TECHNICAL REPORT on the BORRALHA PROPERTY

Parish of Salto, District of Vila Real, Portugal

UTM 29 T 584751 East 4612060 North

- Report Prepared For -

DEEPROCK MINERALS INC.

Suite 1518, 800 West Pender Street
Vancouver, British Columbia, Canada V6C 1J8

- Report Prepared By -

MINOREX CONSULTING

25856 – 28th Avenue
Aldergrove, British Columbia, Canada V4W 2Z8
Permit to Practice No. 1002071

Effective Date: July 31, 2024
Signature Date: October 1, 2024

J. Douglas Blanchflower, P. Geo.
Consulting Geologist

DATE and SIGNATURE PAGE

The undersigned, a consulting geologist of Minorex Consulting (Permit to Practice No. 1002071), prepared this Technical Report titled 'Technical Report on the Borralha Property, Parish of Salto, District of Vila Real, Portugal', dated effective July 31 2024, to provide a geological introduction to the Project, summarize historical and recent exploration work, document historic tungsten-tin mine production, and to estimate mineral resources at the Sta. Helena Breccia zone. Also, to provide recommendations for future exploration and development programs. This Technical Report has been prepared in accordance with the Canadian Securities Administration's ('CSA') National Instrument 43-101 Standards of Disclosure for Mineral Projects ('NI 43-101') and guidelines for technical reporting by Canadian Institute of Mining, Metallurgy and Petroleum's ('CIM') 'Best Practices and Reporting Guidelines' for disclosing mineral exploration.

Effective Date: July 31, 2024

Signed by,

(Signed by J. Douglas Blanchflower)
(signed and sealed original copy on file)

October 1, 2024

J. Douglas Blanchflower, P. Geo. Signature Date
Consulting Geologist

***Title Page Photograph**: Looking Southward at the distant hill and historic open pit that is underlain by the mineralized Santa Helena Intrusive Breccia.*

CERTIFICATE OF QUALIFIED PERSON

In connection with the technical report entitled 'Technical Report on the Borralha Property, Parish of Salto, District of Vila Real, Portugal', dated effective July 31, 2024 (the '**Technical Report'**), which was prepared for Deeprock Minerals Inc., I, J. Douglas Blanchflower do hereby certify that**:**

1) I am a Consulting Geologist with a business office at 25856 – 28th Avenue, Aldergrove, British Columbia, V4W 2Z8; and President of Minorex Consulting (email: minorex@shaw.ca).

2) The Technical Report to which this certificate applies is titled the 'Technical Report on the Borralha Property, Parish of Salto, District of Vila Real, Portugal', dated effective July 31, 2024.

3) I am a graduate of Economic Geology with a Bachelor of Science, Honours Geology degree from the University of British Columbia in 1971. I have practised my profession as a Professional Geologist since graduation. I am familiar with Tungsten-Tin deposit models and have experience writing technical reports. I am a Registered Professional Geoscientist in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (No. 19086) and the Professional Engineers and Geoscientists of Newfoundland-Labrador (No.10683). I am familiar with *National Instrument 43-101—Standards of Disclosure for Mineral Projects* ('N**I 43-101'**) and, by reason of education, experience in exploration, mineral resource development and the evaluation of mining projects, and professional registration, I fulfil the requirements of a Qualified Person as defined in NI 43-101.

4) I visited the property (the '**Property**') which comprises the Borralha Tungsten Project and is the subject of this Technical Report from March 26 to 28, 2023 and recently on July 8, 2024.

5) I am responsible for all sections of this Technical Report.

6) I am independent of Deeprock Minerals Inc., Allied Critical Metals Corp., and its subsidiaries and the Project, and I am a 'Qualified Person' as defined in Section 1.1 of NI 43-101.

7) I have not had prior involvement with the Property that is the subject of this Technical Report.

8) I have read National Instrument 43-101 and Form 43-101F1, and this Technical Report has been prepared by me in compliance with the foregoing Instrument and Form.

9) As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Respectfully submitted by,

(Signed by J. Douglas Blanchflower)
(signed and sealed original copy on file)

J. Douglas Blanchflower, P. Geo.
Consulting Geologist

Dated at Aldergrove, British Columbia, Canada this 1st day of October 2024.

- TABLE OF CONTENTS -

Page No.

- TABLE OF CONTENTS (Continued)-

Page No.

- TABLE OF CONTENTS - (Continued)

Page No.

- LIST OF TABLES -

Table No. **Page No.**

- LIST OF ILLUSTRATIONS –

Figure No. **Page No.**

- LIST OF ILLUSTRATIONS – (Continued)

Figure No. **Page No.**

- LIST OF PHOTOGRAPHS -

Photograph No. **Page No.**

- LIST OF PHOTOGRAPHS – (Continued)

Photograph No. **Page No.**

1 SUMMARY

1.1 Introduction

The author, J. Douglas Blanchflower, P. Geo., was retained to conduct an examination of the Borralha property and prepare this independent NI 43-101 technical report (‘**NI 43-101**’) to be a comprehensive review of the exploration activities on the property to meet the requirements of NI 43-101 for Deeprock Minerals Inc. (‘**Deeprock**’) in connection with a reverse takeover of Deeprock by Allied Critical Metals Corp. (‘**ACM**’).

