0487	1.4469	0.0755	0.1441

muscovite_52	41.8307	0.0003	0.0142	11.7535	0.0002	0.0519	0.0087	0.0104	2.2282	0.0002	0.1727
muscovite_53	43.0267	0.0003	0.0223	11.7788	0.0002	0.3285	0.0065	0.1149	1.6189	0.0002	0.0002
muscovite_54	41.5435	0.0084	0.0263	11.6231	0.0002	0.0736	0.0044	0.0731	1.5815	0.0002	0.0002
muscovite_55	43.3295	0.0042	0.004	11.7795	0.0329	0.2258	0.0087	0.0522	1.8154	0.0002	0.0576
muscovite_56	41.8444	0.0003	0.0002	11.6929	0.0002	0.1522	0.0044	0.0348	1.4781	0.0377	0.2016
muscovite_57	42.075	0.0628	0.0002	11.7256	0.0002	0.1104	0.0002	0.0002	1.596	0.088	0.072
muscovite_58	42.0843	0.0003	0.0061	11.1121	0.0002	0.3082	0.0002	0.0313	1.6407	0.0002	0.2018
muscovite_59	42.9368	0.0003	0.0002	11.176	0.0113	0.09	0.013	0.0244	2.0241	0.0189	0.072
muscovite_60	42.9544	0.0251	0.0162	11.5532	0.0002	0.1888	0.0002	0.0243	1.9541	0.0251	0.0002
muscovite_61	41.964	0.0084	0.0324	11.0385	0.0002	0.0964	0.0044	0.0278	1.7936	0.0002	0.0002
muscovite_62	42.2953	0.0003	0.0002	11.691	0.0002	0.0685	0.0109	0.0244	1.4335	0.0252	0.3889
muscovite_63	42.988	0.0003	0.0081	11.6132	0.0136	0.0825	0.0153	0.0662	1.3401	0.0441	0.0002
muscovite_64	42.8556	0.0003	0.0263	12.1627	0.0182	0.1727	0.0002	0.0313	1.3589	0.0314	0.0002
muscovite_65	43.4863	0.0126	0.0102	11.2507	0.0329	0.0063	0.0044	0.1253	1.8405	0.0002	0.1874
muscovite_66	41.8671	0.0168	0.0264	10.5217	0.0011	0.1039	0.0002	0.0174	2.1148	0.0189	0.0002
muscovite_67	42.7868	0.0545	0.0101	11.7555	0.0002	0.0762	0.0002	0.0383	1.4162	0.0755	0.0865
muscovite_68	42.645	0.0336	0.0162	11.1054	0.0533	0.1903	0.0109	0.0766	1.62	0.0252	0.0002

muscovite_69	42.5979	0.0377	0.0002	11.6101	0.0261	0.1079	0.0153	0.0105	1.5437	0.0503	0.0002
muscovite_70	43.5456	0.0126	0.0041	11.3747	0.0385	0.1103	0.0002	0.0661	1.9804	0.0002	0.0432
muscovite_71	42.3062	0.0003	0.0243	11.5258	0.0002	0.1219	0.0002	0.0035	1.7857	0.0002	0.0002
muscovite_72	41.636	0.0168	0.0061	11.3784	0.0002	0.123	0.0002	0.0626	1.7072	0.0002	0.1729
muscovite_73	42.2368	0.0003	0.0002	11.2354	0.0002	0.0546	0.0022	0.0244	1.2678	0.0002	0.0433
muscovite_74	42.4081	0.0003	0.0002	11.4483	0.0318	0.2105	0.0022	0.0766	1.6216	0.044	0.0576
muscovite_75	41.6614	0.0754	0.002	11.4184	0.0002	0.1863	0.0002	0.0522	1.5791	0.0503	0.2448
muscovite_76	43.0694	0.0126	0.0081	11.5481	0.0068	0.0862	0.0002	0.0209	1.7682	0.0002	0.0002
muscovite_77	43.1907	0.0168	0.0002	11.1552	0.0227	0.1319	0.0002	0.0418	1.4761	0.0002	0.1153
muscovite_78	42.5696	0.0126	0.0081	11.7806	0.0273	0.1194	0.0218	0.0002	1.3529	0.0002	0.0002
muscovite_79	41.2082	0.0503	0.0002	11.6525	0.0002	0.0571	0.0002	0.0592	1.4703	0.0692	0.0002
muscovite_80	42.9517	0.0042	0.0002	11.7517	0.0002	0.1219	0.0002	0.0488	1.5431	0.0315	0.0865
muscovite_81	42.4565	0.0504	0.0002	11.5318	0.0002	0.1396	0.0002	0.0766	1.3043	0.0002	0.4036
muscovite_82	42.0695	0.0084	0.0002	11.3467	0.0002	0.0152	0.0002	0.0174	1.4976	0.0063	0.2882
muscovite_83	41.7303	0.0251	0.0061	11.281	0.0002	0.0888	0.0002	0.0002	1.7267	0.0002	0.0288
muscovite_84	41.2492	0.0003	0.0162	11.4217	0.0034	0.0457	0.0002	0.007	1.4986	0.0002	0.0002
muscovite_85	43.105	0.0003	0.0325	11.4011	0.0352	0.3288	0.0044	0.0279	1.5249	0.0002	0.0002

muscovite_86	42.2187	0.0003	0.0142	11.9379	0.0238	0.2387	0.0044	0.007	1.4383	0.0566	0.0721
muscovite_87	42.065	0.0209	0.0002	11.7614	0.0002	0.1523	0.0002	0.0104	1.2763	0.1069	0.0144
muscovite_88	42.6565	0.021	0.0365	11.407	0.0442	0.2385	0.0002	0.0313	1.6791	0.0002	0.1586
muscovite_89	43.7684	0.0003	0.0102	11.1797	0.0204	0.2397	0.0002	0.0627	1.7866	0.0002	0.245
muscovite_90	45.4556	0.0003	0.0514	6.31	0.0181	0.2293	0.0002	0.0976	1.8073	0.0002	0.0002
muscovite_91	42.0736	0.0084	0.0081	11.4728	0.051	0.1383	0.0002	0.0836	1.5493	0.0002	0.0002
muscovite_92	41.5899	0.0335	0.0142	11.1713	0.0261	0.1446	0.0002	0.0592	1.6189	0.0189	0.0002
muscovite_93	41.8689	0.0251	0.0304	11.6252	0.0114	0.0673	0.0174	0.0002	1.4926	0.0629	0.0288
muscovite_94	42.0583	0.0003	0.0324	11.5624	0.0002	0.0381	0.0087	0.0002	1.6541	0.0002	0.0002
muscovite_95	42.2835	0.0168	0.0365	11.089	0.0002	0.1015	0.0002	0.0002	1.3722	0.0002	0.0002
muscovite_96	43.88	0.0896	0.0002	6.4588	0.0249	0.0977	0.0002	0.0244	1.3973	0.0128	0.1013
muscovite_97	41.3227	0.0628	0.0223	11.7934	0.0002	0.0875	0.0065	0.0696	1.6309	0.0002	0.0576
muscovite_98	41.0193	0.0003	0.0203	11.381	0.0079	0.0964	0.0327	0.0835	1.402	0.0126	0.2161
muscovite_99	41.1355	0.0293	0.0002	11.2538	0.0079	0.1041	0.0022	0.0244	1.429	0.0002	0.0002
muscovite_100	43.4471	0.0003	0.0284	11.439	0.0002	0.3465	0.0002	0.1045	1.3179	0.0378	0.0002

Biotite EMPA data

Label	No	W%(O)	W%(F)	W%(Na)	W%(Mg)	W%(Al)	W%(Si)	W%(P)	W%(Cl)	W%(K)	W%(Ca)
biotite_s23_1	226	32.0332	0.3886	0.0012	3.9665	9.7376	11.0082	0.0035	0.0255	0.0246	0.0157
biotite_s23_2	227	32.1765	0.334	0.0002	4.784	9.9505	11.0659	0.0053	0.0001	0.0208	0.012
biotite_s23_3	228	32.0008	0.3081	0.0147	3.8764	10.0689	11.0021	0.0194	0.0001	0.03	0.012
biotite_s23_4	229	35.899	0.2618	0.0758	3.2961	9.4951	15.6665	0.0961	0.0387	3.0421	0.0799
biotite_s23_5	230	45.4155	0.0005	0.1649	0.0001	9.1234	27.9108	0.0018	0.0001	13.1598	0.0082
biotite_s23_6	231	46.6304	0.1145	0.2261	0.0102	9.49	28.536	0.0001	0.0001	13.0316	0.0001
biotite_s23_7	232	31.6327	0.4017	0.0262	3.442	9.7878	10.8401	0.0318	0.0001	0.0439	0.0001
biotite_s23_8	233	44.7343	0.0784	0.1499	0.4693	9.4896	26.2972	0.0109	0.023	11.1114	0.026
biotite_s23_9	234	31.4346	0.3352	0.0565	3.5776	9.3446	10.8774	0.0775	0.0096	0.1199	0.0538
biotite_s23_10	235	30.9173	0.311	0.0499	3.4701	9.4956	10.4471	0.051	0.008	0.0192	0.0582
biotite_s23_11	236	31.5365	0.2827	0.0316	3.9247	9.7422	10.6517	0.0229	0.0001	0.0154	0.0322
biotite_s23_12	237	32.1484	0.2534	0.0194	4.3422	9.8189	11.114	0.0567	0.0368	0.0378	0.0698
biotite_s23_13	238	45.6388	0.0389	0.1964	0.0006	9.0736	27.928	0.0036	0.0115	13.4117	0.0001
biotite_s23_14	239	32.5538	0.3511	0.0002	4.8947	9.9422	11.1414	0.062	0.0384	0.0224	0.0286
biotite_s23_15	240	31.6576	0.2741	0.0121	3.477	10.1072	10.7181	0.0759	0.0016	0.0392	0.0584
biotite_s23_16	241	32.1057	0.2737	0.0247	3.5428	10.1736	10.8162	0.0847	0.0287	0.0277	0.0793

biotite_s23_17	242	31.7109	0.3414	0.0003	3.8243	9.6265	10.7631	0.0916	0.0064	0.0415	0.1002
biotite_s23_18	243	30.875	0.2245	0.016	4.4122	9.149	10.6009	0.046	0.0272	0.0293	0.0495
biotite_s23_19	244	31.9489	0.2566	0.0003	3.5408	9.5283	11.1625	0.0423	0.008	0.0246	0.0001
biotite_s23_20	245	4.2711	0.2133	0.0051	0.0813	0.2677	3.157	0.0206	0.1445	0.0001	0.064
biotite_s23_21	246	30.8516	0.3531	0.0003	3.623	9.2695	10.5619	0.0352	0.0573	0.0092	0.0515
biotite_s23_22	247	30.9309	0.3703	0.0093	3.7914	8.5634	11.5745	0.0566	0.0368	0.6399	0.0723
biotite_s23_23	248	29.78	0.3797	0.0208	3.3696	8.9008	10.086	0.1019	0.0223	0.0322	0.0671
biotite_s23_24	249	51.1347	0.0005	0.01	0.0071	0.022	44.6524	0.0235	0.0105	0.0001	0.0171
biotite_s23_25	250	51.3967	0.0999	0.0002	0.0089	0.02	44.9142	0.0002	0.0001	0.0008	0.018
biotite_s23_26	251	50.4916	0.057	0.0031	0.0113	0.0124	44.0825	0.002	0.0227	0.0084	0.0155
biotite_s23_27	252	31.2527	0.1912	0.0478	4.015	9.027	10.8999	0.0335	0.0191	0.0292	0.0314
biotite_s23_28	253	31.0298	0.3711	0.0003	3.9497	9.1147	10.7339	0.0229	0.0001	0.0001	0.0344
biotite_s23_29	254	16.8758	0.1448	0.018	0.2981	0.9092	12.5183	0.0169	0.0421	0.0389	0.0047
biotite_s23_30	255	32.1779	0.3271	0.0003	4.6144	9.5057	11.1926	0.0266	0.0064	0.0193	0.036
biotite_s23_31	256	32.0561	0.3704	0.0233	3.969	9.6208	11.0935	0.1024	0.0208	0.0131	0.0262
biotite_s23_32	257	31.9272	0.35	0.0003	4.0088	9.2785	11.3078	0.0177	0.0351	0.0123	0.0329
biotite_s23_33	258	31.7511	0.3061	0.0082	4.3036	9.5481	10.919	0.046	0.016	0.0001	0.0255

biotite_s23_34	259	50.6707	0.0005	0.0002	0.0001	0.0088	44.3108	0.0002	0.0001	0.0201	0.0033
biotite_s23_35	260	50.1136	0.0505	0.038	0.0859	0.1866	43.451	0.0059	0.0348	0.0293	0.0302
biotite_s23_36	261	31.853	0.3826	0.0003	4.513	9.4608	11.0483	0.0425	0.032	0.0046	0.0428
biotite_s23_37	262	32.1993	0.4723	0.0089	4.1043	9.5956	11.1413	0.0265	0.0096	0.0108	0.0075
biotite_s23_38	263	32.0624	0.2581	0.0003	3.8516	9.3946	11.2985	0.0317	0.0239	0.0123	0.0299
biotite_s23_39	264	51.9203	0.0204	0.017	0.0125	0.0556	45.3815	0.0216	0.0001	0.0001	0.0049
biotite_s23_40	265	29.2752	0.4556	0.0358	3.4564	8.1815	9.1277	0.0836	0.0205	0.0228	0.0518
biotite_s23_41	266	31.6526	0.3051	0.0003	4.3215	9.4699	10.8709	0.0671	0.0001	0.0069	0.0569
biotite_s23_42	267	31.9453	0.3621	0.0104	4.0263	9.4036	11.0022	0.0441	0.0223	0.0069	0.0523
biotite_s23_43	268	31.2719	0.3693	0.035	4.0909	9.3407	10.6682	0.0071	0.0048	0.0138	0.0187
biotite_s23_44	269	31.7299	0.3017	0.0276	4.2958	9.5969	10.8127	0.0583	0.0176	0.0001	0.0487
biotite_s23_45	270	49.149	0.016	0.0327	0.1596	0.464	42.2155	0.0002	0.0001	0.0001	0.0114
biotite_s23_46	271	32.0713	0.3392	0.0131	3.5633	9.5274	11.4145	0.0071	0.0001	0.281	0.009
biotite_s23_47	272	32.0126	0.3996	0.0007	4.3885	9.368	10.9096	0.0335	0.0096	0.0001	0.0314
biotite_s23_48	273	31.7146	0.3898	0.015	4.366	9.4719	10.7596	0.0071	0.0176	0.0139	0.009
biotite_s23_49	274	30.0195	0.2658	0.0328	3.385	8.6265	10.7386	0.0229	0.008	0.033	0.0904
biotite_s23_50	275	32.0644	0.1686	0.0616	3.7429	9.9044	10.8688	0.0282	0.0223	0.0492	0.0403

Fluorite EMPA data

Label	No	W%(O)	W%(F)	W%(Na)	W%(Mg)	W%(Al)	W%(Si)	W%(P)	W%(Cl)	W%(K)	W%(Ca)	W%(Ti)
Fluorite_100_200_1	6	42.9452	52.4616	0.0419	0.0002	0.0002	0.0156	0.0096	0.0001	0.0062	52.1075	0.0001
Fluorite_100_200_2	7	42.7441	50.7912	0.0053	0.0002	0.0002	0.0001	0.0001	0.0001	0.0044	53.4523	0.0001
Fluorite_100_200_3	8	40.946	49.3632	0.0003	0.0002	0.0002	0.0185	0.0134	0.0272	0.0044	50.3431	0.0248
Fluorite_100_200_4	9	42.2944	53.108	0.0032	0.0002	0.0201	0.0186	0.0077	0.0128	0.032	49.4725	0.0001
Fluorite_100_200_5	10	40.9234	52.7695	0.0003	0.0002	0.0024	0.0039	0.0001	0.0001	0.0001	46.8042	0.0011
Fluorite_300_400_1	56	42.0614	47.616	0.0353	0.0002	0.0036	0.0316	0.0133	0.0001	0.0001	54.8443	0.0001
Fluorite_300_400_2	57	45.1725	53.0888	0.0115	0.0002	0.0002	0.0073	0.0001	0.0036	0.0132	57.1004	0.0001
Fluorite_300_400_3	58	45.1493	53.1956	0.0003	0.0002	0.0163	0.0117	0.0038	0.0054	0.0123	56.7344	0.0001
Fluorite_300_400_4	59	45.401	53.4948	0.0003	0.0002	0.0002	0.0063	0.0001	0.0526	0.0001	57.217	0.0011
Fluorite_300_400_5	60	44.9859	52.7074	0.0198	0.0002	0.0097	0.0001	0.0076	0.0001	0.0001	56.9599	0.0001
Fluorite_300_400_6	61	44.9422	52.7398	0.0318	0.0002	0.0002	0.0497	0.0001	0.0001	0.0001	56.7522	0.0001
Fluorite_300_400_7	62	45.1672	53.0253	0.017	0.0002	0.0002	0.0141	0.0286	0.0001	0.0001	57.0179	0.0032

Fluorite_300_400_8	63	44.9957	53.2282	0.0085	0.0002	0.0002	0.0244	0.0095	0.0145	0.0001	56.441	0.0022
Fluorite_300_400_9	64	45.0054	52.826	0.0227	0.0002	0.0002	0.0132	0.0019	0.0001	0.0001	56.7388	0.0001
Fluorite_300_400_10	65	45.3994	53.4069	0.0354	0.0002	0.0002	0.0171	0.0095	0.0218	0.0001	57.1887	0.0378
Fluorite_300_400_11	66	45.302	53.2789	0.0003	0.0002	0.0127	0.0001	0.0096	0.0001	0.0001	56.9577	0.0001
Fluorite_300_400_12	67	45.1306	52.9188	0.034	0.0002	0.0002	0.0005	0.0153	0.0018	0.0001	57.1371	0.0001
Fluorite_300_400_13	68	45.261	53.3687	0.0532	0.0002	0.0006	0.0001	0.0001	0.0001	0.0001	56.9836	0.0011
Fluorite_300_400_14	69	45.139	52.8195	0.0716	0.0002	0.0002	0.018	0.0191	0.0001	0.015	56.8529	0.0173
Fluorite_300_400_15	70	44.9688	52.8282	0.0051	0.0002	0.0002	0.0205	0.0153	0.0254	0.0001	56.7684	0.0001
Fluorite_300_400_16	71	44.5949	52.9496	0.0283	0.0002	0.0002	0.0205	0.0038	0.0109	0.0088	55.637	0.0001
Fluorite_300_400_17	72	44.4723	52.9557	0.0008	0.0002	0.0002	0.0054	0.0114	0.0054	0.0001	55.346	0.014
Fluorite_300_400_18	73	45.1363	53.4321	0.0028	0.0002	0.0002	0.0156	0.0134	0.0001	0.0001	56.585	0.0001
Fluorite_300_400_19	74	44.8854	53.1515	0.0003	0.0002	0.0061	0.0049	0.0001	0.0018	0.0001	56.3218	0.0043
Fluorite_300_400_20	75	45.2522	53.1671	0.0003	0.0002	0.0018	0.0132	0.0362	0.0001	0.0115	57.0415	0.0076
Fluorite_300_400_21	76	45.0464	52.5743	0.0003	0.0002	0.0002	0.0044	0.0001	0.0109	0.0001	57.2024	0.0001
Fluorite_300_400_22	77	44.7601	52.8137	0.0003	0.0002	0.0036	0.0219	0.0248	0.0018	0.0044	56.2109	0.0108
Fluorite_300_400_23	78	45.1057	52.9075	0.0003	0.0002	0.0024	0.0049	0.0191	0.0001	0.0001	57.0308	0.0001
Fluorite_300_400_24	79	45.1898	52.8752	0.0003	0.0002	0.0145	0.0058	0.0057	0.0091	0.0062	57.3153	0.0001

Fluorite_300_400_25	80	45.0665	52.9681	0.0003	0.0002	0.0002	0.0001	0.0076	0.0163	0.0001	56.8965	0.0086
Fluorite_300_400_30	85	44.0047	51.0728	0.0114	0.0002	0.0002	0.0462	0.0001	0.0253	0.0088	56.1708	0.0001
Fluorite_300_400_31	86	44.9877	53.032	0.0003	0.0002	0.0024	0.0097	0.0001	0.0036	0.0194	56.6419	0.0001
Fluorite_300_400_32	87	43.7671	50.8083	0.0407	0.0002	0.0018	0.0253	0.021	0.0001	0.0009	55.8022	0.0173
Fluorite_300_400_33	88	45.1331	52.804	0.002	0.0002	0.0002	0.0024	0.0229	0.0018	0.0115	57.1001	0.0001
Fluorite_300_400_34	89	45.1236	52.7144	0.0003	0.0002	0.0002	0.0001	0.0001	0.0036	0.0018	57.4026	0.0043
Fluorite_300_400_35	90	45.0036	52.9131	0.001	0.0002	0.0002	0.018	0.0019	0.0001	0.0001	56.8264	0.0054
Fluorite_300_400_36	91	45.0275	52.8862	0.0095	0.0002	0.0079	0.0001	0.021	0.0018	0.0053	56.8718	0.0001
Fluorite_300_400_37	92	44.9285	52.8349	0.0302	0.0002	0.0002	0.018	0.0038	0.0001	0.0001	56.4939	0.0001
Fluorite_300_400_38	93	44.5118	52.0892	0.0003	0.0002	0.0002	0.0161	0.0114	0.0001	0.0001	56.3529	0.0281
Fluorite_300_400_39	94	44.9258	53.1859	0.0003	0.0002	0.0002	0.0161	0.0267	0.0001	0.0026	56.2374	0.0001
Fluorite_300_400_40	95	44.8377	52.7953	0.0003	0.0002	0.0002	0.0001	0.0001	0.0054	0.0001	56.6086	0.0001
Fluorite_300_400_41	96	44.8855	52.6093	0.0079	0.0002	0.0218	0.0068	0.0001	0.0001	0.0141	56.7325	0.0001
Fluorite_300_400_42	97	44.8458	52.8583	0.0003	0.0002	0.0036	0.0005	0.0001	0.0127	0.0159	56.4911	0.0001
Fluorite_300_400_43	98	44.9973	52.6896	0.0188	0.0002	0.0042	0.0166	0.0191	0.0001	0.0001	56.9632	0.0001
Fluorite_300_400_44	99	45.0155	52.8296	0.042	0.0002	0.0002	0.0019	0.0115	0.0001	0.0185	56.6661	0.0001
Fluorite_300_400_45	100	44.9049	52.8189	0.0281	0.0002	0.0002	0.0001	0.0134	0.0001	0.0001	56.6087	0.0205

Fluorite_300_400_46	101	45.1763	53.3435	0.0475	0.0002	0.0002	0.0156	0.0001	0.0145	0.0062	56.7618	0.0001
Fluorite_300_400_47	102	44.9756	52.6083	0.0152	0.0002	0.0002	0.0001	0.0172	0.0001	0.0001	57.0749	0.0001
Fluorite_300_400_48	103	44.8691	52.5626	0.0003	0.0002	0.0002	0.0054	0.021	0.0001	0.0001	56.8052	0.0162
Fluorite_300_400_49	104	45.1808	52.7443	0.0069	0.0002	0.0012	0.0341	0.0153	0.0127	0.0001	57.1414	0.0001
Fluorite_300_400_50	105	44.7993	52.4819	0.0146	0.0002	0.0002	0.0063	0.0001	0.0181	0.0123	56.7385	0.0065
Fluorite_500_600_1	106	44.2926	51.0622	0.0081	0.0002	0.0042	0.0297	0.0133	0.0181	0.0053	56.921	0.0065
Fluorite_500_600_2	107	43.8656	51.5195	0.0103	0.0002	0.0002	0.0307	0.0305	0.0054	0.0053	55.3127	0.0001
Fluorite_500_600_3	108	45.0828	52.5486	0.001	0.0002	0.0002	0.0229	0.0038	0.0199	0.0001	57.4173	0.0001
Fluorite_500_600_4	109	45.2205	52.4878	0.0003	0.0002	0.0002	0.0005	0.0153	0.0127	0.0106	57.7983	0.0065
Fluorite_500_600_5	110	44.1551	50.8269	0.0003	0.0002	0.0024	0.0141	0.0248	0.0001	0.0009	56.8253	0.0379
Fluorite_500_600_16	131	23.1272	0.0066	0.0092	0.0002	0.0001	0.0285	0.0272	0.0001	0.0047	57.7292	0.0067
Fluorite_500_600_17	132	23.2293	0.0006	0.0002	0.0002	0.0001	0.0161	0.0001	0.0001	0.0039	58.069	0.0001
Fluorite_500_600_18	133	23.2298	0.0033	0.0078	0.0002	0.0113	0.0143	0.0453	0.0137	0.0001	57.8609	0.0212
Fluorite_500_600_19	134	23.1911	0.0006	0.0002	0.0002	0.0079	0.0014	0.0054	0.0001	0.0087	58.0338	0.0001
Fluorite_500_600_20	135	23.1091	0.0033	0.0634	0.0002	0.026	0.0083	0.0127	0.0001	0.0001	57.5803	0.0379
Fluorite_500_600_21	136	44.1612	51.0428	0.0089	0.0002	0.0002	0.0253	0.0153	0.0127	0.0123	56.5694	0.013
Fluorite_500_600_22	137	44.5746	51.7194	0.0215	0.0002	0.0002	0.0541	0.0248	0.0001	0.0001	56.8446	0.0011

Fluorite_500_600_23	138	44.6875	51.844	0.0003	0.0002	0.0002	0.0209	0.0019	0.0001	0.0001	57.1464	0.0184
Fluorite_500_600_24	139	45.0816	52.6038	0.0241	0.0002	0.0002	0.0001	0.0076	0.0001	0.0001	57.3199	0.0032
Fluorite_500_600_25	140	44.6885	51.9844	0.0045	0.0002	0.0002	0.0088	0.0001	0.0036	0.0001	56.9495	0.0001
Fluorite_500_600_26	141	43.6897	51.9185	0.0083	0.0002	0.0012	0.0001	0.0134	0.0001	0.0001	54.5829	0.0001
Fluorite_500_600_27	142	43.7119	52.0261	0.0003	0.0002	0.0061	0.0049	0.0001	0.0018	0.0097	54.4569	0.0001
Fluorite_500_600_28	143	44.3555	49.061	0.0003	0.0002	0.0054	0.0068	0.0247	0.0001	0.0001	59.1513	0.0001
Fluorite_500_600_29	144	44.0602	51.8397	0.0154	0.0002	0.0002	0.0107	0.0172	0.0001	0.0027	55.3249	0.0303
Fluorite_500_600_30	145	43.1219	50.5502	0.0314	0.0002	0.0097	0.0136	0.0439	0.0001	0.0035	54.3199	0.0001
Fluorite_500_600_31	146	42.3446	54.9051	0.0003	0.0002	0.0002	0.0299	0.0154	0.0073	0.0036	47.982	0.0001
Fluorite_500_600_32	147	42.4962	53.8968	0.0132	0.0002	0.0002	0.0186	0.0211	0.0001	0.0045	49.3024	0.0001
Fluorite_500_600_33	148	41.9343	53.2166	0.0302	0.0002	0.0002	0.0294	0.0001	0.02	0.0116	48.7547	0.0001
Fluorite_500_600_34	149	42.3564	52.8629	0.0142	0.0002	0.0002	0.0117	0.0057	0.0255	0.0001	50.205	0.0108
Fluorite_500_600_35	150	41.4932	52.4298	0.0244	0.0002	0.0002	0.0137	0.0422	0.0001	0.0214	48.3826	0.0001
Fluorite_500_600_36	151	39.1843	47.2479	0.0192	0.0002	0.0042	0.0454	0.0001	0.0018	0.0001	48.0253	0.0065
Fluorite_500_600_37	152	41.652	52.0828	0.0003	0.0002	0.0002	0.0289	0.0001	0.0036	0.0001	49.305	0.0086
Fluorite_500_600_38	153	41.7776	51.4849	0.005	0.0002	0.0134	0.0254	0.0249	0.0001	0.0009	50.1505	0.0001
Fluorite_500_600_39	154	42.3467	52.6555	0.0217	0.0002	0.0091	0.0171	0.0038	0.0073	0.0027	50.187	0.0043

Fluorite_500_600_40	155	42.286	52.4657	0.0003	0.0002	0.0018	0.0108	0.0268	0.0001	0.0177	50.4373	0.0001
Fluorite_500_600_41	156	41.7984	52.2221	0.0003	0.0002	0.014	0.0161	0.0173	0.0055	0.0071	49.2221	0.0001
Fluorite_500_600_42	197	42.6384	51.9194	0.0003	0.0002	0.0042	0.0264	0.0001	0.0036	0.0001	51.8255	0.0001
Fluorite_500_600_43	198	42.6805	52.9207	0.0003	0.0002	0.031	0.0176	0.0001	0.0018	0.0089	50.812	0.0011
Fluorite_500_600_44	199	42.7743	52.1058	0.0479	0.0002	0.0002	0.0132	0.0115	0.0109	0.0001	52.021	0.0001
Fluorite_500_600_45	200	42.145	53.0044	0.0427	0.0002	0.0079	0.0147	0.0001	0.0127	0.008	49.5095	0.0001
Fluorite_500_600_46	201	41.9651	52.8296	0.003	0.0002	0.0049	0.0313	0.0268	0.0146	0.0001	49.1457	0.0043
Fluorite_500_600_47	202	44.9705	52.5637	0.0493	0.0002	0.0002	0.0034	0.0019	0.0181	0.0018	57.095	0.0001
Fluorite_500_600_48	203	44.3123	48.9448	0.0079	0.0002	0.0024	0.0321	0.0152	0.0199	0.021	59.193	0.0001
Fluorite_500_600_49	204	44.6415	51.8642	0.0387	0.0002	0.0067	0.0151	0.0134	0.0001	0.0001	56.9058	0.0001
Fluorite_500_600_50	205	44.7012	51.6669	0.0003	0.0002	0.0002	0.0141	0.0076	0.0091	0.007	57.2584	0.0206

Label	W%(Cr)	W%(Mn)	W%(Fe)	W%(Mo)	W%(W)	Ox%(O)	Ox%(F)	Ox%(Na)	Ox%(Mg)	Ox%(Al)
Fluorite_100_200_1	0.0001	0.0001	0.0254	0.0001	0.0002	0	74.5517	0.0565	0.0003	0.0003
Fluorite_100_200_2	0.0053	0.0414	0.0001	0.0001	0.0002	0	72.1779	0.0072	0.0003	0.0003
Fluorite_100_200_3	0.0001	0.0001	0.019	0.0001	0.0002	0	70.1486	0.0004	0.0003	0.0003
Fluorite_100_200_4	0.0389	0.0001	0.0443	0.0177	0.2765	0	75.4702	0.0043	0.0003	0.0379

Fluorite_100_200_5	0.0001	0.0001	0.0001	0.0118	0.0415	0	74.9892	0.0004	0.0003	0.0046
Fluorite_300_400_1	0.023	0.0863	0.0253	0.0001	0.0002	0	67.6657	0.0475	0.0003	0.0068
Fluorite_300_400_2	0.0018	0.0069	0.0095	0.0001	0.0002	0	75.443	0.0155	0.0003	0.0003
Fluorite_300_400_3	0.0001	0.0034	0.019	0.041	0.1932	0	75.5946	0.0004	0.0003	0.0309
Fluorite_300_400_4	0.0001	0.031	0.0001	0.041	0.0002	0	76.0199	0.0004	0.0003	0.0003
Fluorite_300_400_5	0.0018	0.0001	0.0981	0.0001	0.0002	0	74.9009	0.0266	0.0003	0.0183
Fluorite_300_400_6	0.0124	0.0035	0.0001	0.0117	0.0002	0	74.947	0.0429	0.0003	0.0003
Fluorite_300_400_7	0.0195	0.0001	0.0001	0.0001	0.0138	0	75.3526	0.0229	0.0003	0.0003
Fluorite_300_400_8	0.0001	0.0173	0.0001	0.0001	0.0002	0	75.6411	0.0115	0.0003	0.0003
Fluorite_300_400_9	0.0001	0.0172	0.038	0.0176	0.2623	0	75.0694	0.0306	0.0003	0.0003
Fluorite_300_400_10	0.0001	0.0311	0.019	0.0001	0.0002	0	75.895	0.0477	0.0003	0.0003
Fluorite_300_400_11	0.0389	0.0001	0.019	0.0001	0.2761	0	75.7131	0.0004	0.0003	0.024
Fluorite_300_400_12	0.0001	0.0001	0.0253	0.0001	0.0002	0	75.2013	0.0459	0.0003	0.0003
Fluorite_300_400_13	0.0088	0.0001	0.0475	0.0117	0.0002	0	75.8407	0.0717	0.0003	0.0011
Fluorite_300_400_14	0.0018	0.0241	0.0348	0.1055	0.3172	0	75.0602	0.0965	0.0003	0.0003
Fluorite_300_400_15	0.0001	0.0001	0.0253	0.0117	0.0138	0	75.0726	0.0069	0.0003	0.0003
Fluorite_300_400_16	0.0336	0.0517	0.0001	0.0293	0.0002	0	75.2451	0.0382	0.0003	0.0003

Fluorite_300_400_17	0.0053	0.0241	0.0158	0.0001	0.138	0	75.2538	0.0011	0.0003	0.0003
Fluorite_300_400_18	0.0035	0.0379	0.0001	0.0001	0.0002	0	75.9307	0.0037	0.0003	0.0003
Fluorite_300_400_19	0.0001	0.0001	0.0001	0.0293	0.0138	0	75.532	0.0004	0.0003	0.0114
Fluorite_300_400_20	0.0001	0.0001	0.0538	0.0469	0.0002	0	75.5542	0.0004	0.0003	0.0034
Fluorite_300_400_21	0.0001	0.031	0.0285	0.0176	0.1794	0	74.7117	0.0004	0.0003	0.0003
Fluorite_300_400_22	0.0001	0.0001	0.0348	0.0117	0.0138	0	75.0521	0.0004	0.0003	0.0069
Fluorite_300_400_23	0.023	0.0414	0.0001	0.0001	0.0002	0	75.1853	0.0004	0.0003	0.0046
Fluorite_300_400_24	0.0142	0.0001	0.0001	0.0234	0.0002	0	75.1394	0.0004	0.0003	0.0274
Fluorite_300_400_25	0.0001	0.0001	0.1045	0.0176	0.0002	0	75.2714	0.0004	0.0003	0.0003
Fluorite_300_400_30	0.0035	0.0276	0.0001	0.0001	0.0002	0	72.5781	0.0154	0.0003	0.0003
Fluorite_300_400_31	0.0001	0.0172	0.0348	0.0586	0.0002	0	75.3623	0.0004	0.0003	0.0046
Fluorite_300_400_32	0.0001	0.0001	0.0601	0.0001	0.0002	0	72.2022	0.0548	0.0003	0.0034
Fluorite_300_400_33	0.0001	0.031	0.0001	0.0469	0.1932	0	75.0382	0.0027	0.0003	0.0003
Fluorite_300_400_34	0.0001	0.0001	0.0001	0.0527	0.0002	0	74.9109	0.0004	0.0003	0.0003
Fluorite_300_400_35	0.0001	0.0001	0.0253	0.0352	0.0002	0	75.1933	0.0013	0.0003	0.0003
Fluorite_300_400_36	0.0212	0.0001	0.0001	0.0001	0.0002	0	75.155	0.0128	0.0003	0.0149
Fluorite_300_400_37	0.0001	0.0001	0.0001	0.0001	0.3589	0	75.0821	0.0407	0.0003	0.0003

Fluorite_300_400_38	0.0106	0.0001	0.0475	0.0001	0.0552	0	74.0224	0.0004	0.0003	0.0003
Fluorite_300_400_39	0.0195	0.0001	0.0444	0.0001	0.0002	0	75.5809	0.0004	0.0003	0.0003
Fluorite_300_400_40	0.0001	0.0001	0.0285	0.0001	0.0002	0	75.0259	0.0004	0.0003	0.0003
Fluorite_300_400_41	0.0053	0.0001	0.0001	0.0001	0.1794	0	74.7616	0.0106	0.0003	0.0411
Fluorite_300_400_42	0.0001	0.0242	0.0001	0.0001	0.0691	0	75.1154	0.0004	0.0003	0.0069
Fluorite_300_400_43	0.0018	0.0001	0.0001	0.0176	0.0553	0	74.8757	0.0253	0.0003	0.008
Fluorite_300_400_44	0.0053	0.0069	0.0001	0.1114	0.3312	0	75.0746	0.0566	0.0003	0.0003
Fluorite_300_400_45	0.0001	0.0001	0.076	0.0469	0.0002	0	75.0594	0.0379	0.0003	0.0003
Fluorite_300_400_46	0.0018	0.0104	0.019	0.0176	0.0138	0	75.8049	0.064	0.0003	0.0003
Fluorite_300_400_47	0.0035	0.0345	0.0001	0.0001	0.0002	0	74.7601	0.0205	0.0003	0.0003
Fluorite_300_400_48	0.0001	0.0001	0.0095	0.0996	0.0002	0	74.6952	0.0004	0.0003	0.0003
Fluorite_300_400_49	0.0001	0.0001	0.0095	0.0469	0.3312	0	74.9533	0.0093	0.0003	0.0023
Fluorite_300_400_50	0.0089	0.0656	0.0032	0.0001	0.0002	0	74.5806	0.0197	0.0003	0.0003
Fluorite_500_600_1	0.0001	0.0001	0.0032	0.0117	0.0002	0	72.563	0.0109	0.0003	0.008
Fluorite_500_600_2	0.0001	0.0001	0.0001	0.0645	0.0002	0	73.2129	0.0139	0.0003	0.0003
Fluorite_500_600_3	0.0001	0.0001	0.0001	0.0001	0.0002	0	74.6753	0.0013	0.0003	0.0003
Fluorite_500_600_4	0.0001	0.0001	0.0063	0.0878	0.0002	0	74.5889	0.0004	0.0003	0.0003