The author visited the Borralha property from March 26 to 28, 2023 and recently on July 8, 2024. The property examination included: examining several mineral showings and drill sites within the property, collecting drill reject verification samples and reviewing all aspects of the historical exploration work including local topographical, lithological and structural features; drill core geological logging procedures, sampling, analytical results and shipping procedures; and exploration documentation procedures.

1.2 Property Description and Ownership

The Borralha property (the ‘**Project**’ or ‘**Property**’) surrounds the past productive Borralha tungsten-tin mine that is situated approximately 3 kilometres south of the Venda Nova Dam, 40 kilometres east of the city of Braga, or 100 kilometres northeast from the Francisco Sá Carneiro airport in the major city of Porto. The location of the Borralha property is approximately UTM 29 T 584751 East by 4612060 m North. The Borralha property is currently beneficially owned by a Portuguese company, PanMetals Unipessoal Limitada ("**PanMetals**"), which is owned by ACM. The Borralha property is held beneficially in trust for PanMetals by another Portuguese company, Minerália-Minas, Geotecnia E Construcoes Limitada ("**Minerália**") under Mining License C-167 covering an area of 382.48 hectares, which includes the old Borralha tungsten mine and surroundings.

PanMetals holds beneficial title to the Borralha Property, which is licensed in the name of Minerália beneficially in trust for PanMetals pursuant to an agreement dated effective April 29, 2024 (the "**Property Agreement**"), and Minerália holds the Property through a Mining Licence (C-167) granted by the Direcao Geral de Energia e Geologia (“**DGEG**”) of the Government of Portugal. Under the Property Agreement, Minerália holds title of the Property beneficially in trust for PanMetals and has agreed to transfer the legal registration of the Mining License to PanMetals by paying a final €125,000 licencing payment and committing to continue further exploration work on the Property. The Mining Licence is issued with the proviso that full scale mining will commence within a 5-year period commencing October 28, 2021 to October 28, 2026. Prior to full scale mining, a Definitive Feasibility Study (“**DFS**”) and Environmental Impact Study (EIS) needs to be completed to the satisfaction of the DGEG, but in the interim further exploration and pilot mining of up to 150,000 tonnes per annum is permitted. The terms of the Mining Licence include a 3% production royalty payable to the Government of Portugal.

This Technical Report has been prepared on behalf of Deeprock and ACM, by the author on behalf of Minorex Consulting (‘**Minorex**’) in connection with a proposed reverse takeover (the “**RTO**”) of Deeprock by ACM which beneficially owns the Borralha property through its wholly-owned subsidiary, Pan Metals. Pursuant to the RTO, Deeprock will, among other things, under a statutory plan of arrangement transfer all of its other mineral properties to a wholly owned subsidiary in exchange for shares to be distributed pro rata to the shareholders of Deeprock as a spinout transaction, after which the post-spinout Deeprock (“**New Deeprock**”) will consolidate all its issued and outstanding shares on a 40-to-1 basis and change its name to “Allied Critical Metals Corp.”, and a wholly-owned subsidiary of New Deeprock will amalgamate (the “**Amalgamation**”) with ACM (“**Amalco**”) and all of the securityholders of ACM will receive like securities of New Deeprock on a 1-for-1 basis and the securityholders and business of ACM will become the securityholders and business of New Deep as the resulting issuer (the “**Resulting Issuer**”). Prior to the Amalgamation, ACM will complete a concurrent equity financing to provide sufficient net proceeds to meet the working capital requirements of the Resulting Issuer, the common shares of which will be listed and posted for trading on the Canadian Securities Exchange (the **“Exchange**”), subject to Exchange approval.

ACM is an Ontario corporation in Canada which acquired 100% ownership of a private Portuguese company named PanMetals Unipessoal Limitada (**‘Pan Metals**’) on April 29, 2024 (the **‘Acquisition**’). ACM acquired 100% ownership of Pan Metals (through a wholly-owned subsidiary named ACM Tungsten Unipessoal Lda. incorporated in Madeira, Portugal. Under the Acquisition, Pan Metals became 100% owner of the tungsten mineral projects (the ‘**Tungsten Projects**’) in Portugal known as the Borralha Tungsten Project (‘**Borralha**’ or the '**Project**') and the Vila Verde Tungsten Project (‘**Vila Verde**’), in consideration for transferring 10% beneficial interest in the Tungsten Projects (the ‘**Retained Interest**’) to Dalmington Investments Limitada (‘**Dalmington**’) and granting a 1% net smelter returns royalty in respect of all production from the Tungsten Projects (the ‘**1% NSR**’) to Dalmington.