Fluorite_500_600_5	0.0001	0.0001	0.0001	0.0001	0.0002	0	72.2286	0.0004	0.0003	0.0046
Fluorite_500_600_16	0.0001	0.0001	0.0001	0.0223	0.0002	0	0.0093	0.0124	0.0003	0.0003
Fluorite_500_600_17	0.0071	0.0794	0.0001	0.0001	0.0002	0	0.0008	0.0003	0.0003	0.0003
Fluorite_500_600_18	0.0001	0.0001	0.0189	0.0223	0.0808	0	0.0047	0.0105	0.0003	0.0213
Fluorite_500_600_19	0.0001	0.0001	0.0063	0.0222	0.0002	0	0.0008	0.0003	0.0003	0.0149
Fluorite_500_600_20	0.0001	0.0001	0.0157	0.0001	0.1077	0	0.0046	0.0855	0.0003	0.0491
Fluorite_500_600_21	0.0001	0.0552	0.0001	0.0293	0.0002	0	72.5355	0.012	0.0003	0.0003
Fluorite_500_600_22	0.0001	0.0001	0.0001	0.0234	0.0002	0	73.497	0.029	0.0003	0.0003
Fluorite_500_600_23	0.0053	0.0035	0.0001	0.0293	0.0002	0	73.6739	0.0004	0.0003	0.0003
Fluorite_500_600_24	0.0001	0.0001	0.0412	0.1113	0.0002	0	74.7537	0.0325	0.0003	0.0003
Fluorite_500_600_25	0.0001	0.0001	0.0127	0.0176	0.1796	0	73.8735	0.0061	0.0003	0.0003
Fluorite_500_600_26	0.0124	0.0001	0.0001	0.0528	0.0002	0	73.7799	0.0112	0.0003	0.0023
Fluorite_500_600_27	0.0001	0.0001	0.0665	0.0645	0.0829	0	73.9328	0.0004	0.0003	0.0114
Fluorite_500_600_28	0.0035	0.0449	0.0697	0.0292	0.0002	0	69.7192	0.0004	0.0003	0.0103
Fluorite_500_600_29	0.0001	0.0035	0.0001	0.0001	0.3453	0	73.6679	0.0208	0.0003	0.0003
Fluorite_500_600_30	0.0106	0.0414	0.0001	0.0001	0.1519	0	71.8354	0.0423	0.0003	0.0183
Fluorite_500_600_31	0.0001	0.0069	0.0444	0.0001	0.0002	0	78.024	0.0004	0.0003	0.0003

Fluorite_500_600_32	0.0001	0.0069	0.0095	0.0001	0.2353	0	76.5912	0.0177	0.0003	0.0003
Fluorite_500_600_33	0.0035	0.0276	0.0001	0.0001	0.0002	0	75.6246	0.0407	0.0003	0.0003
Fluorite_500_600_34	0.0001	0.0311	0.019	0.0294	0.0002	0	75.122	0.0191	0.0003	0.0003
Fluorite_500_600_35	0.0001	0.0345	0.019	0.0001	0.0002	0	74.5065	0.0329	0.0003	0.0003
Fluorite_500_600_36	0.0124	0.0001	0.0001	0.0001	0.1659	0	67.1426	0.0259	0.0003	0.008
Fluorite_500_600_37	0.0018	0.0001	0.0001	0.0001	0.0002	0	74.0133	0.0004	0.0003	0.0003
Fluorite_500_600_38	0.0001	0.0001	0.0032	0.0001	0.0138	0	73.1637	0.0067	0.0003	0.0253
Fluorite_500_600_39	0.0106	0.0001	0.0032	0.0471	0.3044	0	74.8272	0.0292	0.0003	0.0172
Fluorite_500_600_40	0.0001	0.0001	0.0159	0.0001	0.0002	0	74.5574	0.0004	0.0003	0.0034
Fluorite_500_600_41	0.0001	0.0001	0.0158	0.0942	0.318	0	74.2113	0.0004	0.0003	0.0264
Fluorite_500_600_42	0.0018	0.0069	0.0127	0.0001	0.1798	0	73.7811	0.0004	0.0003	0.008
Fluorite_500_600_43	0.0001	0.0001	0.0001	0.0001	0.2353	0	75.204	0.0004	0.0003	0.0586
Fluorite_500_600_44	0.0106	0.0001	0.0381	0.0001	0.0002	0	74.046	0.0646	0.0003	0.0003
Fluorite_500_600_45	0.0035	0.0173	0.0158	0.0353	0.0002	0	75.323	0.0575	0.0003	0.015
Fluorite_500_600_46	0.0106	0.0035	0.0032	0.0001	0.0416	0	75.0747	0.004	0.0003	0.0092
Fluorite_500_600_47	0.0124	0.0001	0.0285	0.0001	0.0002	0	74.6968	0.0664	0.0003	0.0003
Fluorite_500_600_48	0.0001	0.0001	0.0001	0.0001	0.0002	0	69.5541	0.0106	0.0003	0.0046

Fluorite_500_600_49	0.0071	0.0001	0.0634	0.0586	0.0002	0	73.7027	0.0522	0.0003	0.0126
Fluorite_500_600_50	0.0035	0.0656	0.0032	0.0001	0.0967	0	73.4223	0.0004	0.0003	0.0003

Label	Ox%(Si)	Ox%(P)	Ox%(Cl)	Ox%(K)	Ox%(Ca)	Ox%(Ti)	Ox%(Cr)	Ox%(Mn)	Ox%(Fe)	Ox%(Mo)	Ox%(W)
Fluorite_100_200_1	0.0334	0.0219	0.0001	0.0087	72.9076	0.0002	0.0002	0.0002	0.0326	0.0001	0.0002
Fluorite_100_200_2	0.0003	0.0003	0.0001	0.0062	74.7892	0.0002	0.0094	0.0535	0.0002	0.0001	0.0002
Fluorite_100_200_3	0.0397	0.0307	0.0334	0.0062	70.4389	0.0373	0.0002	0.0002	0.0245	0.0001	0.0002
Fluorite_100_200_4	0.0397	0.0176	0.0156	0.0451	69.2208	0.0002	0.0688	0.0002	0.057	0.0206	0.3486
Fluorite_100_200_5	0.0084	0.0003	0.0001	0.0001	65.4873	0.0016	0.0002	0.0002	0.0002	0.0137	0.0524
Fluorite_300_400_1	0.0676	0.0306	0.0001	0.0001	76.7369	0.0002	0.0407	0.1114	0.0326	0.0001	0.0002
Fluorite_300_400_2	0.0156	0.0003	0.0044	0.0186	79.8935	0.0002	0.0031	0.0089	0.0122	0.0001	0.0002
Fluorite_300_400_3	0.025	0.0087	0.0067	0.0174	79.3815	0.0002	0.0002	0.0045	0.0244	0.0479	0.2437
Fluorite_300_400_4	0.0135	0.0003	0.0644	0.0001	80.0568	0.0016	0.0002	0.0401	0.0002	0.0478	0.0002
Fluorite_300_400_5	0.0003	0.0175	0.0001	0.0001	79.697	0.0002	0.0031	0.0002	0.1262	0.0001	0.0002
Fluorite_300_400_6	0.1063	0.0003	0.0001	0.0001	79.4063	0.0002	0.0219	0.0045	0.0002	0.0137	0.0002
Fluorite_300_400_7	0.0302	0.0655	0.0001	0.0001	79.7781	0.0049	0.0344	0.0002	0.0002	0.0001	0.0174

Fluorite_300_400_8	0.0522	0.0219	0.0178	0.0001	78.971	0.0032	0.0002	0.0223	0.0002	0.0001	0.0002
Fluorite_300_400_9	0.0281	0.0044	0.0001	0.0001	79.3876	0.0002	0.0002	0.0223	0.0489	0.0205	0.3308
Fluorite_300_400_10	0.0365	0.0219	0.0267	0.0001	80.0171	0.0568	0.0002	0.0401	0.0245	0.0001	0.0002
Fluorite_300_400_11	0.0003	0.0219	0.0001	0.0001	79.6939	0.0002	0.0689	0.0002	0.0244	0.0001	0.3482
Fluorite_300_400_12	0.001	0.035	0.0022	0.0001	79.9449	0.0002	0.0002	0.0002	0.0326	0.0001	0.0002
Fluorite_300_400_13	0.0003	0.0003	0.0001	0.0001	79.7301	0.0016	0.0157	0.0002	0.0611	0.0137	0.0002
Fluorite_300_400_14	0.0385	0.0437	0.0001	0.0211	79.5472	0.0259	0.0031	0.0311	0.0448	0.1231	0.4
Fluorite_300_400_15	0.0438	0.035	0.0311	0.0001	79.429	0.0002	0.0002	0.0002	0.0326	0.0137	0.0174
Fluorite_300_400_16	0.0438	0.0087	0.0133	0.0124	77.846	0.0002	0.0595	0.0668	0.0002	0.0342	0.0002
Fluorite_300_400_17	0.0115	0.0262	0.0067	0.0001	77.4388	0.0211	0.0094	0.0311	0.0203	0.0001	0.174
Fluorite_300_400_18	0.0334	0.0306	0.0001	0.0001	79.1724	0.0002	0.0063	0.049	0.0002	0.0001	0.0002
Fluorite_300_400_19	0.0104	0.0003	0.0022	0.0001	78.8042	0.0065	0.0002	0.0002	0.0002	0.0342	0.0174
Fluorite_300_400_20	0.0281	0.083	0.0001	0.0161	79.8111	0.0114	0.0002	0.0002	0.0692	0.0547	0.0002
Fluorite_300_400_21	0.0094	0.0003	0.0133	0.0001	80.0363	0.0002	0.0002	0.0401	0.0366	0.0205	0.2262
Fluorite_300_400_22	0.0469	0.0568	0.0022	0.0062	78.649	0.0162	0.0002	0.0002	0.0448	0.0137	0.0174
Fluorite_300_400_23	0.0104	0.0437	0.0001	0.0001	79.7961	0.0002	0.0407	0.0534	0.0002	0.0001	0.0002
Fluorite_300_400_24	0.0125	0.0131	0.0111	0.0087	80.1942	0.0002	0.025	0.0002	0.0002	0.0273	0.0002

Fluorite_300_400_25	0.0003	0.0175	0.02	0.0001	79.6082	0.013	0.0002	0.0002	0.1344	0.0205	0.0002
Fluorite_300_400_30	0.0989	0.0003	0.0311	0.0124	78.5929	0.0002	0.0063	0.0356	0.0002	0.0001	0.0002
Fluorite_300_400_31	0.0208	0.0003	0.0044	0.0273	79.2521	0.0002	0.0002	0.0223	0.0448	0.0683	0.0002
Fluorite_300_400_32	0.0542	0.048	0.0001	0.0012	78.0772	0.026	0.0002	0.0002	0.0774	0.0001	0.0002
Fluorite_300_400_33	0.0052	0.0525	0.0022	0.0161	79.8931	0.0002	0.0002	0.0401	0.0002	0.0547	0.2436
Fluorite_300_400_34	0.0003	0.0003	0.0044	0.0025	80.3163	0.0065	0.0002	0.0002	0.0002	0.0615	0.0002
Fluorite_300_400_35	0.0386	0.0044	0.0001	0.0001	79.5102	0.0081	0.0002	0.0002	0.0326	0.041	0.0002
Fluorite_300_400_36	0.0003	0.0481	0.0022	0.0074	79.5737	0.0002	0.0376	0.0002	0.0002	0.0001	0.0002
Fluorite_300_400_37	0.0385	0.0088	0.0001	0.0001	79.0449	0.0002	0.0002	0.0002	0.0002	0.0001	0.4526
Fluorite_300_400_38	0.0344	0.0262	0.0001	0.0001	78.8476	0.0422	0.0188	0.0002	0.0611	0.0001	0.0697
Fluorite_300_400_39	0.0344	0.0612	0.0001	0.0037	78.686	0.0002	0.0345	0.0002	0.0571	0.0001	0.0002
Fluorite_300_400_40	0.0003	0.0003	0.0067	0.0001	79.2054	0.0002	0.0002	0.0002	0.0367	0.0001	0.0002
Fluorite_300_400_41	0.0146	0.0003	0.0001	0.0199	79.3788	0.0002	0.0094	0.0002	0.0002	0.0001	0.2263
Fluorite_300_400_42	0.001	0.0003	0.0156	0.0224	79.041	0.0002	0.0002	0.0312	0.0002	0.0001	0.0871
Fluorite_300_400_43	0.0354	0.0437	0.0001	0.0001	79.7016	0.0002	0.0031	0.0002	0.0002	0.0205	0.0697
Fluorite_300_400_44	0.0042	0.0263	0.0001	0.0261	79.2859	0.0002	0.0094	0.0089	0.0002	0.13	0.4177
Fluorite_300_400_45	0.0003	0.0306	0.0001	0.0001	79.2056	0.0308	0.0002	0.0002	0.0978	0.0547	0.0002

Fluorite_300_400_46	0.0334	0.0003	0.0178	0.0087	79.4198	0.0002	0.0031	0.0134	0.0245	0.0205	0.0174
Fluorite_300_400_47	0.0003	0.0393	0.0001	0.0001	79.8579	0.0002	0.0063	0.0446	0.0002	0.0001	0.0002
Fluorite_300_400_48	0.0115	0.0481	0.0001	0.0001	79.4805	0.0243	0.0002	0.0002	0.0122	0.1162	0.0002
Fluorite_300_400_49	0.0729	0.035	0.0156	0.0001	79.9509	0.0002	0.0002	0.0002	0.0122	0.0547	0.4177
Fluorite_300_400_50	0.0136	0.0003	0.0222	0.0174	79.3871	0.0097	0.0157	0.0847	0.0041	0.0001	0.0002
Fluorite_500_600_1	0.0635	0.0306	0.0222	0.0074	79.6426	0.0097	0.0002	0.0002	0.0041	0.0137	0.0002
Fluorite_500_600_2	0.0657	0.07	0.0067	0.0075	77.3923	0.0002	0.0002	0.0002	0.0002	0.0752	0.0002
Fluorite_500_600_3	0.049	0.0087	0.0244	0.0001	80.3369	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002
Fluorite_500_600_4	0.001	0.0349	0.0155	0.0149	80.87	0.0097	0.0002	0.0002	0.0081	0.1025	0.0002
Fluorite_500_600_5	0.0302	0.0568	0.0001	0.0012	79.5086	0.0568	0.0002	0.0002	0.0002	0.0001	0.0002
Fluorite_500_600_16	0.0611	0.0623	0.0001	0.0067	80.7734	0.0101	0.0002	0.0002	0.0002	0.026	0.0002
Fluorite_500_600_17	0.0345	0.0003	0.0001	0.0056	81.2488	0.0002	0.0126	0.1025	0.0002	0.0001	0.0002
Fluorite_500_600_18	0.0305	0.1039	0.0167	0.0001	80.9576	0.0318	0.0002	0.0002	0.0243	0.026	0.1019
Fluorite_500_600_19	0.003	0.0125	0.0001	0.0122	81.1996	0.0002	0.0002	0.0002	0.0081	0.026	0.0002
Fluorite_500_600_20	0.0177	0.0291	0.0001	0.0001	80.565	0.057	0.0002	0.0002	0.0202	0.0001	0.1359
Fluorite_500_600_21	0.0542	0.035	0.0155	0.0174	79.1505	0.0195	0.0002	0.0713	0.0002	0.0342	0.0002
Fluorite_500_600_22	0.1156	0.0568	0.0001	0.0001	79.5356	0.0016	0.0002	0.0002	0.0002	0.0273	0.0002

Fluorite_500_600_23	0.0448	0.0044	0.0001	0.0001	79.958	0.0276	0.0094	0.0045	0.0002	0.0342	0.0002
Fluorite_500_600_24	0.0003	0.0175	0.0001	0.0001	80.2007	0.0049	0.0002	0.0002	0.053	0.1298	0.0002
Fluorite_500_600_25	0.0188	0.0003	0.0044	0.0001	79.6824	0.0002	0.0002	0.0002	0.0163	0.0205	0.2265
Fluorite_500_600_26	0.0003	0.0306	0.0001	0.0001	76.3711	0.0002	0.0219	0.0002	0.0002	0.0616	0.0002
Fluorite_500_600_27	0.0104	0.0003	0.0022	0.0137	76.1948	0.0002	0.0002	0.0002	0.0856	0.0753	0.1046
Fluorite_500_600_28	0.0145	0.0567	0.0001	0.0001	82.7631	0.0002	0.0063	0.0579	0.0896	0.0341	0.0002
Fluorite_500_600_29	0.0229	0.0394	0.0001	0.0037	77.4094	0.0454	0.0002	0.0045	0.0002	0.0001	0.4354
Fluorite_500_600_30	0.0292	0.1006	0.0001	0.005	76.0032	0.0002	0.0188	0.0535	0.0002	0.0001	0.1916
Fluorite_500_600_31	0.064	0.0352	0.009	0.005	67.1353	0.0002	0.0002	0.0089	0.0571	0.0001	0.0002
Fluorite_500_600_32	0.0398	0.0483	0.0001	0.0063	68.9828	0.0002	0.0002	0.0089	0.0122	0.0001	0.2967
Fluorite_500_600_33	0.0629	0.0003	0.0246	0.0163	68.2164	0.0002	0.0063	0.0357	0.0002	0.0001	0.0002
Fluorite_500_600_34	0.0251	0.0132	0.0312	0.0001	70.2457	0.0162	0.0002	0.0401	0.0245	0.0343	0.0002
Fluorite_500_600_35	0.0293	0.0967	0.0001	0.0301	67.6959	0.0002	0.0002	0.0446	0.0245	0.0001	0.0002
Fluorite_500_600_36	0.0971	0.0003	0.0022	0.0001	67.1958	0.0097	0.0219	0.0002	0.0002	0.0001	0.2092
Fluorite_500_600_37	0.0618	0.0003	0.0045	0.0001	68.9864	0.013	0.0031	0.0002	0.0002	0.0001	0.0002
Fluorite_500_600_38	0.0544	0.057	0.0001	0.0012	70.1694	0.0002	0.0002	0.0002	0.0041	0.0001	0.0175
Fluorite_500_600_39	0.0366	0.0088	0.0089	0.0038	70.2205	0.0065	0.0188	0.0002	0.0041	0.055	0.3838

Fluorite_500_600_40	0.023	0.0614	0.0001	0.025	70.5707	0.0002	0.0002	0.0002	0.0204	0.0001	0.0002
Fluorite_500_600_41	0.0345	0.0395	0.0067	0.01	68.8704	0.0002	0.0002	0.0002	0.0204	0.1099	0.401
Fluorite_500_600_42	0.0564	0.0003	0.0045	0.0001	72.5131	0.0002	0.0031	0.0089	0.0163	0.0001	0.2268
Fluorite_500_600_43	0.0377	0.0003	0.0022	0.0125	71.095	0.0016	0.0002	0.0002	0.0002	0.0001	0.2967
Fluorite_500_600_44	0.0282	0.0263	0.0134	0.0001	72.7866	0.0002	0.0188	0.0002	0.049	0.0001	0.0002
Fluorite_500_600_45	0.0314	0.0003	0.0156	0.0113	69.2725	0.0002	0.0063	0.0223	0.0204	0.0412	0.0002
Fluorite_500_600_46	0.0671	0.0615	0.0179	0.0001	68.7635	0.0065	0.0188	0.0045	0.0041	0.0001	0.0524
Fluorite_500_600_47	0.0073	0.0044	0.0222	0.0025	79.886	0.0002	0.0219	0.0002	0.0367	0.0001	0.0002
Fluorite_500_600_48	0.0686	0.0349	0.0244	0.0296	82.8215	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002
Fluorite_500_600_49	0.0323	0.0306	0.0001	0.0001	79.6213	0.0002	0.0125	0.0002	0.0815	0.0684	0.0002
Fluorite_500_600_50	0.0302	0.0175	0.0111	0.0099	80.1147	0.0309	0.0063	0.0847	0.0041	0.0001	0.122

Apatite EMPA data

Label	No	W%(O)	W%(F)	W%(Na)	W%(Mg)	W%(Al)	W%(Si)	W%(P)	W%(Cl)	W%(K)	W%(Ca)
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Apatite_100_200_1	1	42.9104	4.1782	0.0371	0.0002	0.0017	0.0245	19.2085	0.0173	0.0103	40.445
Apatite_100_200_2	2	42.7681	3.9494	0.0042	0.0002	0.0171	0.0036	19.0648	0.0327	0.0001	40.5276
Apatite_100_200_3	3	43.2687	4.212	0.0484	0.0002	0.0061	0.0177	19.5433	0.0001	0.0001	40.3767
Apatite_100_200_4	4	43.0075	3.9406	0.0576	0.0002	0.0001	0.2612	19.1029	0.0077	0.0242	40.5453
Apatite_100_200_5	5	43.5574	4.4001	0.0484	0.0002	0.0033	0.0609	19.5389	0.0328	0.0001	40.6378
Apatite_100_200_6	11	42.754	3.9044	0.0192	0.0002	0.0232	0.0041	19.2115	0.0308	0.0065	39.913
Apatite_100_200_7	12	42.7789	4.2834	0.0367	0.0111	0.0083	0.0168	19.0999	0.0385	0.0159	39.7973
Apatite_100_200_8	13	43.1747	4.4276	0.0118	0.0002	0.0138	0.0155	19.2584	0.0154	0.0001	40.2366
Apatite_100_200_9	14	42.8888	4.2266	0.0123	0.0002	0.0039	0.0195	19.1566	0.0385	0.0093	40.0882
Apatite_100_200_10	15	42.9215	4.2498	0.0375	0.0002	0.0001	0.0105	19.211	0.0001	0.0001	40.0933
Apatite_100_200_11	16	42.9968	4.6539	0.0228	0.0002	0.0001	0.0114	19.1589	0.0001	0.0001	40.1816
Apatite_100_200_12	17	43.5217	4.4444	0.0095	0.0002	0.0001	0.0001	19.5225	0.0269	0.0001	40.4367
Apatite_100_200_13	18	42.8357	4.423	0.0136	0.0002	0.0039	0.0113	19.0368	0.0001	0.0001	40.3903
Apatite_100_200_14	19	42.8363	4.3109	0.0334	0.0002	0.0006	0.0163	19.1436	0.0001	0.0001	40.1811
Apatite_100_200_15	20	42.5053	4.0192	0.0332	0.0002	0.0001	0.0127	19.0144	0.0231	0.0001	39.896
Apatite_100_200_17	22	42.1381	3.9005	0.0478	0.0002	0.0077	0.0544	18.8992	0.0001	0.0001	39.7661
Apatite_100_200_19	24	42.8835	4.1251	0.0345	0.0002	0.0033	0.0295	19.3048	0.0077	0.0028	40.2012

Apatite_100_200_20	25	42.8131	4.0833	0.058	0.0002	0.0001	0.0241	19.3151	0.0058	0.0001	40.0833
Apatite_100_200_21	26	42.3711	4.2882	0.0685	0.0002	0.0001	0.0073	18.9279	0.0001	0.0224	39.7127
Apatite_100_200_22	27	41.9561	3.7899	0.0477	0.0002	0.0001	0.0082	18.8624	0.0001	0.0158	39.5787
Apatite_100_200_23	28	42.6844	4.0876	0.0086	0.0002	0.0116	0.0182	18.9786	0.0288	0.0233	40.7795
Apatite_100_200_24	29	42.9988	3.9175	0.054	0.0002	0.0022	0.0136	19.3872	0.0077	0.0168	40.1677
Apatite_100_200_25	30	42.8453	4.1093	0.0424	0.0002	0.0001	0.0155	19.1386	0.0077	0.0001	40.3002
Apatite_100_200_26	31	43.0794	4.242	0.0258	0.0002	0.0001	0.0132	19.3652	0.0173	0.014	40.1256
Apatite_100_200_27	32	42.4862	4.1105	0.0337	0.0002	0.0199	0.0086	18.8757	0.0038	0.0056	40.3331
Apatite_100_200_28	33	42.9746	4.0523	0.0015	0.0002	0.0001	0.0009	19.2071	0.0001	0.0019	40.5743
Apatite_100_200_29	34	43.1999	4.1125	0.037	0.0002	0.0001	0.005	19.3352	0.0001	0.0001	40.5017
Apatite_100_200_30	35	42.9148	4.1304	0.0167	0.0002	0.0001	0.01	19.1722	0.0096	0.0065	40.5073
Apatite_100_200_31	36	42.5137	4.3908	0.0249	0.017	0.0001	0.0068	18.8251	0.0058	0.0001	39.9021
Apatite_100_200_32	37	42.8078	4.2583	0.0002	0.0002	0.0001	0.0141	19.0926	0.0269	0.0001	40.1675
Apatite_100_200_33	38	43.1998	4.3385	0.0352	0.0002	0.0001	0.0114	19.3033	0.0001	0.0001	40.1555
Apatite_100_200_34	39	42.9976	4.4356	0.0159	0.0002	0.0078	0.0227	19.0719	0.0346	0.0047	40.3012
Apatite_100_200_35	40	42.7071	4.34	0.0259	0.0025	0.0001	0.0373	19.0071	0.0058	0.0001	39.9203
Apatite_100_200_36	41	42.3401	4.4282	0.0375	0.0002	0.0001	0.0186	18.7212	0.0211	0.0009	40.1469

Apatite_100_200_37	42	43.0126	4.07	0.0047	0.0002	0.0001	0.0181	19.161	0.0001	0.0019	41.2429
Apatite_100_200_38	43	43.4286	4.4923	0.0002	0.0002	0.0001	0.03	19.4844	0.0019	0.0001	39.9729
Apatite_100_200_39	44	42.4858	3.6542	0.0703	0.0002	0.0001	0.0282	19.0062	0.0192	0.0001	40.2122
Apatite_100_200_40	45	43.0299	4.1428	0.0441	0.0002	0.005	0.0349	19.2142	0.0192	0.0037	40.5534
Apatite_100_200_41	46	42.9144	4.6844	0.0007	0.0002	0.0127	0.0001	18.9956	0.0001	0.0001	40.3726
Apatite_100_200_42	47	43.6168	4.6199	0.0049	0.0002	0.0172	0.015	19.5769	0.0001	0.0001	40.2449
Apatite_100_200_43	48	42.7777	4.3664	0.0193	0.0002	0.0001	0.0001	19.1098	0.0289	0.0084	40.0101
Apatite_100_200_44	49	42.476	4.4272	0.0348	0.0002	0.0105	0.0001	18.8961	0.0115	0.0121	39.7222
Apatite_100_200_45	50	43.097	4.5687	0.0352	0.0002	0.0001	0.01	19.2488	0.0001	0.0047	39.9807
Apatite_100_200_46	51	43.0396	4.2691	0.0108	0.0002	0.0001	0.0036	19.2891	0.0001	0.0001	40.344
Apatite_100_200_47	52	43.093	3.8567	0.0002	0.0002	0.0066	0.0001	19.3127	0.0115	0.0289	40.5911
Apatite_100_200_48	53	41.9422	3.8902	0.0165	0.0002	0.0001	0.0291	18.7197	0.0308	0.0028	39.7264
Apatite_100_200_49	54	42.1657	3.5104	0.0002	0.0002	0.0724	0.0001	18.9556	0.0001	0.0001	39.9426
Apatite_100_200_50	55	42.373	4.7743	0.0252	0.0002	0.0139	0.0473	18.8826	0.0001	0.0001	39.184
Apatite_500_600_1	121	43.3402	4.6301	0.0002	0.0002	0.0001	0.0336	19.3226	0.0289	0.0103	40.5805
Apatite_500_600_2	122	37.8958	4.4101	0.012	0.0025	0.0001	0.0337	17.1636	0.0155	0.0001	33.8716
Apatite_500_600_5	125	37.8392	0.0062	0.0053	0.0002	0.006	0.0001	17.5909	0.0115	0.0102	37.2269

Apatite_500_600_6	126	38.2451	0.0092	0.1102	0.0002	0.0208	0.0411	17.9833	0.0001	0.0001	36.5688
Apatite_500_600_7	127	38.397	0.0092	0.0937	0.0002	0.0131	0.0329	18.0395	0.0212	0.0001	36.8224
Apatite_500_600_8	128	37.3341	4.1094	0.0002	0.0002	0.0001	0.0159	17.0538	0.0001	0.0001	33.7273
Apatite_500_600_9	129	39.6015	5.1502	0.0462	0.0002	0.0001	0.0382	17.9585	0.0155	0.0001	34.9463
Apatite_500_600_10	130	41.2772	1.3622	0.0565	0.0002	0.0116	0.0181	18.9993	0.0001	0.0037	39.5643
Apatite_500_600_11	157	42.4516	4.0192	0.0218	0.0002	0.0022	0.02	19.1078	0.0135	0.0075	40.1979
Apatite_500_600_12	158	42.9145	4.2778	0.0002	0.0002	0.0001	0.0127	19.209	0.0001	0.0001	40.7913
Apatite_500_600_13	159	43.3312	4.5	0.0002	0.0002	0.0001	0.0327	19.3961	0.0001	0.0001	40.9447
Apatite_500_600_14	160	43.0042	4.2138	0.0007	0.0002	0.0001	0.0223	19.2235	0.0058	0.0009	41.0109
Apatite_500_600_15	161	43.0651	4.5749	0.0505	0.0002	0.0001	0.0218	19.152	0.0366	0.0037	40.9594
Apatite_500_600_16	162	42.522	4.4983	0.0029	0.0002	0.0055	0.0404	18.8623	0.0058	0.0001	40.604
Apatite_500_600_17	163	42.4045	4.1912	0.0229	0.0002	0.0001	0.0159	18.9785	0.0116	0.0001	40.3069
Apatite_500_600_18	164	42.8895	4.0152	0.0347	0.0002	0.0001	0.0001	19.3751	0.0212	0.0001	40.2493
Apatite_500_600_19	165	42.7515	4.2549	0.0468	0.0002	0.005	0.0245	19.1371	0.0058	0.0065	40.3909
Apatite_500_600_20	166	42.525	3.8807	0.0276	0.0002	0.0028	0.0177	19.0114	0.025	0.0001	40.5981
Apatite_500_600_21	167	42.5438	4.0988	0.0086	0.0002	0.0177	0.0196	19.01	0.0019	0.0121	40.2186
Apatite_500_600_22	168	42.5494	3.9	0.0002	0.0002	0.0001	0.0327	19.0307	0.0001	0.0047	40.0625

Apatite_500_600_23	169	43.0231	4.0052	0.0002	0.0002	0.0149	0.0222	19.3382	0.0212	0.0001	40.6562
Apatite_500_600_24	170	43.0943	4.1365	0.0269	0.0002	0.0001	0.0223	19.3162	0.0001	0.0037	40.8286
Apatite_500_600_25	171	43.1349	4.3133	0.0381	0.0002	0.0028	0.0001	19.3557	0.0289	0.0001	40.0863
Apatite_500_600_26	172	42.6613	4.0806	0.0181	0.0002	0.0094	0.0109	19.0215	0.0385	0.0001	40.2512
Apatite_500_600_31	177	42.6865	4.0233	0.0364	0.0002	0.0017	0.015	19.0738	0.0212	0.0001	40.1629
Apatite_500_600_32	178	43.1707	3.9144	0.0111	0.0002	0.0001	0.0054	19.4516	0.0154	0.0001	40.3901
Apatite_500_600_33	179	43.2165	4.2548	0.0189	0.0002	0.0033	0.0159	19.3956	0.0001	0.0001	40.7771
Apatite_500_600_36	182	42.4013	4.1038	0.029	0.0002	0.0001	0.0018	18.9238	0.0135	0.0001	40.2333
Apatite_500_600_37	183	42.7781	3.9872	0.0013	0.0002	0.0001	0.0127	19.2625	0.0212	0.0001	39.9853
Apatite_500_600_38	184	43.1643	4.1728	0.0484	0.0002	0.0001	0.0209	19.3886	0.0001	0.0001	40.389
Apatite_500_600_39	185	43.0412	4.063	0.0002	0.0002	0.0001	0.0336	19.3195	0.0001	0.0019	40.9118
Apatite_500_600_40	186	42.6732	4.1678	0.0002	0.0002	0.0001	0.0282	18.9819	0.0135	0.0093	40.9611
Apatite_500_600_41	187	42.7246	4.5125	0.0131	0.0002	0.0006	0.0268	19.0263	0.0019	0.0001	40.5982
Apatite_500_600_42	188	42.7238	4.0277	0.0208	0.0002	0.0001	0.0041	19.1955	0.0366	0.0001	40.6093
Apatite_500_600_43	189	42.1286	3.768	0.0002	0.0002	0.0001	0.0354	18.9462	0.0116	0.0001	40.125
Apatite_500_600_44	190	42.3787	3.9016	0.0163	0.0002	0.0001	0.0259	18.9189	0.0077	0.0056	40.7427
Apatite_500_600_45	191	42.9389	3.8899	0.0152	0.0002	0.0133	0.0145	19.2991	0.0077	0.0001	40.0791

Apatite_500_600_46	192	43.3084	4.468	0.0774	0.0002	0.0283	0.0278	19.3534	0.0001	0.0001	40.2911
Apatite_500_600_47	193	42.4109	3.8157	0.0592	0.0002	0.0001	0.0113	19.1423	0.0231	0.0001	39.4224
Apatite_500_600_48	194	42.7808	4.2895	0.033	0.0002	0.0001	0.0295	19.1382	0.0001	0.0009	40.3733
Apatite_500_600_49	195	42.876	4.1143	0.0002	0.0002	0.0001	0.0145	19.1819	0.0001	0.0001	40.7019
Apatite_500_600_50	196	42.5762	4.0987	0.0209	0.0002	0.0028	0.0082	18.9809	0.0058	0.0001	40.6027

Label	W%(Ti)	W%(Cr)	W%(Mn)	W%(Fe)	W%(Mo)	W%(W)	Ox%(O)	Ox%(F)	Ox%(Na)	Ox%(Mg)	Ox%(Al)
Apatite_100_200_1	0.0001	0.0001	0.4634	0.057	0.0001	0.0002	0	5.9375	0.05	0.0003	0.0031
Apatite_100_200_2	0.0098	0.0071	0.3345	0.0001	0.0253	0.6447	0	5.6124	0.0056	0.0003	0.0323
Apatite_100_200_3	0.0065	0.0036	0.242	0.076	0.0001	0.0002	0	5.9855	0.0653	0.0003	0.0115
Apatite_100_200_4	0.0055	0.0142	0.4288	0.0951	0.0001	0.0002	0	5.5999	0.0776	0.0003	0.0003
Apatite_100_200_5	0.0011	0.0107	0.408	0.0856	0.0189	0.0002	0	6.2528	0.0652	0.0003	0.0063
Apatite_100_200_6	0.0001	0.0124	0.7874	0.2374	0.0379	0.055	0	5.5484	0.0259	0.0003	0.0439
Apatite_100_200_7	0.0001	0.0001	0.9772	0.2405	0.0568	0.0002	0	6.0871	0.0495	0.0183	0.0157
Apatite_100_200_8	0.0001	0.0089	0.8253	0.2152	0.0063	0.1237	0	6.292	0.0159	0.0003	0.0262
Apatite_100_200_9	0.0001	0.0177	0.8146	0.2024	0.1072	0.0002	0	6.0063	0.0166	0.0003	0.0073
Apatite_100_200_10	0.0076	0.016	0.7907	0.1582	0.0189	0.0002	0	6.0392	0.0505	0.0003	0.0003

Apatite_100_200_11	0.0001	0.0249	0.6045	0.1424	0.0001	0.0002	0	6.6136	0.0308	0.0003	0.0003
Apatite_100_200_12	0.0001	0.0001	0.7285	0.25	0.0315	0.0002	0	6.3158	0.0128	0.0003	0.0003
Apatite_100_200_13	0.0294	0.0001	0.4522	0.0633	0.082	0.261	0	6.2855	0.0184	0.0003	0.0073
Apatite_100_200_14	0.0001	0.0001	0.4903	0.1804	0.0631	0.0962	0	6.126	0.045	0.0003	0.001
Apatite_100_200_15	0.0185	0.0124	0.7319	0.193	0.0883	0.0002	0	5.7116	0.0448	0.0003	0.0003
Apatite_100_200_17	0.0022	0.0001	0.3213	0.0001	0.0252	0.1237	0	5.5429	0.0645	0.0003	0.0146
Apatite_100_200_19	0.0109	0.0001	0.3595	0.0222	0.0126	0.0002	0	5.8621	0.0465	0.0003	0.0063
Apatite_100_200_20	0.0001	0.0001	0.325	0.0253	0.0001	0.0002	0	5.8027	0.0782	0.0003	0.0003
Apatite_100_200_21	0.0305	0.0036	0.6321	0.095	0.0001	0.0002	0	6.0938	0.0923	0.0003	0.0003
Apatite_100_200_22	0.0001	0.0107	0.4184	0.1362	0.0126	0.0002	0	5.3856	0.0642	0.0003	0.0003
Apatite_100_200_23	0.0306	0.0018	0.3113	0.0697	0.0001	0.0002	0	5.8087	0.0116	0.0003	0.0219
Apatite_100_200_24	0.0164	0.0107	0.6079	0.1203	0.0001	0.0275	0	5.567	0.0728	0.0003	0.0042
Apatite_100_200_25	0.0001	0.0001	0.7463	0.2058	0.0189	0.0002	0	5.8396	0.0572	0.0003	0.0003
Apatite_100_200_26	0.0076	0.0001	0.6636	0.133	0.0001	0.0002	0	6.0283	0.0348	0.0003	0.0003
Apatite_100_200_27	0.0001	0.0001	0.6769	0.0854	0.0126	0.055	0	5.8412	0.0455	0.0003	0.0376
Apatite_100_200_28	0.0033	0.0071	0.6598	0.0855	0.0001	0.165	0	5.7586	0.002	0.0003	0.0003
Apatite_100_200_29	0.0001	0.0001	0.58	0.1929	0.0001	0.3435	0	5.8442	0.0499	0.0003	0.0003