Accordingly, ACM now owns 90% of the Tungsten Projects and the only royalty on the Tungsten Projects (other than government taxes, fees or royalties under the laws of Portugal) is the 1% NSR, as well as another 1% net smelter returns royalty which was purchased on September 17, 2024 by ACM on behalf of Pan Metals for a purchase price of $300,000 USD and expected to be completed by August 31, 2024. ACM also has the right to repurchase the 10% Retained Interest in respect of Borralha and Vila Verde from Dalmington upon commencement of commercial production from the Borralha and Vila Verde properties, respectively at a purchase price equal to a 30% discount to 10% of the net present values (using a discount rate of 7%) for the respective Tungsten Projects payable 30% in cash and 70% in shares of ACM (or its listed issuer parent company) at a share price equal to the 20-day volume weighted average price. Prior to commencement of commercial production at the respective Tungsten Projects, the Retained Interest will be a fully-carried, non-participating interest, and after it then becomes a participating net profits interest. ACM has the right, after production commencing at the Tungsten Projects, to purchase 50% of the 1% NSR for a cash purchase price equal to 70% of 1% of the combined net present value of the Tungsten Projects.

The surface and water rights where the main exploration activities have taken place are privately owned. The work on the Property was conducted with the approval of the property owners and without any issues with the community. Future exploration work does not require additional permits, though they must be proposed for approval by the DRG. Besides industry-standard environmental responsibilities that are to be followed, the owner of the Property does not have any responsibilities concerning some pre-existing environmental liabilities from historic underground and surface mining.

1.3 Accessibility and Local Environment

The Project is readily accessible year-round by paved highways extending northeastwardly from the city of Porto, or via National Road N103 from the city of Braga. It is 110 km from Porto's Francisco Sá Carneiro International Airport (OPO) to the property, or 60 km via the paved National Highway 103 from Braga. Within the property there are several paved and good gravel roads that are accessible year-round by truck or car.

The climate in northcentral Portugal is mild with temperatures ranging from freezing to highs in the mid-30º's C with an average annual temperature of 13°C (55°F).

Much of the property has been cleared because of either the various mining operations or farming activity. Local forests are commonly covered by pine and oak trees. The cleared areas are covered by a variety of grasses and low shrubs, except where they have been sown with hay and seed crops.

Borralha project is close to essential infrastructures such as major roads, electric power lines, ports and airports. Hydroelectric power is available from the Venda Nova dam and a hydroelectric plant 3 km north of the property, and plentiful water is available from the local rivers. A portion of the local population are retired or unemployed mining personnel, and others farm or provide services outside of Borralha. Board and lodging for exploration personnel is available in the nearby town of Salto.

The Property is situated within an upland hilly terrain with relatively low relief, varying from 700 to 950 m AMSL. A river bisects the property separating the southern prospective Santa Helena intrusive body from the northern area of sub-horizontal vein structures, the focus of the historic Borralha mining operations.

1.4 Mining History

The Borralha mine was discovered by Domingos Borralha when he found wolframite-bearing rocks on his land. In 1902 the mining concession was granted to the Compagnie de Mines d'Étain et Wolfram which in 1909 became the Mines de Borralha, SA Brussels and in 1914 became Mines de Borralha SA Paris. By 1910, the mine had become the largest tungsten source in the country. Mining continued almost uninterrupted from 1903 to 1985.

The global production of wolframite and scheelite concentrates from 1904 until the mine's closing is estimated at about 18,500 tonnes, although this number is an approximate and certainly much less than the true value. The largest annual production was 1955 with 524.3 tonnes of concentrate, of which 44.39 tonnes came from mining vein structures situated north of the Borralha River and 58.37 tonnes from the open pit to the south on the Santa Helena Breccia ('SHB').

Most of the production at Borralha was wolframite concentrate. Scheelite concentrates represented about 18% of the total production. From 1975 to 1980 the total production of chalcopyrite concentrates at Borralha was 1,711.65 tonnes (1.06 tonnes of tungstate concentrates to 1 tonne of chalcopyrite concentrates). The chalcopyrite concentrates also had silver values in the order of 0.3%. There was also a small production of tin concentrates from the associated cassiterite mineralization.

1.5 Geological Setting and Mineralization

The Borralha tungsten mine is situated along a regional contact between a Precambrian-age 'schisto-graywacke' complex comprised of schist, graywacke, quartzite, and amphibolite, and a two-mica, porphyritic coarse-grained granite, called the 'Borralha syn-tectonic granite', belonging to the Hercynian orogeny. These country rocks host the mineralization and are locally intruded by aplite to pegmatite dykes and by, at least, two known large breccia intrusions.

A feature of the Borralha deposit is the presence of large siliceous, intrusive breccia bodies that are probably the source of the fault- and fracture-controlled sub-vertical and sub-horizontal vein systems, although several later fault systems have displaced both the breccias and the mineralized veins. The country rocks are concordant with the larger regional fault and fold structures that are related to the last phase (D3 phase) of the Hercynian folding at azimuths 130^{o} and 140^{o}.