Apatite_100_200_30	0.0001	0.0089	0.6252	0.1298	0.0001	0.0002	0	5.8696	0.0225	0.0003	0.0003
Apatite_100_200_31	0.0283	0.0001	0.9799	0.3447	0.0001	0.0002	0	6.2397	0.0336	0.0282	0.0003
Apatite_100_200_32	0.0001	0.0107	0.7219	0.2342	0.0001	0.0688	0	6.0514	0.0003	0.0003	0.0003
Apatite_100_200_33	0.0054	0.0231	0.8803	0.2626	0.0001	0.1512	0	6.1654	0.0474	0.0003	0.0003
Apatite_100_200_34	0.0174	0.0053	0.8315	0.2529	0.0189	0.1374	0	6.3033	0.0214	0.0003	0.0146
Apatite_100_200_35	0.0087	0.0071	0.8559	0.253	0.0189	0.0412	0	6.1674	0.0349	0.0042	0.0003
Apatite_100_200_36	0.0185	0.0001	0.5906	0.1867	0.0001	0.0002	0	6.2928	0.0506	0.0003	0.0003
Apatite_100_200_37	0.0001	0.0178	0.1902	0.0001	0.0001	0.0002	0	5.7838	0.0063	0.0003	0.0003
Apatite_100_200_38	0.0001	0.0018	1.0068	0.1991	0.0505	0.0961	0	6.3839	0.0003	0.0003	0.0003
Apatite_100_200_39	0.0022	0.0001	0.8114	0.1867	0.0001	0.0002	0	5.1929	0.0948	0.0003	0.0003
Apatite_100_200_40	0.0001	0.0001	0.5628	0.0001	0.0568	0.1786	0	5.8872	0.0594	0.0003	0.0094
Apatite_100_200_41	0.012	0.0248	0.6008	0.2405	0.0945	0.0002	0	6.6568	0.0009	0.0003	0.0241
Apatite_100_200_42	0.024	0.0001	0.6633	0.2533	0.0001	0.055	0	6.5652	0.0066	0.0003	0.0324
Apatite_100_200_43	0.0001	0.0001	0.7532	0.19	0.0001	0.0002	0	6.205	0.026	0.0003	0.0003
Apatite_100_200_44	0.0316	0.0035	0.8768	0.1392	0.0693	0.0002	0	6.2914	0.047	0.0003	0.0199
Apatite_100_200_45	0.0001	0.0001	0.9078	0.2341	0.0001	0.0002	0	6.4924	0.0475	0.0003	0.0003
Apatite_100_200_46	0.0001	0.0001	0.4942	0.1805	0.0001	0.0963	0	6.0668	0.0145	0.0003	0.0003

Apatite_100_200_47	0.0001	0.016	0.7116	0.2152	0.0001	0.0962	0	5.4807	0.0003	0.0003	0.0125
Apatite_100_200_48	0.0001	0.0001	0.5319	0.1804	0.0504	0.0412	0	5.5282	0.0223	0.0003	0.0003
Apatite_100_200_49	0.0011	0.0001	0.5531	0.1362	0.0001	0.0002	0	4.9886	0.0003	0.0003	0.1367
Apatite_100_200_50	0.0001	0.0053	0.7188	0.171	0.0001	0.0002	0	6.7846	0.034	0.0003	0.0262
Apatite_500_600_1	0.0055	0.0001	0.567	0.0792	0.0001	0.0002	0	6.5798	0.0003	0.0003	0.0003
Apatite_500_600_2	0.0239	0.0319	0.6632	0.1551	0.0001	0.1239	0	6.2671	0.0162	0.0042	0.0003
Apatite_500_600_5	0.0001	0.0001	0.7189	0.1298	0.0001	0.0002	0	0.0087	0.0072	0.0003	0.0114
Apatite_500_600_6	0.0273	0.0001	0.7911	0.212	0.076	0.0002	0	0.0131	0.1486	0.0003	0.0394
Apatite_500_600_7	0.0011	0.0001	0.625	0.2213	0.057	0.2196	0	0.013	0.1263	0.0003	0.0248
Apatite_500_600_8	0.0098	0.0001	0.3044	0.0222	0.0001	0.0002	0	5.8398	0.0003	0.0003	0.0003
Apatite_500_600_9	0.0001	0.0142	0.6499	0.1014	0.0001	0.0002	0	7.3188	0.0623	0.0003	0.0003
Apatite_500_600_10	0.0065	0.0001	0.8808	0.1487	0.0001	0.0824	0	1.9357	0.0761	0.0003	0.0218
Apatite_500_600_11	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0	5.7116	0.0294	0.0003	0.0042
Apatite_500_600_12	0.0001	0.0053	0.0139	0.0001	0.0126	0.0002	0	6.0791	0.0003	0.0003	0.0003
Apatite_500_600_13	0.0001	0.0053	0.0001	0.0001	0.0001	0.0138	0	6.3948	0.0003	0.0003	0.0003
Apatite_500_600_14	0.0001	0.0001	0.0001	0.0001	0.0252	0.0138	0	5.9881	0.0009	0.0003	0.0003
Apatite_500_600_15	0.0001	0.0001	0.0035	0.0127	0.0001	0.0002	0	6.5012	0.0681	0.0003	0.0003

Apatite_500_600_16	0.0001	0.0036	0.0173	0.0001	0.0063	0.0002	0	6.3923	0.0039	0.0003	0.0104
Apatite_500_600_17	0.0197	0.0036	0.0001	0.0001	0.0063	0.0002	0	5.956	0.0308	0.0003	0.0003
Apatite_500_600_18	0.0087	0.0001	0.2077	0.0951	0.019	0.0002	0	5.7059	0.0467	0.0003	0.0003
Apatite_500_600_19	0.0001	0.0018	0.1938	0.0001	0.0189	0.0413	0	6.0466	0.0631	0.0003	0.0094
Apatite_500_600_20	0.0001	0.0036	0.2804	0.0317	0.0001	0.0138	0	5.5147	0.0372	0.0003	0.0052
Apatite_500_600_21	0.0001	0.0001	0.4567	0.1173	0.0126	0.0002	0	5.8247	0.0116	0.0003	0.0335
Apatite_500_600_22	0.0001	0.0001	0.4315	0.1992	0.0632	0.412	0	5.5422	0.0003	0.0003	0.0003
Apatite_500_600_23	0.0001	0.0001	0.2975	0.0001	0.0316	0.0002	0	5.6917	0.0003	0.0003	0.0282
Apatite_500_600_24	0.0001	0.0001	0.2216	0.0349	0.0001	0.0002	0	5.8782	0.0363	0.0003	0.0003
Apatite_500_600_25	0.0491	0.0036	0.6982	0.1299	0.0001	0.1239	0	6.1295	0.0514	0.0003	0.0052
Apatite_500_600_26	0.0001	0.0001	0.7882	0.1521	0.0001	0.0138	0	5.7988	0.0244	0.0003	0.0178
Apatite_500_600_31	0.0109	0.0053	0.6254	0.1013	0.0505	0.2475	0	5.7174	0.049	0.0003	0.0031
Apatite_500_600_32	0.0164	0.0195	0.5911	0.076	0.0001	0.1926	0	5.5626	0.015	0.0003	0.0003
Apatite_500_600_33	0.0142	0.0001	0.1627	0.0666	0.0001	0.0002	0	6.0463	0.0254	0.0003	0.0063
Apatite_500_600_36	0.0164	0.0001	0.4394	0.0856	0.0001	0.0002	0	5.8318	0.0391	0.0003	0.0003
Apatite_500_600_37	0.0055	0.0089	0.5289	0.1172	0.0001	0.1789	0	5.6661	0.0018	0.0003	0.0003
Apatite_500_600_38	0.0131	0.0036	0.6227	0.0571	0.0001	0.0002	0	5.9298	0.0653	0.0003	0.0003

Apatite_500_600_39	0.0131	0.0001	0.0001	0.019	0.0001	0.0002	0	5.7738	0.0003	0.0003	0.0003
Apatite_500_600_40	0.0011	0.0001	0.045	0.0095	0.0001	0.0002	0	5.9227	0.0003	0.0003	0.0003
Apatite_500_600_41	0.0001	0.0036	0.0035	0.0001	0.0568	0.0002	0	6.4126	0.0177	0.0003	0.001
Apatite_500_600_42	0.0001	0.0053	0.0001	0.0001	0.0316	0.0002	0	5.7237	0.0281	0.0003	0.0003
Apatite_500_600_43	0.0001	0.0036	0.0104	0.0063	0.0505	0.0002	0	5.3546	0.0003	0.0003	0.0003
Apatite_500_600_44	0.0044	0.0001	0.0001	0.0001	0.0001	0.0002	0	5.5445	0.022	0.0003	0.0003
Apatite_500_600_45	0.0229	0.0178	0.7254	0.1108	0.0759	0.2475	0	5.5278	0.0204	0.0003	0.0251
Apatite_500_600_46	0.0262	0.0001	0.6362	0.244	0.0001	0.0002	0	6.3493	0.1044	0.0003	0.0534
Apatite_500_600_47	0.0001	0.0001	0.6214	0.1613	0.0001	0.3161	0	5.4224	0.0797	0.0003	0.0003
Apatite_500_600_48	0.0087	0.0001	0.2873	0.0381	0.0001	0.0002	0	6.0957	0.0445	0.0003	0.0003
Apatite_500_600_49	0.0098	0.0001	0.2802	0.0792	0.0001	0.0002	0	5.8466	0.0003	0.0003	0.0003
Apatite_500_600_50	0.0001	0.0214	0.2769	0.0507	0.0001	0.0002	0	5.8245	0.0282	0.0003	0.0052

Label	Ox%(Si)	Ox%(P)	Ox%(Cl)	Ox%(K)	Ox%(Ca)	Ox%(Ti)	Ox%(Cr)	Ox%(Mn)	Ox%(Fe)	Ox%(Mo)	Ox%(W)
Apatite_100_200_1	0.0525	44.0129	0.0212	0.0144	56.5897	0.0002	0.0002	0.5983	0.0734	0.0002	0.0002
Apatite_100_200_2	0.0078	43.6836	0.0401	0.0001	56.7052	0.0147	0.0125	0.4319	0.0002	0.0295	0.813

Apatite_100_200_3	0.0379	44.7801	0.0001	0.0001	56.4942	0.0098	0.0063	0.3125	0.0978	0.0002	0.0002
Apatite_100_200_4	0.5588	43.771	0.0094	0.0341	56.7301	0.0082	0.0252	0.5537	0.1223	0.0002	0.0002
Apatite_100_200_5	0.1303	44.7699	0.0401	0.0001	56.8594	0.0016	0.0189	0.5269	0.1101	0.0221	0.0002
Apatite_100_200_6	0.0087	44.0198	0.0378	0.0092	55.8453	0.0002	0.022	1.0168	0.3054	0.0442	0.0694
Apatite_100_200_7	0.036	43.7641	0.0472	0.0223	55.6835	0.0002	0.0002	1.2618	0.3094	0.0663	0.0002
Apatite_100_200_8	0.0331	44.1273	0.0189	0.0001	56.2981	0.0002	0.0157	1.0656	0.2768	0.0074	0.1561
Apatite_100_200_9	0.0418	43.894	0.0472	0.0131	56.0905	0.0002	0.0314	1.0518	0.2604	0.125	0.0002
Apatite_100_200_10	0.0224	44.0185	0.0001	0.0001	56.0977	0.0114	0.0283	1.021	0.2035	0.0221	0.0002
Apatite_100_200_11	0.0243	43.8992	0.0001	0.0001	56.2211	0.0002	0.044	0.7805	0.1833	0.0002	0.0002
Apatite_100_200_12	0.0003	44.7324	0.033	0.0001	56.578	0.0002	0.0002	0.9407	0.3216	0.0368	0.0002
Apatite_100_200_13	0.0243	43.6194	0.0001	0.0001	56.5132	0.0442	0.0002	0.5839	0.0814	0.0956	0.3291
Apatite_100_200_14	0.035	43.8642	0.0001	0.0001	56.2205	0.0002	0.0002	0.6331	0.232	0.0736	0.1213
Apatite_100_200_15	0.0272	43.5682	0.0283	0.0001	55.8215	0.0278	0.022	0.9451	0.2483	0.103	0.0002
Apatite_100_200_17	0.1164	43.3042	0.0001	0.0001	55.6398	0.0033	0.0002	0.4149	0.0002	0.0295	0.1561
Apatite_100_200_19	0.0631	44.2337	0.0094	0.0039	56.2485	0.0164	0.0002	0.4642	0.0285	0.0147	0.0002
Apatite_100_200_20	0.0515	44.2572	0.0071	0.0001	56.0837	0.0002	0.0002	0.4196	0.0326	0.0002	0.0002
Apatite_100_200_21	0.0156	43.3701	0.0001	0.0315	55.5652	0.0458	0.0063	0.8162	0.1222	0.0002	0.0002

Apatite_100_200_22	0.0175	43.2198	0.0001	0.0223	55.3776	0.0002	0.0189	0.5402	0.1753	0.0147	0.0002
Apatite_100_200_23	0.0389	43.4861	0.0354	0.0328	57.0577	0.0459	0.0031	0.4019	0.0897	0.0002	0.0002
Apatite_100_200_24	0.0291	44.4223	0.0094	0.0236	56.2017	0.0245	0.0188	0.785	0.1547	0.0002	0.0347
Apatite_100_200_25	0.0331	43.8527	0.0094	0.0001	56.3871	0.0002	0.0002	0.9636	0.2648	0.0221	0.0002
Apatite_100_200_26	0.0282	44.372	0.0212	0.0197	56.1428	0.0115	0.0002	0.8569	0.1711	0.0002	0.0002
Apatite_100_200_27	0.0185	43.2503	0.0047	0.0079	56.4331	0.0002	0.0002	0.874	0.1099	0.0147	0.0693
Apatite_100_200_28	0.0019	44.0096	0.0001	0.0026	56.7706	0.0049	0.0126	0.852	0.1099	0.0002	0.2081
Apatite_100_200_29	0.0107	44.3032	0.0001	0.0001	56.669	0.0002	0.0002	0.7489	0.2482	0.0002	0.4332
Apatite_100_200_30	0.0214	43.9297	0.0118	0.0092	56.6769	0.0002	0.0157	0.8073	0.167	0.0002	0.0002
Apatite_100_200_31	0.0146	43.1343	0.0071	0.0001	55.83	0.0425	0.0002	1.2653	0.4434	0.0002	0.0002
Apatite_100_200_32	0.0302	43.7472	0.033	0.0001	56.2015	0.0002	0.0188	0.9322	0.3013	0.0002	0.0867
Apatite_100_200_33	0.0243	44.2301	0.0001	0.0001	56.1846	0.0082	0.0408	1.1366	0.3378	0.0002	0.1907
Apatite_100_200_34	0.0486	43.6999	0.0424	0.0066	56.3884	0.0261	0.0094	1.0736	0.3254	0.0221	0.1732
Apatite_100_200_35	0.0798	43.5514	0.0071	0.0001	55.8555	0.0131	0.0126	1.1052	0.3255	0.0221	0.052
Apatite_100_200_36	0.0399	42.8964	0.0259	0.0013	56.1726	0.0278	0.0002	0.7626	0.2402	0.0002	0.0002
Apatite_100_200_37	0.0388	43.9041	0.0001	0.0026	57.7061	0.0002	0.0315	0.2456	0.0002	0.0002	0.0002
Apatite_100_200_38	0.0641	44.645	0.0024	0.0001	55.9291	0.0002	0.0031	1.3	0.2561	0.0589	0.1212

Apatite_100_200_39	0.0602	43.5493	0.0236	0.0001	56.264	0.0033	0.0002	1.0477	0.2401	0.0002	0.0002
Apatite_100_200_40	0.0747	44.0261	0.0236	0.0053	56.7413	0.0002	0.0002	0.7267	0.0002	0.0662	0.2253
Apatite_100_200_41	0.0003	43.5251	0.0001	0.0001	56.4884	0.018	0.0439	0.7757	0.3094	0.1102	0.0002
Apatite_100_200_42	0.0321	44.8571	0.0001	0.0001	56.3097	0.036	0.0002	0.8565	0.3259	0.0002	0.0694
Apatite_100_200_43	0.0003	43.7868	0.0354	0.0118	55.9812	0.0002	0.0002	0.9726	0.2444	0.0002	0.0002
Apatite_100_200_44	0.0003	43.297	0.0141	0.0171	55.5784	0.0474	0.0063	1.1321	0.1791	0.0809	0.0002
Apatite_100_200_45	0.0214	44.1052	0.0001	0.0066	55.9401	0.0002	0.0002	1.1722	0.3012	0.0002	0.0002
Apatite_100_200_46	0.0078	44.1976	0.0001	0.0001	56.4484	0.0002	0.0002	0.6381	0.2322	0.0002	0.1214
Apatite_100_200_47	0.0003	44.2518	0.0142	0.0407	56.7941	0.0002	0.0283	0.9188	0.2769	0.0002	0.1214
Apatite_100_200_48	0.0622	42.893	0.0377	0.0039	55.5842	0.0002	0.0002	0.6867	0.232	0.0588	0.052
Apatite_100_200_49	0.0003	43.4334	0.0001	0.0001	55.8868	0.0016	0.0002	0.7142	0.1752	0.0002	0.0002
Apatite_100_200_50	0.1013	43.2661	0.0001	0.0001	54.8253	0.0002	0.0094	0.9281	0.22	0.0002	0.0002
Apatite_500_600_1	0.072	44.2744	0.0354	0.0145	56.7792	0.0082	0.0002	0.7321	0.1019	0.0002	0.0002
Apatite_500_600_2	0.072	39.3273	0.019	0.0001	47.3923	0.0359	0.0565	0.8564	0.1996	0.0002	0.1562
Apatite_500_600_5	0.0003	40.3064	0.0141	0.0144	52.0871	0.0002	0.0002	0.9283	0.1669	0.0002	0.0002
Apatite_500_600_6	0.0879	41.2056	0.0001	0.0001	51.1662	0.041	0.0002	1.0215	0.2727	0.0886	0.0002
Apatite_500_600_7	0.0704	41.3344	0.026	0.0001	51.521	0.0016	0.0002	0.8069	0.2848	0.0665	0.2769

Apatite_500_600_8	0.034	39.0758	0.0001	0.0001	47.1904	0.0147	0.0002	0.3931	0.0286	0.0002	0.0002
Apatite_500_600_9	0.0818	41.1489	0.019	0.0001	48.8961	0.0002	0.0251	0.8391	0.1304	0.0002	0.0002
Apatite_500_600_10	0.0387	43.5336	0.0001	0.0052	55.3574	0.0098	0.0002	1.1373	0.1913	0.0002	0.1039
Apatite_500_600_11	0.0427	43.7822	0.0165	0.0105	56.244	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Apatite_500_600_12	0.0272	44.0141	0.0001	0.0001	57.0742	0.0002	0.0095	0.0179	0.0002	0.0147	0.0002
Apatite_500_600_13	0.0699	44.4428	0.0001	0.0001	57.2889	0.0002	0.0094	0.0002	0.0002	0.0002	0.0174
Apatite_500_600_14	0.0476	44.0473	0.0071	0.0013	57.3816	0.0002	0.0002	0.0002	0.0002	0.0295	0.0174
Apatite_500_600_15	0.0466	43.8834	0.0448	0.0053	57.3094	0.0002	0.0002	0.0045	0.0163	0.0002	0.0002
Apatite_500_600_16	0.0865	43.2196	0.0071	0.0001	56.8122	0.0002	0.0063	0.0223	0.0002	0.0074	0.0002
Apatite_500_600_17	0.034	43.486	0.0142	0.0001	56.3965	0.0295	0.0063	0.0002	0.0002	0.0074	0.0002
Apatite_500_600_18	0.0003	44.3946	0.026	0.0001	56.3159	0.0131	0.0002	0.2682	0.1224	0.0221	0.0002
Apatite_500_600_19	0.0525	43.8493	0.0071	0.0092	56.514	0.0002	0.0031	0.2503	0.0002	0.0221	0.0521
Apatite_500_600_20	0.0379	43.5613	0.0307	0.0001	56.804	0.0002	0.0063	0.362	0.0408	0.0002	0.0174
Apatite_500_600_21	0.0418	43.5582	0.0024	0.0171	56.2729	0.0002	0.0002	0.5897	0.1509	0.0147	0.0002
Apatite_500_600_22	0.0699	43.6054	0.0001	0.0066	56.0545	0.0002	0.0002	0.5571	0.2563	0.0737	0.5196
Apatite_500_600_23	0.0476	44.31	0.026	0.0001	56.8852	0.0002	0.0002	0.3841	0.0002	0.0368	0.0002
Apatite_500_600_24	0.0476	44.2596	0.0001	0.0053	57.1264	0.0002	0.0002	0.2861	0.0449	0.0002	0.0002

Apatite_500_600_25	0.0003	44.3501	0.0354	0.0001	56.0878	0.0737	0.0063	0.9016	0.1671	0.0002	0.1562
Apatite_500_600_26	0.0234	43.5845	0.0472	0.0001	56.3185	0.0002	0.0002	1.0178	0.1956	0.0002	0.0174
Apatite_500_600_31	0.0321	43.7042	0.026	0.0001	56.195	0.0164	0.0094	0.8075	0.1303	0.059	0.3121
Apatite_500_600_32	0.0117	44.57	0.0189	0.0001	56.5129	0.0246	0.0346	0.7633	0.0978	0.0002	0.2429
Apatite_500_600_33	0.034	44.4417	0.0001	0.0001	57.0544	0.0213	0.0002	0.2101	0.0857	0.0002	0.0002
Apatite_500_600_36	0.0039	43.3605	0.0165	0.0001	56.2936	0.0246	0.0002	0.5674	0.1101	0.0002	0.0002
Apatite_500_600_37	0.0272	44.1366	0.026	0.0001	55.9464	0.0082	0.0157	0.683	0.1508	0.0002	0.2256
Apatite_500_600_38	0.0447	44.4255	0.0001	0.0001	56.5114	0.0197	0.0063	0.804	0.0734	0.0002	0.0002
Apatite_500_600_39	0.0719	44.2672	0.0001	0.0026	57.2429	0.0197	0.0002	0.0002	0.0245	0.0002	0.0002
Apatite_500_600_40	0.0603	43.4937	0.0165	0.0131	57.3118	0.0016	0.0002	0.0581	0.0122	0.0002	0.0002
Apatite_500_600_41	0.0574	43.5954	0.0024	0.0001	56.804	0.0002	0.0063	0.0045	0.0002	0.0663	0.0002
Apatite_500_600_42	0.0087	43.9831	0.0449	0.0001	56.8195	0.0002	0.0095	0.0002	0.0002	0.0368	0.0002
Apatite_500_600_43	0.0757	43.412	0.0142	0.0001	56.1419	0.0002	0.0063	0.0134	0.0082	0.0589	0.0002
Apatite_500_600_44	0.0553	43.3493	0.0094	0.0079	57.0062	0.0066	0.0002	0.0002	0.0002	0.0002	0.0002
Apatite_500_600_45	0.0311	44.2205	0.0095	0.0001	56.0777	0.0344	0.0314	0.9367	0.1425	0.0885	0.3121
Apatite_500_600_46	0.0594	44.3448	0.0001	0.0001	56.3743	0.0393	0.0002	0.8215	0.3139	0.0002	0.0002
Apatite_500_600_47	0.0243	43.8611	0.0284	0.0001	55.1589	0.0002	0.0002	0.8024	0.2075	0.0002	0.3986

Apatite_500_600_48	0.0632	43.8518	0.0001	0.0013	56.4894	0.0131	0.0002	0.371	0.049	0.0002	0.0002
Apatite_500_600_49	0.0311	43.952	0.0001	0.0001	56.9491	0.0148	0.0002	0.3618	0.1019	0.0002	0.0002
Apatite_500_600_50	0.0175	43.4914	0.0071	0.0001	56.8103	0.0002	0.0378	0.3575	0.0653	0.0002	0.0002

Tourmaline EMPA data

Label	No	W%(O)	W%(F)	W%(Na)	W%(Mg)	W%(Al)	W%(Si)	W%(P)	W%(Cl)
tourmaline_1	125	37.1815	0.2623	1.1639	3.2514	16.0549	15.504	0.0019	0.0001
tourmaline_2	126	38.0524	0.2586	1.3401	3.1918	16.5764	15.9696	0.0112	0.0001
tourmaline_3	127	38.4186	0.2498	1.2474	3.2572	16.7841	16.1117	0.0002	0.0017
tourmaline_4	128	37.8924	0.3815	1.1443	3.0484	16.9908	15.6519	0.0149	0.0067
tourmaline_5	129	38.1074	0.1632	1.223	3.1511	17.0368	15.8986	0.0002	0.0001
tourmaline_6	130	38.141	0.2366	1.2574	3.1914	16.9777	15.8577	0.0002	0.0151
tourmaline_7	131	38.7192	0.1257	1.2616	3.031	17.9474	16.1599	0.0002	0.0034
tourmaline_8	132	38.3143	0.1252	1.269	3.1922	16.6717	16.128	0.0002	0.0134
tourmaline_9	133	38.1278	0.201	1.1391	2.9778	17.5949	15.7394	0.0002	0.0001
tourmaline_10	134	38.0841	0.2305	1.2776	3.1241	16.5015	15.9191	0.013	0.0001

tourmaline_11	135	37.747	0.3883	1.2797	3.201	16.0979	15.8472	0.0093	0.0001
tourmaline_12	136	37.9898	0.4479	1.2218	3.2658	15.861	15.7144	0.0167	0.0001
tourmaline_13	137	37.9422	0.3852	1.2316	3.1371	16.5037	15.9504	0.0002	0.0001
tourmaline_14	138	38.1369	0.4399	1.3108	3.3932	16.017	16.0236	0.0002	0.0001
tourmaline_15	139	39.2956	0.1853	1.2823	3.1298	17.6785	16.444	0.0187	0.0001
tourmaline_16	140	37.9624	0.3106	1.32	3.3087	16.0086	15.944	0.0002	0.0001
tourmaline_17	141	37.716	0.2179	1.1457	3.2721	16.2926	15.797	0.0075	0.0001
tourmaline_18	142	36.6637	0.2938	1.2145	2.8915	15.7541	15.4431	0.0223	0.0167
tourmaline_19	143	37.7777	0.4916	1.193	3.3597	15.7561	15.7641	0.0056	0.0033
tourmaline_20	144	38.3974	0.2503	1.3076	3.1402	17.243	15.9669	0.0002	0.0151
Tourmaline_S41_1	196	37.98295	0.215	0.003	0.0716	2.0103	1.8586	0.0017	0.0567
Tourmaline_S41_2	197	38.07612	0.5145	0.1057	0.1773	8.3736	9.2805	0.0339	0.1708
Tourmaline_S41_3	198	38.16929	0.5436	0.1917	0.4772	13.3986	15.9175	0.0001	0.0499
Tourmaline_S41_4	199	40.2136	0.6727	0.0933	1.1418	13.9285	20.7671	0.0056	0.0434
Tourmaline_S41_5	200	39.6414	0.5241	0.2413	0.5009	15.8053	18.5523	0.0001	0.0282
Tourmaline_S41_6	201	36.4553	1.3233	1.4879	1.9775	15.4375	15.0584	0.0148	0.01
Tourmaline_S41_7	202	37.98028	0.5375	0.2691	0.7813	16.2843	20.3936	0.0055	0.005

Tourmaline_S41_8	203	35.5454	0.7915	1.3805	1.9204	15.6758	14.6293	0.0111	0.0367
Tourmaline_S41_9	204	37.5489	1.0021	1.435	2.1416	16.6399	15.471	0.0001	0.0001
Tourmaline_S41_10	205	37.09395	0.6664	0.3442	0.686	16.6225	20.5128	0.0001	0.0448
Tourmaline_S41_11	206	37.03381	0.4302	0.2865	0.5754	15.7222	19.0429	0.0001	0.053
Tourmaline_S41_12	207	36.8995	0.484	0.3548	0.6145	18.3284	21.7945	0.011	0.0001
Tourmaline_S41_13	208	39.3168	0.9739	1.0276	1.6992	16.2668	17.1751	0.0001	0.0133
Tourmaline_S41_14	209	42.8539	0.6035	0.2061	0.9661	16.0212	20.8185	0.0001	0.0382
Tourmaline_S41_15	210	38.6679	0.582	0.2294	0.5444	14.7597	18.4883	0.0256	0.0596
Tourmaline_S41_16	211	43.2819	0.7751	0.2768	0.8679	15.9558	21.0859	0.0128	0.0182
Tourmaline_S41_17	212	44.0975	0.4568	0.3574	0.5256	17.7906	20.7397	0.0092	0.0066
Tourmaline_S41_18	213	36.4981	0.3819	0.9565	1.5399	14.7576	16.1286	0.0147	0.0465
Tourmaline_S41_19	214	37.5106	1.0875	1.479	2.2588	16.2718	15.4427	0.0001	0.0083
Tourmaline_S41_20	215	34.2046	1.1904	1.1642	2.0305	14.78	13.906	0.0055	0.0598

Label	W%(K)	W%(Ca)	W%(Ti)	W%(Cr)	W%(Mn)	W%(Fe)	W%(Mo)	W%(W)
tourmaline_1	0.0081	0.5527	0.9625	0.1388	0.0533	5.9507	0.0002	0.1822
tourmaline_2	0.017	0.6195	0.71	0.109	0.016	6.0258	0.0002	0.0002

tourmaline_3	0.0008	0.573	0.7258	0.0839	0.0934	6.0098	0.0383	0.1483
tourmaline_4	0.0291	0.503	0.6814	0.0815	0.0401	6.0531	0.0002	0.0002
tourmaline_5	0.0089	0.5209	0.5192	0.0695	0.0267	6.0744	0.0002	0.0002
tourmaline_6	0.0356	0.5262	0.5297	0.0743	0.0401	6.1933	0.0002	0.0002
tourmaline_7	0.0001	0.3137	0.3753	0.088	0.0188	5.0671	0.0661	0.0343
tourmaline_8	0.0162	0.6044	0.8119	0.0995	0.0481	6.1565	0.0274	0.0002
tourmaline_9	0.0032	0.3764	0.479	0.1058	0.0802	5.4626	0.0002	0.1715
tourmaline_10	0.0001	0.4759	0.7812	0.1277	0.0133	6.8071	0.0656	0.0456
tourmaline_11	0.0242	0.4898	0.8505	0.1302	0.04	6.646	0.0002	0.0002
tourmaline_12	0.0306	0.8226	1.1587	0.1155	0.0532	7.3315	0.0218	0.2502
tourmaline_13	0.0259	0.5619	0.607	0.1041	0.0027	6.3393	0.0002	0.0002
tourmaline_14	0.0242	0.6393	0.8693	0.0919	0.0506	6.8937	0.0002	0.0002
tourmaline_15	0.0016	0.3111	0.7268	0.0937	0.0321	5.7596	0.0002	0.0343
tourmaline_16	0.0307	0.688	0.9274	0.1711	0.0187	6.4025	0.0002	0.2621
tourmaline_17	0.0162	0.6098	0.741	0.1448	0.0427	6.3642	0.0002	0.0228
tourmaline_18	0.0153	0.4345	0.6688	0.1192	0.0107	6.7901	0.0002	0.0798
tourmaline_19	0.0266	0.8681	1.0355	0.0823	0.0107	7.011	0.0708	0.0002

tourmaline_20	0.0235	0.4395	0.5652	0.1477	0.0267	5.7564	0.0055	0.0002
Tourmaline_S41_1	4.2398	0.013	0.1409	0.0108	0.0001	1.2847	0.0347	0.1334
Tourmaline_S41_2	6.5378	0.0269	0.169	0.0061	0.0296	1.0264	0.1109	0.1478
Tourmaline_S41_3	5.8796	0.0244	0.1211	0.0001	0.0541	1.218	0.0217	0.0344
Tourmaline_S41_4	6.0426	0.0001	0.1236	0.0185	0.0352	1.7461	0.0272	0.0689
Tourmaline_S41_5	8.022	0.0146	0.261	0.0086	0.0243	1.274	0.0539	0.0002
Tourmaline_S41_6	0.1099	0.3025	0.6638	0.0001	0.1004	8.9494	0.0001	0.3061
Tourmaline_S41_7	8.3746	0.0268	0.2537	0.0172	0.0674	1.7108	0.0648	0.2973
Tourmaline_S41_8	0.1456	0.2585	0.4405	0.0024	0.0873	8.207	0.0002	0.2837
Tourmaline_S41_9	0.066	0.2414	0.4856	0.0095	0.1326	8.2444	0.0002	0.0682
Tourmaline_S41_10	8.2671	0.0203	0.2583	0.0001	0.1027	1.469	0.0001	0.0687
Tourmaline_S41_11	8.0998	0.0309	0.2402	0.0222	0.0971	1.5383	0.0001	0.183
Tourmaline_S41_12	8.0375	0.0268	0.2515	0.0001	0.0513	1.4341	0.0001	0.126
Tourmaline_S41_13	2.7976	0.2319	0.4378	0.0156	0.1226	6.4557	0.0001	0.148
Tourmaline_S41_14	8.012	0.0268	0.2329	0.0136	0.0595	1.6676	0.027	0.0002
Tourmaline_S41_15	7.7838	0.0512	0.2159	0.0062	0.0648	1.4317	0.0001	0.0002
Tourmaline_S41_16	8.0609	0.0089	0.2697	0.0012	0.0972	2.0487	0.0001	0.0002

Tourmaline_S41_17	8.3284	0.0187	0.2406	0.0185	0.0838	1.2962	0.0541	0.0573
Tourmaline_S41_18	4.0938	0.2181	0.3768	0.0001	0.1096	4.9201	0.0001	0.2619
Tourmaline_S41_19	0.0539	0.336	0.4748	0.0024	0.1007	8.9294	0.0001	0.0002
Tourmaline_S41_20	0.0819	0.3998	0.4314	0.0106	0.0925	8.5599	0.0001	0.2154

Unknown hydroxide EMPA data

Label	No	W%(O)	W%(F)	W%(Na)	W%(Mg)	W%(Al)	W%(Si)	W%(P)	W%(Cl)	W%(K)	W%(Ca)
Unknown_1	307	18.9342	0.5805	0.0264	0.0554	1.2153	2.0216	0.6417	0.021	0.0548	0.299
Unknown_2	308	19.1522	0.6591	0.0429	0.0766	1.2974	2.1892	0.5742	0.009	0.0837	0.365
Unknown_3	309	19.2832	0.4917	0.0045	0.105	1.5424	2.172	0.5268	0.0001	0.0781	0.479
Unknown_1	310	19.6079	0.5584	0.0003	0.0374	1.1771	2.0342	0.7226	0.003	0.0634	0.299
311	311	19.5617	0.5692	0.0038	0.1064	1.37	2.332	0.5824	0.0001	0.0441	0.348
312	312	20.6659	0.5289	0.0163	0.1201	1.51	2.4243	0.5961	0.012	0.0938	0.4216
313	313	22.166	0.6904	0.0149	0.1479	1.6261	2.6851	0.6109	0.0151	0.06	0.4356
Unknown_1	314	18.3689	0.5965	0.0003	0.0441	1.3302	1.5754	0.6225	0.0001	0.0101	0.4494
Unknown_2	315	18.9032	0.4605	0.002	0.0813	1.4525	1.6553	0.5818	0.0001	0.0187	0.4639
Unknown_3	316	18.8878	0.5434	0.0364	0.0796	1.562	1.5252	0.6091	0.0001	0.0402	0.5045
Unknown_4	317	18.8206	0.6173	0.013	0.0647	1.5644	1.4893	0.5982	0.009	0.0337	0.247

Unknown_5	318	19.0998	0.5369	0.0003	0.0834	1.6288	2.0755	0.6022	0.0001	0.0418	0.255
Unknown_6	319	18.6847	0.4692	0.0773	0.0959	1.4873	1.8813	0.5655	0.012	0.0381	0.302
Unknown_7	320	19.6172	0.6071	0.0351	0.0843	1.312	2.498	0.5879	0.024	0.0784	0.2548
Unknown_8	321	19.2741	0.6282	0.0371	0.067	1.3055	2.1417	0.6036	0.0001	0.0395	0.3361
Unknown_9	322	19.1582	0.677	0.011	0.039	1.387	1.8652	0.6128	0.015	0.0639	0.3995
Unknown_10	323	19.3587	0.5805	0.0313	0.095	1.5334	2.0549	0.5832	0.0001	0.0842	0.3962
Unknown_11	324	19.5925	0.5551	0.0605	0.1534	1.6879	2.3482	0.5231	0.0001	0.0785	0.5354
Unknown_12	325	19.4048	0.5585	0.0724	0.0804	1.3028	1.8295	0.7642	0.027	0.1848	0.3526
Unknown_13	326	19.4665	0.5678	0.0354	0.0685	1.312	2.0707	0.6301	0.0105	0.1214	0.3113
Unknown_14	327	18.9176	0.5169	0.0212	0.1149	1.5482	1.5889	0.5487	0.0446	0.0651	0.4622
Unknown_15	328	18.7005	0.5146	0.063	0.0733	1.5132	1.3699	0.5424	0.0015	0.0802	0.5746

Label	W%(Ti)	W%(Cr)	W%(Mn)	W%(Fe)	W%(Mo)	W%(W)	Ox%(O)	Ox%(F)	Ox%(Na)	Ox%(Mg)	Ox%(Al)
Unknown_1	0.0001	0.0009	0.06	47.341	0.244	2.5423	0	0.8249	0.0355	0.0919	2.2962
Unknown_2	0.0322	0.0001	0.0046	47.1025	0.1466	2.6888	0	0.9366	0.0579	0.127	2.4513
Unknown_3	0.0001	0.012	0.0208	46.5821	0.1667	3.3233	0	0.6987	0.0061	0.1741	2.9143
Unknown_1	0.0021	0.0018	0.0161	49.1187	0.1759	3.0511	0	0.7935	0.0004	0.0621	2.224

311	0.0336	0.0001	0.0001	47.5815	0.1176	3.0588	0	0.8089	0.0052	0.1764	2.5885
312	0.0133	0.0073	0.0439	50.5721	0.0831	2.8633	0	0.7516	0.022	0.1992	2.8529
313	0.0001	0.0001	0.0231	53.5457	0.0687	3.5187	0	0.9811	0.0201	0.2452	3.0723
Unknown_1	0.0146	0.0092	0.0206	45.9301	0.2436	3.4637	0	0.8476	0.0004	0.0732	2.5133
Unknown_2	0.0098	0.0001	0.0184	47.4121	0.2484	3.443	0	0.6544	0.0027	0.1347	2.7444
Unknown_3	0.0237	0.0001	0.0321	47.2966	0.1314	3.3321	0	0.7722	0.049	0.1319	2.9513
Unknown_4	0.007	0.0001	0.0092	47.5893	0.1266	3.3625	0	0.8772	0.0175	0.1072	2.9558
Unknown_5	0.0001	0.0001	0.0001	46.0023	0.2054	3.4317	0	0.7629	0.0004	0.1382	3.0775
Unknown_6	0.0154	0.0001	0.0345	45.7272	0.2003	3.4888	0	0.6668	0.1042	0.1589	2.8102
Unknown_7	0.0001	0.0082	0.0001	47.7263	0.117	2.6206	0	0.8627	0.0473	0.1397	2.479
Unknown_8	0.0001	0.0045	0.0276	48.1744	0.1943	2.2091	0	0.8927	0.05	0.1112	2.4666
Unknown_9	0.0146	0.0073	0.0391	47.669	0.1169	3.0829	0	0.962	0.0148	0.0647	2.6206
Unknown_10	0.0377	0.0055	0.0069	46.9351	0.2197	3.3798	0	0.825	0.0421	0.1575	2.8973
Unknown_11	0.0217	0.0147	0.0323	46.6204	0.1123	2.8069	0	0.7889	0.0816	0.2543	3.1892
Unknown_12	0.0001	0.0001	0.0552	47.9605	0.1852	3.265	0	0.7936	0.0976	0.1334	2.4616
Unknown_13	0.0139	0.0018	0.023	48.5471	0.1946	2.6767	0	0.8069	0.0477	0.1136	2.4789
Unknown_14	0.0187	0.0099	0.0437	49.1007	0.1208	1.4705	0	0.7346	0.0285	0.1904	2.9252