Most of the historical mining was carried out underground on the sub-vertical veins situated north of the Borralha River. Wolframite with lesser scheelite, chalcopyrite, pyrite, pyrrhotite, sphalerite and molybdenite mineralization were mined underground hosted by quartz veins and wall rocks. There are three distinct hosts for the Borralha mineralization: 1) quartz veins with wolframite, scheelite and sulphide mineralization; 2) aplite-pegmatite veins with cassiterite mineralization; and 3) intrusive breccias as pipe-like bodies and/or collapse breccias.

The Santa Helena Breccia ('SHB') is situated south of the river along the contact between syn-D3 Borralha granitic rocks, Silurian-age metasedimentary rocks, and a transition zone of granitic and metasedimentary xenoliths. The eastern and western contacts of the breccia are marked by extremely fractured, large and barren north-south striking quartz veins. Detailed mapping and recent drilling of SHB indicate it strikes northerly and is at least 575 m long, over 150 m wide and, at least, 200 m in depth.

The SHB hosts tungsten, tin, copper, zinc, and molybdenum mineralization with associated minor niobium, tin, thorium, uranium, rare earths, bismuth, silver, and lead. Wolframite commonly occurs as fine-grained disseminations in breccia fragments, associated with other minerals, and/or in zones with obvious hydrothermal alteration.

The Venise Breccia ('VB') is situated on the north side of the Borralha River. It was intersected by the old underground workings but never mined. Like the SHB, it also appears to be oriented north-south and open to depth. At the -60 m mine level, the water level in the old workings, the breccia body has a reported strike length of 80 m with a width of 30 m. According to verbal reports from old miners, the breccia is well mineralized with wolframite and molybdenite.

1.6 Deposit Summary

The mineral deposits at Borralha occur as greisens, breccias and veins related to hydrothermal activity during and after Paleozoic-age metasedimentary rocks were intruded by younger, syn-tectonic, Hercynia-age, two-mica granites and intrusive breccias.

There were two main types of veins ranging from 10 to more than 100 cm wide: 1) 'subvertical' veins with -45° to -60° inclinations and strikes of 080° to 130°, and 2) 'subhorizontal' veins with inclinations less than -30º. Subvertical veins were the most productive at the Borralha mine.

It appears that the Santa Helena Breccia body is an intrusion that has collapsed, brecciated and has been later silicified and mineralized with fine- to coarse-grained wolframite, minor cassiterite plus associated base- and precious-metal sulphides. This breccia body and that of the unmined Venize breccia are of immediate exploration and economic interest.

1.7 Exploration Work

No exploration work was carried out on the property from 1983 until Blackheath Resources Inc. optioned the property in 2011 from Minerália who then continued working on the project as the exploration contractor. Minerália collected available historical geological maps and old mining plans then digitized them. This work identified two exploration targets worthy of immediate interest, the under-exploited sub-horizontal veins north of Borralha River and the Santa Helena Breccia ('SHB') south of the river. Minerália's early field work included surveying, geological mapping, establishment of a survey grid and soil geochemical sampling.

In 2012 Blackheath Resources excavated nine trenches across the SHB and collected channel samples at 5-metre intervals. This work was followed by the drilling of thirteen diamond drill holes, totalling 1,917.55 metres of mostly HQ-size. In 2013 two drill holes tested the sub-horizontal veins on the north side of Borralha River, and later in 2014 and 2017 eleven drill holes tested the mineralization of the Santa Helena Breccia.

In 2023-24 the Company contracted Minerália to carry out re-analyses of the historical drill hole pulps, supervise a metallurgical testing program, and manage a drilling program that was comprised of 2 P-size diamond drill holes and 13 reverse circulation drill holes, totalling 3,685.4 metres.

1.8 Sampling Information

The sampling and assay procedures at the historic Borralha producing mine are not documented.

Minerália's 2011 to 2017 channel and drill core samples were all collected, prepared and securely delivered to ALS Global preparatory facilities in Seville, Spain. There the samples were crushed, pulverized and split after which a representative sample pulp of each was sent directly to the ALS assay laboratory at Dublin Road, Loughrea, Co., for XFR analyses. The remaining sample pulps and rejects were returned to Minerália. X-Ray fluorescence ('XRF') is a non-destructive analytical technique used to determine the elemental composition of materials. XRF analysers determine the chemistry of a sample by measuring the fluorescent or secondary X-ray emitted from a sample when it is excited by a primary X-ray source.

Minerália analysed all their 2011 to 2017 drill core and channel samples only for tungsten (W) by the W-XFR05 method (X-Ray Fluorescence Spectroscopy) that provides results in the range of 10 to 5,000 ppm. Samples that contained more than 5,000 ppm tungsten were reanalysed by W-XRF10 (X-Ray Fluorescence Spectroscopy) that provides results in the range of 0.01 to 50% W. It is the opinion of the author that the Minerália samples were properly collected and handled according to CIM guidelines, but that Mass Spectrometry/ICP analytical procedures should have been used.