Unknown_15	0.0001	0.0001	0.0689	48.1363	0.1698	2.7033	0	0.7312	0.085	0.1215	2.8591
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LA-ICP-MS data

Wolframite

Name	Na23	Mg24	Al27	Si29	S33	S34	K39	Ca43	Sc45	Ti47	V51
1	6.66	1240.18	10.78	6738.58	0	0	0	0	19.21	263.59	4.96
2	8.31	1376.83	18.03	8568.91	0	0	0	0	33.31	155.43	4.19
3	4.14	1296.18	15.86	9709.26	0	0	0	0	19.26	473.77	6.29
4	4.43	1281.58	17.79	7772.86	0	0	0	0	22.16	283.13	4.43
5	1.65	1086.45	8.8	3319.37	0	0	0	337.17	31.93	294.13	4.56
6	3.13	1150.81	13.58	4110.52	0	0	0	0	32.04	690.06	8.92
7	6.1	1173.62	10.51	5450.33	0	0	0	0	16.52	249	4.73
8	2.1	1153.93	15.61	4328.06	0	0	0	250.29	33.6	627.23	8.77

9	8.58	1026.57	14.37	6478.2	0	0	0	21191.56	28.43	259.6	4.65
9B	0	1221.75	14.34	6816.21	0	0	0	0	20.28	295.92	4.97
10	4.33	1259.08	17.03	7071.85	0	0	0	174.38	19.08	445.32	5.88
S31	0.0033	0.79	0.039	0	0	0	0.077	0	0.0039	0.207	0.00181
S32	2.27	1231.07	11.37	0	0	0	62.55	0	5.86	324.98	3.74
S33	2.3	1372.44	15.76	0	0	0	15.09	0	21.24	114.78	2.65
S34	48.92	1264.62	34.59	3884.85	0	0	0	0	18.43	214.36	2.35
S35	5.97	1337.94	17.86	3868.93	0	0	0	0	4.88	697.37	2.44
S36	3.36	1335.23	9.68	3069.11	0	0	0	0	4.44	244.17	2.81
S37	0	1416.88	8.85	3926.58	0	0	0	0	9.74	143.58	2.1
S38	7.92	1440.25	37.17	2819.3	0	0	0	0	6.29	171.11	2.15
S39	0	1449.24	10.84	5040.55	0	0	0	0	11.72	105.63	1.56
S310	3.82	1425.84	94.64	4028.03	0	0	0	0	12.82	77.6	1.87
SY1	1.97	740.14	0	0	0	0	46.13	0	4.59	113.53	1.93
SY2	2.01	973.28	12.93	0	0	0	110.3	0	11.99	234.7	3.24
SY3	0	1197.54	11.78	0	0	0	65.44	0	31.23	199.35	3.84
SY4	0	1221.48	14.02	0	0	0	0	0	32.43	186.08	3.76

SY5	0	1271.26	24.34	4890.19	0	0	0	0	33.74	138.56	3.05
SY6	2.41	1051.99	11.29	0	0	0	0	0	12.97	228.3	2.43
SY7	2.53	1012.4	6.56	4289.91	0	0	10.28	0	22.05	314.13	4.55
SY8	2.9	1308.33	11.57	2712.76	0	0	0	0	37.46	409.52	6.35
SY9	0	1311.03	16.5	3616.93	0	0	0	0	30.77	530.49	6.65
SY10	7.5	903.62	0	0	0	0	0	645.83	10.2	54.19	1.31

Name	Ce140	Pr141	Nd146	Sm147	Eu153	Gd157	Tb159	Dy163	Ho165	Er166	Yb172
1	23.08	9.08	1.51	4.84	25.95	2.88	16.32	8.39	16.02	31.35	102.64
2	20.57	5.84	1.25	4.84	23.63	3	11.39	22.77	31.16	93.6	139.98
3	17.96	6.69	1.22	4.8	23.04	2.49	14.76	9.02	11	22.39	80.38
4	19.38	6.75	1.15	4.52	22.08	3.78	13.17	7.12	14.47	30.71	49.24
5	15.64	3.14	0.78	5.38	21.45	2.8	9.74	30.78	40.12	111.39	310.96
6	38.27	35.83	2.17	5.97	42.05	3.97	24.73	16.19	21.75	53.09	95.21
7	32.53	9.25	1.85	5.97	43.4	3.8	19.18	13.79	19.99	18.85	48.59
8	24.02	8.92	1.78	5.75	29.79	3.38	20	21.33	30.29	52.5	110.44
9	111.28	6.66	1.49	4.38	28.05	2.78	13.74	23.22	26.63	72.55	151.78

9B	17.35	6.22	1.31	4.64	19.28	2.55	14.81	9.96	19.12	44.43	86.04
10	25.26	4.33	1.24	4.74	18.37	2.11	13.74	9.29	73.46	49.47	84.25
S31	0.007	0.002	0.00054	0.002	0.01	0.0014	0.02	0.04	0.06	0.09	0.12
S32	17.25	5.49	1.21	4.84	21.15	3.02	15.9	21.19	28.46	55.36	65.23
S33	19.92	7.18	1.76	4.44	29.92	3.19	15.31	9.75	33.18	55.61	130.4
S34	84.3	7.46	1.58	5.11	29.71	2.66	14.9	48.48	68.17	109.65	149.81
S35	21.17	6.23	1.63	4.92	25.97	2.81	21.91	62.75	79.75	146.85	138.87
S36	41.23	13.51	2.25	6.91	50.73	3.88	40.52	12.8	24.98	22.07	33.99
S37	44.86	14.86	2	8.91	47.93	4.29	29.83	33.15	85.7	103.33	164.87
S38	162.79	11.87	2.01	5.77	61.32	3.93	26.69	32.04	67.16	114.66	131.25
S39	30.6	9.24	2.02	6.31	37.38	4.14	21.67	46.46	70.93	152.37	240.58
S310	310.64	11.07	2.1	7.06	35.01	3.96	25.04	36.26	73.27	121.86	240.07
SY1	3.63	1.19	0.56	3.66	10.86	3.49	32.43	40.66	86.94	186.35	279.76
SY2	19.17	2.72	0.83	2.91	13.85	6.34	60.18	124.67	214.53	368.02	463.86
SY3	21.28	6.01	1.45	6.18	34.46	9.57	177.66	400.35	701.49	1501.7	2044.81
SY4	24.91	8.2	2.18	8.45	52.38	11.37	219.69	432.96	794.91	1576.53	2252.19
SY5	22.89	7.1	1.81	6.87	38.54	9.18	122.77	246.61	460.05	919.7	1405.68

SY6	23.87	6.87	1.61	6.19	24.84	3.2	16.98	23.53	61.86	104.56	162.09
SY7	17.13	4.88	1.21	3.4	16.06	2.37	19.19	26.66	52.47	104.18	161.9
SY8	17.84	6.25	1.7	5.53	30.18	2.53	19.39	30.87	43.27	85.02	150.27
SY9	146.42	10.04	1.85	5.97	37.89	3.61	19.8	32.46	42.66	78.43	119.91
SY10	55.66	14.03	4.93	7.81	58.43	4.82	25.91	61.97	47.51	284.55	484.17

Name	Lu175	Hf178	Ta181	W184	Ir193	Au197	Pb208	Bi209	Th232	U238
1	119.55	33.34	4818.15	644097.7	0	1.42	0.315	0.02	55.75	1915.56
2	246.75	58.02	12718.49	644097.8	0	1.35	0.431	0.0193	53.3	769.92
3	86.56	37.78	3197.1	644097.8	0	1.15	0.058	0.0182	106.55	5725.29
4	91.7	44.36	3851.8	644097.8	0	1.17	0.198	0.0148	74.99	1268.34
5	424.07	85.98	11532.94	644097.8	0	1.46	0.047	0.0161	105.79	6832.26
6	102.93	81.94	2288.82	644097.8	0	1.05	0.056	0.031	143.51	9569.22
7	43.44	14.9	706.93	644097.8	0	0.98	0.051	0.021	88.12	1509.99
8	140.45	89.58	2925.83	644097.8	0	0.97	0.059	0.0216	131.51	9929.52
9	196.1	54.41	5737.16	644097.8	0	1.02	0.55	0.0204	84.41	4974.51
9B	171.91	39.39	4620.21	644097.8	0	0.94	0.189	0.019	73.78	3030.33

10	139.58	44.06	3046.02	644097.7	0	0.93	0.311	0.0143	68.13	4918.86
S31	0.14	0.05	2.24	445.3	0	0.00245	0.00042	0.00001	0.04	1.95
S32	84.22	56.28	2444.06	644097.8	0	1.53	0.337	0.0183	101.94	2426.08
S33	170.53	38.8	25470.41	644097.8	0	1.07	0.222	0.0186	83.41	1269.74
S34	175.26	29.95	33141.91	644097.8	0	1.02	0.173	0.039	115.62	2368.31
S35	136.41	42.71	1597.54	644097.8	0	0.99	0.107	0.0236	89.23	8641.07
S36	37.04	122.55	3117.94	644097.8	0	1.07	0.68	0.034	43.57	1601.95
S37	225.22	76.3	11837.17	644097.8	0	1.07	0.299	0.032	78.51	850.58
S38	181.22	58.26	4002.67	644097.8	0	1.01	0.69	0.025	66.57	1149.27
S39	350.5	6.32	5417.28	644097.8	0	0.9	0.346	0.023	65.58	427.89
S310	296.85	13.43	6404.63	644097.7	0	0.87	0.95	0.024	62.02	889.98
SY1	301.72	22.2	1061.67	644097.8	0	7.67	0.019	0.0089	31.68	1503.07
SY2	516.57	34.66	2557.01	644097.8	0	2.73	0.0211	0.0116	72.97	2257.62
SY3	2406.15	94.12	71234.62	644097.8	0	1.36	0.032	0.0168	135.47	6174.71
SY4	2709.2	93.32	80320.34	644097.8	0	1.17	0.73	0.0245	132.37	5536.89
SY5	1663.79	69.58	55171.61	644097.8	0	1.02	0.111	0.024	113.99	3678.1
SY6	201.89	18.75	4672.31	644097.8	0	0.95	0.174	0.0155	100.02	1419.04

SY7	234.78	35.84	4633.5	644097.8	0	1.05	0.033	0.0208	82.49	5102.36
SY8	250.09	35.87	11354.03	644097.8	0	0.77	0.051	0.026	94.37	3050.29
SY9	146.46	37.88	3976.86	644097.8	0	0.91	1.18	0.056	118.95	4310.05
SY10	450.74	9.44	31256.83	644097.8	0	0.98	0.84	0.036	29.57	700.19

Scheelite

Name	Na23	Mg24	Al27	Si29	S33	S34	K39	Ca43	Sc45	Ti47	V51
SCH1	11.45	111.78	0	0	0	0	0	187376.1	0	0	0
SCH2	13.63	113.48	0	0	0	0	0	154546.8	0	0	0
SCH3	17.81	125.98	0	2100.76	0	0	0	189579	0	0	0
SCH4	11.05	117.25	0	0	0	0	0	162491.5	0	0	0
SCH5	42.38	135.24	0	3094.57	0	0	0	198735.6	0	0	0
SCH6	18.96	112.64	0	0	0	0	0	194608	0	0	0
SCH7	23.53	116.27	0	2216.93	0	0	0	193884.7	0	0	0
SCH8	59.45	124.33	0	2604.97	0	0	0	187085.2	0.42	0	0
SCH9	26.76	116.15	0	2587.85	0	0	0	193375.1	0	0	0

SCH10	23.43	110.76	0	2457.59	0	0	0	189260	0	0	0
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Name	Cr52	Mn55	Fe57	As75	Se82	Sr88	Y89	Zr90	Nb93	Ba137	La139
SCH1	1.16	115.31	141.78	0	0	2805.05	35075.55	0	5322.06	0.21	15382.33
SCH2	3.28	98.93	133.29	0	0	2709.11	12621.27	0	1211.89	0	8637.9
SCH3	2.03	102.25	141.37	0	0	2890.88	33419.58	0	4697.1	0	15413.77
SCH4	3.32	101.45	118.56	0	0	2774.15	13590.29	0	1269.49	0	8868.23
SCH5	1.9	104.21	140.54	5.56	0	2934.29	37338.49	0.62	6343.5	0	12841.63
SCH6	1.05	93.62	126.39	0	0	3305.09	20480.17	0	2184.76	0	11420.09
SCH7	2.74	97.16	135.71	0	0	3948.15	25700.09	0	3249.52	0.24	13248.67
SCH8	1.34	91.64	850.3	0	0	3491.11	36648.95	0	5028.9	0.48	14980.86
SCH9	2.21	110.39	231.58	0	0	3285.52	18532.19	0	1880.97	0.4	12157.35
SCH10	2.3	108.35	141.1	6.55	0	3128.98	20651.43	0	2306.62	0	16820.09

Name	Ce140	Pr141	Nd146	Sm147	Eu153	Gd157	Tb159	Dy163	Ho165	Er166	Yb172
SCH1	279938.4	8066.14	661.15	254.66	19111.48	141.05	1421.05	2426.71	3527.17	5938.38	6964.77

SCH2	109042.3	2544.41	146.35	50.76	20960.96	41.46	436.58	937.72	1549.64	2954.73	6068.98
SCH3	273078	7117.38	494.23	151.58	19555.96	103.15	1124.32	2031.89	3067.17	5708.5	7410.13
SCH4	110025.7	2362.91	136.61	51.14	24534.97	40.65	491.28	1050.21	1735.8	3405.9	6953.73
SCH5	296741.8	9265.22	772.7	293.35	18187.93	181.9	1691.75	2838.66	4055.89	6729.52	6777.99
SCH6	140780.3	2769.63	160.28	50.53	23403.25	46.68	542.86	1248	1915.91	3637.36	6065.44
SCH7	201164.3	4993.92	352.02	122.76	20546.09	78.74	862	1705.2	2374.27	4503.09	6276.39
SCH8	293980.6	8320.93	621.91	234.45	20229.56	132.32	1376.74	2445.78	3522.71	6424.5	7808.71
SCH9	132810.3	2504.24	137.43	44.68	23241.46	42.42	563.21	1101.73	1893.98	3510.41	5830.09
SCH10	202578	4028.31	219.5	56.77	24763.4	58.86	772.25	1308.8	2170.19	3798.43	5929.81

Name	Lu175	Hf178	Ta181	W184	Ir193	Au197	Pb208	Bi209	Th232	U238
SCH1	7855.1	0	1475.99	667724.5	0	0.9	17.5	0.029	1164.71	1275.23
SCH2	7656.05	0	743.78	667724.5	0	1.07	28.94	0.053	1745.34	2486.39
SCH3	8313.85	0	1517.83	667724.5	0	0.86	18.83	0.031	1033.72	1199.49
SCH4	8540.95	0	689.81	667724.5	0	1.13	29.27	0.111	2762.97	3978.39
SCH5	6756.9	0	1991.16	667724.5	0	0.97	18.66	0	810.32	930.88
SCH6	7471.49	0	766.58	667724.4	0	0.79	16.97	0	1738.83	2252

SCH7	7470.81	0	1047.38	667724.5	0	0.95	17.2	0.047	1398.4	1559.15
SCH8	8365.77	0	1671.57	667724.5	0	0.82	16.66	0.037	963.92	1717.25
SCH9	7605.27	0	926	667724.5	0	0.81	17.73	0.068	2494.11	3065
SCH10	7055.85	0	1076.18	667724.5	0	0.8	17.34	0.051	1987.53	2016.68

Sphalerite

Element	Na23	Mg24	Al27	Si29	S33	S34	K39	Ca43	Sc45	Ti47	V51
ZnS1	14.65	1.65	10.24	1370.84	<0.00	<0.00	12.88	265.53	0.134	13.9	0.147
ZnS2	45.67	35.08	31.43	1278.65	<0.00	<0.00	114.71	537.73	0.26	10.91	0.32
ZnS3	13.14	1.58	7.48	1470.7	<0.00	<0.00	12.4	297.55	0.125	21.57	0.29
ZnS4	6.88	1.41	6.84	2171.99	<0.00	<0.00	10.76	341.32	0.121	20.77	0.13
ZnS5	3.64	1.96	9.72	1299.11	<0.00	<0.00	15.21	376.34	0.145	18.49	0.17

Element	Cr52	Mn55	Fe57	Zn66	Ga69	Ge72	As75	Se82	Sr88	Y89	Zr90	Nb93
ZnS1	1.9	226.48	57970	540831	6.75	0.77	3.37	56.44	0.058	0.053	0.103	0.064

ZnS2	1.36	252.68	38443.96	540831	4.93	1.46	10.49	31.75	0.53	0.21	0.7	0.14
ZnS3	1.47	226.46	36139.44	540831	6.72	0.8	3.28	46.71	0.055	0.042	0.085	0.041
ZnS4	2.42	226.32	37238	540830.9	4.9	0.66	2.79	37.59	0.03	0.03	0.052	0.032
ZnS5	2.21	226.18	38240.67	540830.9	4.29	0.89	3.91	37.34	0.042	0.042	0.085	0.048

Element	In115	Ba137	La139	Ce140	Pr141	Nd146	Sm147	Eu153	Gd157	Tb159	Dy163	Ho165
ZnS1	107.51	0.2	0.051	0.048	0.046	0.126	0.16	0.071	0.15	0.05	0.11	0.049
ZnS2	122.19	0.36	0.084	0.199	0.075	0.21	0.34	0.13	0.28	0.091	0.24	0.085
ZnS3	115.52	0.31	0.045	0.035	0.035	0.128	0.128	0.055	0.11	0.034	0.093	0.039
ZnS4	117.54	0.13	0.023	0.03	0.02	0.089	0.102	0.037	0.107	0.019	0.079	0.023
ZnS5	113.07	0.17	0.035	0.033	0.026	0.135	0.125	0.043	0.148	0.029	0.093	0.032

Element	Er166	Yb172	Lu175	Hf178	Ta181	W184	Ir193	Au197	Pb208	Bi209	Th232	U238
ZnS1	0.082	0.12	0.049	0.108	0.039	0.123	0	0.062	10.14	11.45	0.049	0.044
ZnS2	0.27	0.28	0.36	0.2	0.065	6.38	0	0.13	7.53	3.92	0.25	0.09
ZnS3	0.078	0.104	0.042	0.073	0.033	0.21	0	0.055	4.85	3.55	0.036	0.033
ZnS4	0.051	0.063	0.02	0.069	0.021	0.065	0	0.056	3.54	7.18	0.025	0.023
ZnS5	0.075	0.111	0.029	0.103	0.026	0.097	0	0.054	4.17	4.69	0.038	0.0231

Apatite

Name	Na23	Mg24	Al27	Si29	P31	S33	S34	K39	Ca43	Sc45	Ti47	V51	Cr52
Apatite 1	4844.4	309.79	32057.45	0	233545.4	0	0	2020.845	403398.7	2587.99	2230.53	25.685	620.31
Apatite 2	114.42	34.46	101.16	17737.52	201977.8	0	0	7.38	403398.7	0.638	80.08	0.089	1.72
Apatite 3	230.6	35.15	8.24	1628.91	200348.6	0	0	7.38	403398.7	0.202	81.74	0.087	2.14
Apatite 4	510.27	80.99	42.78	343.36	200651.1	0	0	70.81	403398.7	0.184	61.76	0.0905	3.69
Apatite 5	423.66	70.41	8.3	769.94	202890.2	0	0	7.45	403398.7	0.184	54.49	0.097	2.11
Apatite 6	266.31	34.43	16.29	1304.73	201365.4	0	0	6.72	403398.6	0.219	65.21	0.097	1.84
Apatite 7	228	37.82	10.01	886.84	204929.5	0	0	8.125	403398.7	0.096	100.85	0.1015	3.3
Apatite 8	389.2	64.37	10.68	1305.23	210864.2	0	0	6.21	403398.6	0.305	90.46	0.084	2.19
Apatite 9	421.06	80.4	8.52	1500	200598.8	0	0	7.025	403398.7	0.31	58.06	0.088	2.71
Apatite 10	400.25	91.86	4.3	829.2	201339.4	0	0	7.535	403398.7	0.4	72.99	0.093	1.92
Apatite 11	34.55	46.1	169.67	440994.1	161638.1	0	0	26.225	403398.7	2.09	62.77	0.54	1.655
Apatite 12	264.36	33.72	313.04	531698	163550.4	0	0	24.355	403398.6	7.73	44.07	0.3	9.02

Apatite 13	505.02	78.52	4.44	400.62	202927.2	0	0	7.635	403398.7	0.484	57.74	0.091	3.13
Apatite 14	492.48	63.86	15.54	405.185	213908.2	0	0	7.605	403398.7	0.452	39.39	0.103	2.62
Apatite 15	282.48	19.77	143.08	315346.7	162346.7	0	0	19.505	403398.7	4.29	56.77	0.22	3.46
Apatite 16	406.2	172.93	9.69	1372.84	213403	0	0	8.41	403398.7	0.322	83.99	0.1095	1.19
Apatite 17	329.28	120.65	4.42	1372.93	202040.8	0	0	7.505	403398.7	0.28	44.76	0.0825	3.22
Apatite 18	452.45	173.93	4.83	460.76	213640	0	0	8.6	403398.7	0.48	42.87	0.114	2.38
Apatite 19	471.46	156.71	4.74	467.7	222309.6	0	0	26.875	403398.7	0.205	59.49	0.1195	1.75
Apatite 20	349.71	117.79	13.54	1055.2	220826.6	0	0	36.27	403398.7	0.299	58.62	0.098	2.32
Apatite 21	306.52	87.34	4.91	438.37	217386.3	0	0	7.94	403398.7	0.315	57.63	0.0965	2.29

Name	Mn55	Fe57	Zn66	Ga69	Ge72	As75	Se82	Sr88	Y89	Zr90	Nb93
Apatite	3247.37	1719.275	147.36	24.85	458.16	644.22	568.18	913.59	528.16	73.35	13.31

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Apatite 2	1460.53	854.82	13.5	4.26	1.94	2.16	2.96	469.61	445.05	0.284	0.384
Apatite 3	4018.87	1086.84	4.98	7.18	3.55	2.095	3.13	276.56	678.62	0.092	0.05
Apatite 4	7469.63	1718.33	18.26	13.71	6.25	2.045	7.77	318.25	1207.78	0.089	0.038
Apatite 5	6708.74	1592.28	9.41	13.4	5.93	2.23	5.86	327.52	1004.5	0.08	0.052
Apatite 6	4707.58	1046.67	5.82	6.97	3.52	2.7	3.89	806.74	701.03	0.078	0.043
Apatite 7	3707.87	988.46	2.93	5.7	3.05	2.365	4.45	279.02	647.08	0.12	0.088
Apatite 8	6779.63	1421.73	14.7	10.17	4.75	1.835	5.07	312.02	823.69	0.077	0.046
Apatite 9	7117.48	1595.03	8.17	12.69	5.26	2.005	6.8	304.26	1020.86	0.143	0.051
Apatite 10	8723.39	1842.67	14.17	13.26	6.12	2.18	7.89	333.4	1015.89	0.085	0.047
Apatite 11	2699.18	696.62	4.71	14.78	6.25	7.58	7.2	334.35	1090.95	0.91	0.57

Apatite 12	1359.82	1008.14	26.17	2.87	1.085	7.115	6.43	367.14	483.08	0.28	1.07
Apatite 13	6722.53	1570.03	6.03	15.12	4.97	2.225	8.07	385.16	1291.58	0.104	0.289
Apatite 14	6326.01	1417.05	24.66	12.76	4.08	2.255	7.31	405.24	1200.27	0.5	0.045
Apatite 15	2150.09	748.07	15.1	5.39	4.19	5.82	5.04	385.88	693.96	1.4	0.536
Apatite 16	8592.54	2629.17	4.99	10.72	3.21	2.485	2.78	463.41	742.99	0.417	0.054
Apatite 17	8338.31	2189.07	2.48	11.44	1.93	2.27	3.54	519.04	753.17	0.088	0.047
Apatite 18	8625.46	2633.04	2.73	10.39	2.69	2.59	4.04	441.36	731.8	0.103	0.053
Apatite 19	9221.58	2503.6	7.88	9.44	2.58	3.365	2.35	455	644.52	0.106	0.066
Apatite 20	6579.79	1851.82	6.33	6.19	1.89	2.575	3.77	408.63	499.32	0.427	0.051
Apatite 21	4578.56	1438.82	10.12	6.05	2.2	1.19	2.13	366.56	439	5.22	0.118

Name	In115	Sn118	Ba137	La139	Ce140	Pr141	Nd146	Sm147	Eu153	Gd157	Tb159	Dy163	Ho165
Apatite 1	17.69	145.23	56.75	93.53	317.84	37.88	167.04	44.25	17.02	77.48	9.31	39.19	9.87
Apatite 2	0.295	41.92	0.52	114.83	295.77	32.69	118.79	32.57	18.15	33.29	7.87	56.3	11.65
Apatite 3	0.16	4.39	0.36	211.64	454.21	53.59	207.13	48.97	15.56	52.41	11.53	84.53	19.15
Apatite 4	1.05	133.51	0.57	403.53	925.15	103.67	378.17	90.22	22.98	99.38	22.18	164.02	37.53
Apatite 5	0.174	31.6	0.55	399.68	869.77	101.58	363.32	79.01	22.06	80.18	17.89	133.72	29.95
Apatite 6	0.126	20.17	1.05	205.1	485.35	61.83	245.43	62.55	18.68	63.38	14.05	99.9	21.64
Apatite 7	0.131	11	0.45	180	435.42	52.63	207.2	49.98	14.59	54.93	11.87	85.81	19.53
Apatite 8	0.539	59.04	0.37	321.21	723.19	82.74	290.63	63.77	21.06	62.15	13.68	102.78	22.72
Apatite 9	0.386	5.33	0.31	397.39	855.87	94.75	351.5	76.55	22.41	77.88	17.31	128.02	29.33
Apatite 10	0.446	59.72	0.45	413.02	926.49	105.11	369.96	80.73	27.62	79.81	18.13	132.66	30.18

Apatite 11	0.58	6.06	1.42	593.69	1255.25	137.92	509.06	103.79	20.38	108.44	18.88	133.06	25.9
Apatite 12	0.157	4.38	0.87	116.13	255.54	30.2	116.05	31.3	19.16	31.7	7.56	57.46	12.19
Apatite 13	0.226	56.71	0.4	529.3	1036.15	107.84	341.79	74.08	29.04	80.02	19.49	153.03	36.37
Apatite 14	0.309	64	0.46	452.01	910.48	94.37	299.6	65.03	28.16	69.12	17.39	138.88	32.93
Apatite 15	0.239	64.07	0.56	188.15	470.13	58.3	222.8	62.16	17.68	64.07	13.21	87.63	17.97
Apatite 16	0.078	35.69	0.23	378.47	750.84	74.03	225.67	45.94	33.55	43	10.74	83.43	19.48
Apatite 17	0.058	12.29	0.41	400.49	689.54	60.68	165.19	33.42	74.5	30.99	8.29	68.52	16.5
Apatite 18	0.059	15.8	0.3	365.25	714.91	69.91	217.74	45.44	32.71	41.15	10.32	78.76	18.47
Apatite 19	0.271	45.21	0.36	333.08	641.84	63.19	188.11	38.58	31.63	34.71	8.95	71.59	16.14
Apatite 20	0.143	32.62	0.68	211.72	442.68	42.27	133.92	29.7	26.05	29.52	7.06	54.15	12.49
Apatite	0.246	61.07	0.25	207.76	409.13	41.67	135.7	31.67	22.1	30.8	7.02	51.69	11.57

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Name	Er166	Yb172	Lu175	Hf178	Ta181	W184	Ir193	Au197	Pb208	Bi209	Th232	U238
Apatite 1	27.09	33.53	8.6	26.36	8.92	30.64	0	11.14	9.235	5.525	9.34	8.42
Apatite 2	34.5	39.15	5.16	0.085	0.031	2.76	0	0.0445	3.51	0.106	9.23	1.2
Apatite 3	60.43	77.58	10.6	0.09	0.032	1.37	0	0.0465	1.34	0.047	14.08	2.58
Apatite 4	113.64	128.34	17.14	0.091	0.032	0.64	0	0.039	4.26	0.087	14.67	4.86
Apatite 5	93.16	113	15.37	0.093	0.028	1.95	0	0.042	4.86	0.058	9.04	5.05
Apatite 6	65.24	72.81	9.89	0.094	0.0234	2.48	0	0.04	2.94	0.038	4.77	3.77
Apatite 7	58.56	69.89	9.3	0.15	0.045	3.31	0	0.037	2.71	0.058	3.36	2.42
Apatite 8	74.27	99.06	13.8	0.086	0.035	1.99	0	0.0345	5.11	0.086	7.2	4.34
Apatite 9	93.71	117.31	16.56	0.089	0.046	0.47	0	0.0415	2.7	0.065	11.91	5.75

Apatite 10	95.34	118.74	16.28	0.096	0.036	0.83	0	0.0445	6.3	0.048	7.98	6.94
Apatite 11	76.98	81.44	8.96	0.78	0.42	1.09	0	0.13	10.83	0.52	30.15	0.53
Apatite 12	37.07	46.91	6.73	0.35	0.115	2.07	0	0.16	15.92	0.195	11.13	1.28
Apatite 13	113.96	130.14	16.75	0.094	0.031	1.01	0	0.0465	8.04	0.238	94.31	10.72
Apatite 14	103.09	119.32	15.65	0.092	0.037	0.9	0	0.045	8.02	0.266	72.05	8.43
Apatite 15	51.28	54.79	7.35	0.238	0.08	1.86	0	0.1225	9.45	0.115	37.97	2.6
Apatite 16	64.87	103.01	14.63	0.103	0.041	0.46	0	0.0495	7.15	0.285	39.92	21.51
Apatite 17	58.97	124.28	18.02	0.11	0.058	1.1	0	0.048	8.74	0.164	92.86	30.01
Apatite 18	63.05	102.73	14.99	0.109	0.03	0.52	0	0.0625	6.53	0.208	31.06	18.21
Apatite 19	56.5	93.74	13.36	0.105	0.028	0.552	0	0.055	7.37	0.151	35.27	23.86
Apatite	41.93	70.78	10.45	0.104	0.033	1.67	0	0.045	6.5	0.26	34.54	18.67

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Apatite 21	38.36	60.49	8.85	0.235	0.053	1.16	0	0.0465	8.89	1.35	54.31	21.75

Fluorite

Element	Na23	Mg24	Al27	Si29	P31	S33	S34	K39	Ca43	Sc45	Ti47	V51
Fluorite 1	25.49	6.02	12.3	411.295	0	0	0	6.76	553184.3	0.276	0.745	0.166

Fluorite 2	24.15	6.27	50.4	541.09	2.99	0	0	57.67	553184.3	0.15	1.55	0.111
Fluorite 3	57.75	6.71	15.71	649.07	20.07	0	0	157.88	553184.3	0.0635	0.775	0.142
Fluorite 4	23.94	6.53	5.155	1343.15	8.025	0	0	60.24	553184.3	0.098	1.025	0.221
Fluorite 5	33.19	7.68	29.81	369.825	28.68	0	0	96.37	553184.3	0.073	4.27	0.192
Fluorite 6	16.46	5.42	4.215	381.415	5.89	0	0	66.49	553184.3	0.201	0.735	0.18
Fluorite 7	42.61	9.53	39.4	325.29	4.38	0	0	99.49	553184.3	0.069	3.29	0.148
Fluorite 8	29.69	3.24	11.69	402.07	5.09	0	0	110.29	553184.3	0.0705	0.7	0.202
Fluorite 9	41.09	8.81	29.42	280.005	2.925	0	0	103.42	553184.3	0.059	1.61	0.135
Fluorite 10	72.72	10.31	14.51	291.45	3.035	0	0	55.86	553184.3	0.0595	1.44	0.123
Fluorite 11	29.13	6.61	8.86	761.31	7.72	0	0	15.345	553184.3	0.17	1.475	0.44
Fluorite 12	61.45	9.15	21.55	642.18	7.75	0	0	117.35	553184.3	0.0515	1.33	0.121

Element	Cr52	Mn55	Fe57	Zn66	Ga69	Ge72	As75	Se82	Sr88	Y89	Zr90	Nb93
Fluorite 1	1.13	0.34	1148.87	1.25	0.043	0.27	2.14	0.92	71.69	54.45	1.84	0.02

Fluorite 2	1.35	0.69	868.79	3.86	0.234	0.36	1.365	0.58	85.66	65.92	0.379	0.013
Fluorite 3	2.16	1.11	578.76	9.03	0.207	0.58	1.78	2.17	92.04	89.03	0.764	0.067
Fluorite 4	0.56	0.32	580.59	7.08	0.159	0.365	2.575	1.23	111.09	44.65	7.71	0.029
Fluorite 5	1.6	0.26	624.65	7.91	0.147	0.285	1.995	0.875	108.96	55.68	0.596	0.053
Fluorite 6	1.22	0.235	544.92	8.78	0.3	0.3	2.11	1.02	94.94	84.33	2.25	0.0305
Fluorite 7	1.81	0.84	580.64	11.82	0.273	0.25	1.74	0.775	106.04	76.81	1.54	0.079
Fluorite 8	1.69	0.22	558.8	3.73	0.06	0.31	2.205	0.99	125.95	47.25	0.297	0.025
Fluorite 9	1.15	0.35	495.72	7.61	0.16	0.22	1.555	0.675	105.86	86.1	0.07	0.017
Fluorite 10	1.15	0.8	473.4	10.4	0.083	0.225	1.58	0.685	101.4	105.27	0.359	0.018
Fluorite 11	0.895	5.18	438.86	4.04	0.0935	0.605	4.32	1.785	90.73	85.76	1.4	0.0425
Fluorite	1.63	0.51	795.46	30.65	0.087	0.215	1.48	0.69	85.17	90.13	0.149	0.095

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Element	In115	Sn118	Ba137	La139	Ce140	Pr141	Nd146	Sm147	Eu153	Gd157	Tb159	Dy163	Ho165
Fluorite 1	0.266	1.52	0.219	1.13	3.71	0.966	6.1	2.8	3.71	3.52	0.587	2.41	0.545
Fluorite 2	0.528	117.39	0.97	4.93	12.8	2.3	13.05	4.46	8	5	0.781	4.99	0.874
Fluorite 3	0.861	159.6	0.49	5.92	17.61	3.87	20.81	5.96	15.3	9.05	1.19	7.03	1.25
Fluorite 4	0.325	64.82	0.16	4.9	10.85	1.91	11.5	3.25	11.14	3.51	0.454	2.66	0.542
Fluorite 5	0.976	193.74	0.37	6.76	15.34	2.99	14.68	4.4	15.17	4.67	0.719	4.08	0.74
Fluorite 6	0.0755	2.335	0.115	8.21	23.19	4.71	20.24	7.34	22.04	7.55	1.17	6.41	1.25
Fluorite 7	1.4	342.94	0.284	7.09	17.7	3.46	17.25	6.12	17.96	6.22	0.95	5.91	1
Fluorite 8	0.65	162.12	0.82	4.19	12.02	1.95	11.15	3.27	11.31	3.5	0.557	3.13	0.497
Fluorite	1.3	208.2	1.55	4.36	15.51	3.88	20.55	6.64	12.34	6.99	1.16	7.65	1.29

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Fluorite 10	1.89	193.74	0.76	1.92	11.7	3.18	20.11	6.61	11.45	8.26	1.37	7.59	1.37
Fluorite 11	0.447	85.01	0.16	3.31	12.59	3.16	17.88	5.87	10.75	6.31	1.03	5.79	1.23
Fluorite 12	1.29	530.26	0.62	2.28	11.45	2.93	18.03	5.46	10.43	6	1.11	6.37	1.26

Element	Er166	Yb172	Lu175	Hf178	Ta181	W184	Ir193	Au197	Pb208	Bi209	Th232	U238
Fluorite 1	1.09	1.48	0.304	0.048	0.017	0.165	0	0.042	0.0565	0.016	1.64	0.0165
Fluorite 2	2.22	2.63	0.416	0.067	0.00845	0.15	0	0.024	0.228	0.15	0.032	0.0083
Fluorite 3	2.65	3.92	0.59	0.0475	0.08	1.39	0	0.0345	0.464	0.017	0.11	0.0135
Fluorite 4	1.08	1.83	0.218	0.056	0.0205	0.195	0	0.0505	0.1175	0.025	0.0275	0.0245
Fluorite 5	1.63	1.79	0.318	0.0455	0.0195	1.85	0	0.076	1.91	0.0195	0.045	0.021
Fluorite	2.76	3.86	0.651	0.0535	0.02	0.31	0	0.2	0.0925	0.022	0.66	0.103

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Fluorite 7	2.68	3.3	0.505	0.135	0.03	0.63	0	0.036	0.0905	0.023	5.94	0.104
Fluorite 8	1.33	1.83	0.334	0.0455	0.017	0.72	0	0.034	0.247	0.02	0.017	0.022
Fluorite 9	3.55	4.65	0.765	0.0335	0.067	1.21	0	0.0405	0.521	0.0105	1.35	0.0106
Fluorite 10	3.53	4.73	0.823	0.0345	0.04	1.32	0	0.0275	0.432	0.023	0.0107	0.00905
Fluorite 11	2.92	4.25	0.648	0.1005	0.0335	0.63	0	0.0935	0.357	0.036	0.035	0.033
Fluorite 12	2.98	4.31	0.709	0.062	0.119	3.88	0	0.0235	1.45	0.0135	0.062	0.0103