During the author's site examination, it was obvious that there is very little bedrock exposure within the Santa Helena Breccia intrusion and there was no splitting equipment at the time to quarter the stored drill core. Thus, the author selected for verification ten drill core reject samples originally collected by Minerália from three drill holes at various depths, plus the same standard material sample used previously during the 2017 analyses.

These verification drill core reject samples were described and securely shipped to the ISO-accredited facilities of ALS Global Laboratory in Seville, Spain, the same assay laboratory used for the 2014 and 2017 drill core samples. There, the ten verification samples were re-homogenized, pulverized and a sample pulp of each was split and analysed by two procedures. The first procedure analysed for twelve base metals using a 4-acid digestion and a second procedure used a Lithium Borate Fusion and Mass Spectrometry to analyses 31 additional elements including tungsten.

A very important result of the author's data verification was the detection of significant values for tungsten plus tin, copper, molybdenum, and silver. Since all the drill cores from the SHB had previously only been analysed for tungsten, the grades of accessory minerals were only suspected from observations of chalcopyrite and cassiterite in the drill core. With tungsten values ranging from 969 to 4830 ppm there are associated copper values ranging from 0.083 to 0.576 % and silver values ranging from 6.7 to 18.5 gpt.

During the 2023-24 drilling campaign two P-size diamond drill holes and thirteen reverse circulation boreholes, totalling 3,685.40 metres of drilling, were completed to their proposed lengths. Minerália was contracted to supervise and manage the drilling program that included three P-size diamond drill holes, namely Bo_Met_01, _02 and _ 02a, totalling 490.4 metres of drilling and thirteen reverse circulation drill holes, namely Bo_RC_01 to _13 that totalled 3,195.0 metres of drilling. Diamond drill hole Bo_Met_02 intersected old underground workings and was abandoned and re-drilled nearby as Bo_Met_02a. As of the effective date of this report, the Company has drill tested the SHB with 5,602.95 metres of drilling, infilling historical drill holes and extending exploration towards the southern part of the SHB.

The cores from the two diamond holes, Bo_Met_01 and _ 02a were halved length wise after logging and one-half of the cores were shipped to Wardell Armstrong International Ltd. with offices in Truro, London for metallurgical test work. The other half of drill core was sampled and shipped to the ALS preparatory laboratories in Seville, Spain and later to the ALS certified assay laboratories in Dublin Road, Loughrea, Co., Ireland for multi-element ICP analyses. The later 1-metre reverse circulation drill cuttings were composited into 2-metre samples and direct shipped to the ALS preparatory laboratories in Seville, Spain and later to the ALS certified assay laboratories in Dublin Road, Loughrea, Co., Ireland.

It is the author’s opinion that Minerália personnel exercised appropriate care and attention handling, preparing and securely shipping all their rock, core and cuttings samples. Furthermore. it is the author’s opinion that the sample preparation, handling and security for both the author’s verification samples and Minerália’s channel and drilling samples were carried out according to industry’s best practice standards

1.9 Data Verification

Since Minerália acquired the Borralha license in 2011 they have confirmed the locations of the numerous historic underground workings, compiled a confirmed exploration database, and examined diamond drill cores from six holes of the Santa Helena Breccia and one hole from the Sub–Horizontal Vein drilling north of the river. All the major geological features described in the historic logs were confirmed.

During his 2023 property examination, the author verified and photographed the locations of various historical workings by personal inspection, both in the Borralha zone and south within the SHB. He also examined the records, maps and data pertaining the Borralha project, and, especially, the Santa Helena Breccia.

To verify 2023 sample analyses, the author submitted ten reject core samples from three widely spaced drill holes with BO9 being the most northerly drill hole, BO8A tested the centre of the SHB and BO5 tested the southern portion of the SHB.

The results of the verification sampling reflect the ‘nuggety’ distribution of the tungsten mineralization and the need for complete multi-element analyses of all samples. A comparison between the higher tungsten values in drill holes BO5 and BO8A show that the higher tungsten grades vary between those analysed originally by XRF and those of the verification samples analysed using two analytical procedures. The low tungsten grades for XRF-analysed samples from drill hole BO9 show a marked difference with the author's verification samples returning much higher tungsten grades. There is no obvious explanation for this difference other than the XRF analyses of the original sample pulps did not fully detect the tungsten contents that the mass spectrometry analyses did. There is a significant difference between the two tungsten analyses of the Certified W Reference Standard GW-03. One explanation of the difference with the standard sample from the verification sample batch might be that the GW-03 standard in a small brown envelope had been shelved for six years and was not completely re-homogenized at the laboratory prior to its analysis which resulted in a lower tungsten analysis. The author received the ALS analyses directly which corresponded to the samples analysed, and ALS's internal quality control procedures and results indicate that the results of the ten verification samples are credible and reliable.

On July 8, 2024 the author, accompanied by two Minerália geologists, examined most of the currently accessible 2023-24 reverse circulation drill sites. They are located where they have been reported and labelled and plugged with black tubing.

Minerália maintains a well-documented quality assurance/quality control ('QA/QC') procedure. Certified standard samples are inserted as every 20th sample in the sample sequence. Two blanks are also placed in every assay sequence. All standards and blanks were obtained from independent third-party providers (e.g. CDN Resource Laboratories Ltd., Geostats Pty Ltd. and OREAS) with a total of five different control reference materials ('**CRM**') being utilized with different element suites.

It is the author's opinion that Minerália personnel exercised appropriate care and attention handling, preparing and securely shipping all their rock, core and cuttings samples. Furthermore. it is the author's opinion that the sample preparation, handling and security for both the author's verification samples and Minerália's channel and drilling samples were carried out according to industry's best practice standards.

1.10 Metallurgical Testing

In 2019 a weathered surface bulk sample with visible mineralization, weighing approximately 150 kg, was collected from the southern part of the SHB. The sample was shipped to Grinding Solutions Ltd ('**GSL**'), UK (2019) for preliminary metallurgical studies. This sample was collected to study the liberalization characteristics of wolframite mineralization and to confirm that a wolframite concentrate could be produced.

The results this preliminary metallurgical testing were quite encouraging. A few of the most significant results include:

- head grade was 1.49 % WO_3 and 0.02 % Sn;
- assay by size data demonstrated that the tungsten is concentrated more into the coarser fractions with tungsten grades varying between 2 to 3%. Fractions -1 mm varied between 1 and 2% WO_3;
- gravity release analysis showed that the material was well liberated in all fractions tested;

- tailings from this process contained 5.5% of the WO_3 at a grade of 0.2% WO_3;
- magnetic testing performed on the gravity pre-concentrate proved successful recovering 99.9% of the tungsten reporting to the process at magnetic intensity of 1.5T. Tungsten grade in this product was 61.84% WO_3. Further important work on this para-magnetic wolframite property will be the main subject of the next phase of metallurgy testing;
- during the processing poor recovery of tin was observed throughout; and
- overall tungsten recovery using the gravity methods was 69.96% at a concentrate grade of 61.84% WO_3 in this processing route which was not optimized.

In August 2023 the Company had Minerália retain MinePro Solutions S. L. and Wardell Armstrong International Ltd. based in Truro, London for a second phase of metallurgical testing to study the recoveries of tungsten and associated minerals from mineralized Borralha SHB material, and to generate a sample of 'barren' tailings material for submission to an external laboratory for characterisation testing to support an application for a Mining Permit.

A 150 kg fresh rock sample was collected from one-half of the core from the two 2023 diamond drill holes Bo_Met_01 and -02a and shipped to Wardell Armstrong International Ltd. ('**WAI**'). It was requested by ACM that the bulk mineral deportment of the sample be characterized and to undertake a detailed particle liberation study.

After logging in the sample in, WAI crushed the sample to 1 mm, homogenizing and splitting it into representative sub-samples. One sub-sample was be submitted for mineralogical analysis and another was sent for head assay after which they completed the particle-size analysis. These steps were followed by the grind calibration test to select the right grinding time for getting a target product of d80 equal 250 microns. After that, they completed the sulphide flotation test work and the magnetic characterization on a separated subsample.

The results of this metallurgical study were reported by Petrolab Ltd. on behalf of Wardell Armstrong International Ltd. (2023) as follows

"1. The main target phases present are wolframite, ferberite, scheelite and cassiterite. Combined, W species provide 0.4 wt % in the reconstructed sample. Wolframite is the dominant species, usually followed by ferberite and scheelite. Cassiterite abundance reaches an elevated peak of 0.5 wt % in the +53 µm fraction. Chalcopyrite reaches a height of 0.6 wt % in the +100 µm fraction, falling to 0.2 wt % in the coarsest fraction.

2. Gangue mineralogy is dominated by quartz and mica and clay group, contributing 85-88 wt % across the size fractions. Plagioclase is reliably a minor component, at 6-8 wt % across the size fractions, while K-feldspar contributes 1.6-2.8 wt % across the size fractions.

3. Pyrite is the dominant sulphide, with pyrite and the other sulphides of sphalerite, bismuthinite and molybdenite showing a general trend of higher abundance in the finer fractions. Traces of heavy *metal minerals are also seen in the finer fractions, namely uraninite and columbite (also containing tantalite). Phosphate also contains traces of Th hosting brockite.*

4. Four elements were reported for deportment, Cu, Fe, S and W. No reliable Ag was recorded in the sample. Cu is exclusively hosted by chalcopyrite. Cu grade is low across the samples, at 0.1-0.2 % Cu.

5. Fe is principally hosted by the mica and clay group, at 57-67 % of available Fe across the size fractions. Pyrite also hosts major amounts of Fe, at 21-32 % of available Fe, while chalcopyrite hosted Fe remains at 5 % or below. Iron oxide hosted Fe generally increases from 2.8 % to 8.3 % of available Fe, between the coarsest and finest fraction respectively. Further traces are notably present in the Fe bearing W species. Total Fe grade is fairly consistent across the size fractions, at 3.1-4.4 % Fe, reaching a maximum in the finest fraction.

6. S is principally hosted in pyrite, with >82 % of available S in each fraction. The remainder is hosted by other sulphides, namely chalcopyrite, sphalerite, molybdenite and bismuthinite. Total S grade reaches a maximum in the finest fraction, at 1.6 % S, driven by pyrite abundance.

7. W is hosted by wolframite, ferberite and scheelite. Wolframite is marginally the dominant species, with >90 % of available W in the coarsest fraction and 50-60 % of available W in the +300 µm and +180 µm fractions. W hosted in scheelite generally increases with fining fraction, although it does show a peak of 65.5 % of available W in the +100 µm fraction. Ferberite hosts its highest proportion of W in the +300 µm fraction, at 37.8 % of available W. From the provided chemical assay the W grade increases slightly into the fines.

8. Wolframite is the coarsest target phase, with a Dx20 and Dx50 above the overall particle size distribution (PSD); however, the Dx80 is marginally below, at 846 µm and 885 µm respectively. The remaining phases of scheelite, ferberite and cassiterite are finer than the PSD. Cassiterite grain size is concentrated between 75-212 µm.

9. Wolframite displays variable liberation across the size fractions. Greatest liberation is seen in the 53 µm and +180 µm fractions, at 80-86 % free and liberated grains. The 600-900 µm particle size class hosts ~55 % of the mineral mass and displays 47 % free and liberated grains. Ferberite exhibits poor liberation throughout the size fractions. From the theoretical mineral recovery, just over 85 % of the mineral mass is present between 425-900 µm, where no free or liberated grains are recorded. Scheelite indicates moderate to good liberation, with the +180 µm and +53 µm fractions producing 99-100 % free and liberated grains. From the theoretical mineral-recovery, the 600-900 µm particle size class hosts ~65 % of the mineral mass and displays 66 % liberated grains, with the remainder locked. Cassiterite is completely locked in the coarsest three fractions. However, occurrences were generally more prominent in the finer three size fractions and in this liberation was excellent with 93-100 % free of liberated grains. The mineral mass of cassiterite is concentrated, with 70 % of the mineral mass between 75-300 µm.

10. The W species are strongly associated with each other and phosphate. Cassiterite shows a higher-than-expected association with the other heavy minerals, namely columbite and bismuthinite. Association with quartz is weak, given its high abundance. Notably, no association is observed between the W species, and cassiterite."

1.11 Mineral Resource Estimate

The Santa Helena Breccia body has now been tested with nine surface trenches and 23 drill holes over a 300-metre strike length and to a depth of over 250 metres. The analytical results from samples collected from 20 drill holes and nine trenches were used in the mineral resource estimation. Past exploration results have shown that the distribution of tungsten mineralization is very 'nuggety' requiring detailed sampling.

The very high grade tungsten values were capped, due to their nuggety distirbution, by doing 'outlier restriction' capping instead of a classic grade capping procedure. This restriction was made on the values larger than 1.8% or 18,000 ppm WO_3 where the original value was applied for a search radius up to 30% between the distance from the outlier and another composite assay value. Above 30% of the distance of the search radius the 18,000 ppm cap is applied. Thus, the values greater than 18,000 ppm were capped to 18,000 ppm (1.8% WO3).

A 5- x 10- x 5-metre block size would be used with sub-blocking at 3 passes (2.5- x 5- x 2.5-metre sub-blocks) at the limits of the geological information and topography. All blocks strike north-south with a N-S / 90º block distribution. The certified specific gravity measurements that were collected by ALS Global Laboratories during their anlytical work provide the average density value of the Breccia domain at 2.783 ton/m^3.

A three-pass grade block interpolation was conducted using Ordinary Kriging. The generated Ordinary Kriging results were then compared to those obtained from Inverse Distance ('ID3') and Nearest Neighbour ('NN') methods of interpolation using the same parameters. The block models and the drill hole intercepts were then reviewed by swath plots and visually in three-dimensions to ensure that the grade blocks were honouring the drill hole data. The result was a satisfactory agreement between the block grades and drill intercepts

At a cut-off grade of 0.10% WO_3 and at an effective date of March 25, 2024, the following mineral resources have been estimated. The Reasonable Prospects for Eventual Economic Extraction ('**RPEEE**')) is defined with a 0.1% WO_3 Grade-Volume shell with less than 5,000 m^3 volumes excluded.

Indicated Class	**Oxidized Material** – 0.5 t grading 0.19 WO_3%, 75 ppm tin, 387 ppm copper and 2.4 ppm silver **Fresh Material** – 4.4 Mt grading 0.22 WO_3%, 99 ppm tin, 809 ppm copper and 5.1 ppm silver

Inferred Class	**Oxidized Material** – 1.0 Mt grading 0.21 WO_3%, 81 ppm tin, 415 ppm copper and 3.0 ppm silver **Fresh Material** – 6.0 Mt grading 0.20 WO_3%, 83 ppm tin, 681 ppm copper and 4.7 ppm silver

1.12 Conclusions and Recommendations

It is the author's opinion that the SHB within the Borralha property has excellent exploration potential and may have good economic potential pending advanced exploration. To date, approximately 50 % of the inferred SHB has been partially tested with surface work and drilling.

Further advanced exploration of the SHB should include continued RC drilling to delineate its dimensions and define its mineralization, bulk sampling using strategic diamond drilling, continued advance metallurgical testing, estimation of mineral resources/reserves, environmental studies, and interaction with community and public-interest groups. The author recommends such a comprehensive and aggressive exploration program be carried out to progress the Project to the next phase which includes the preparation of a feasibility report.

1.13 Proposed Exploration Budgets

The total estimated costs of further drilling, metallurgical and preliminary mine planning studies, plus continued environmental studies and community communications included in the recommended Phase I advanced exploration program are **EUR 321,535** or approximately **CAD $492,600** (rounded). Current conversion rate of EUR 1.00 = CAD $1.532.

The estimated cost of the recommended Phase II advanced exploration and development work in preparation for a possible Feasibility Study is **EUR 901,190** or approximately **CAD $1,503,200** (rounded).

Thus, the combined total cost of the recommended Phase I and II exploration work is **EUR 1,222,725** or **CAD $1,995,800**.

2 INTRODUCTION and TERMS OF REFERENCE

2.1 Introduction and Terms of Reference

The author, J. Douglas Blanchflower, P. Geo., was retained by Deeprock Minerals Inc. and Allied Critical Metals Corp. to conduct an examination of the Borralha property that included: collecting verification samples, reviewing available exploration data and results, and preparing this independent technical report (the '**Report**') in accordance with the formatting requirements of National Instrument 43-101 ('**NI 43-101**') and Form 43-101F1 (Standards of Disclosure for Mineral Properties) to be a comprehensive review of the exploration activities on the property.

Units used in the report are metric units unless otherwise noted. Monetary units are in Euros ('EUR' or '€') or Canadian dollars ('CAD') unless otherwise stated. All ounce units refer to troy ounces. The Report uses Canadian English. It is intended to be read in its entirety.

2.2 Site Visits

The author, an independent qualified person according to NI 43-101, visited the Borralha property from March 26 to 28, 2023 and recently on July 8, 2024. The author examined several mineral showings within the property, collected drill reject verification samples and reviewed all aspects of the historical exploration work including local topographical, lithological and structural features; drill core geological logging and sampling procedures, analytical results, and shipping procedures; visited recent drill hole sites, and reviewed exploration documentation procedures.

2.3 Sources of Information and References

Reports and documents listed in Section 27 of the report were used to support preparation of this Report. Additional information was provided by PanMetals Unipessoal Limitada and Minerália – Minas, Geotecnia e Construções Lda. ('**Minerália**') personnel as required, as described and listed in Section 27.

2.4 Abbreviations and Units of Measure

Metric units are used throughout in this report and costs are in Euros (EUR or €) or Canadian Dollars (CAD$). Precious metal prices are reported in US$ per troy ounce. A list of abbreviations that may be used in this report is provided below.

%	per cent	m2	square metre
Ag	silver	m3	cubic metre
AMSL	above mean sea level	Ma	million years ago
As	arsenic	mg	magnetite
Au	gold	mm	millimetre
b.y.	billion years	mm2	square millimetre
CAD$	Canadian dollar	mm3	cubic millimetre
cl	chlorite	mo	molybdenite
cm	centimetre	Moz	million troy ounces

cm2	square centimetre
cm3	cubic centimetre
cp	chalcopyrite
cs	cassiterite
Cu	copper
cy	clay
°C	degree Celsius
°F	degree Fahrenheit
DDH	diamond drill hole
ep	epidote
ft	feet
ft2	square feet
ft3	cubic feet
g	gram
gl	galena
GPS	Global Positioning System
gpt	grams per tonne
ha	hectare
hm	hematite
ICP	induced coupled plasma
kf	potassic feldspar
kg	kilogram
km	kilometre
km2	square kilometre
l	litre
li	limonite
m	metre
ms	sericite
Mt	million tonnes
mu	muscovite
m.y.	million years
NI 43-101	National Instrument 43-101
oz	troy ounce (31.1035 grams)
Pb	lead
pf	plagioclase
ppb	parts per billion
ppm	parts per million
py	pyrite
QA	Quality Assurance
QC	Quality Control
qz	quartz
RC	reverse circulation drilling
RQD	rock quality description
sc	scheelite
SG	specific gravity
st	short ton (2,000 pounds)
Sn	Tin
t	tonne (1,000 kg or 2,204.6 lbs)
to	tourmaline
W	Tungsten
um	micron
US$	United States dollar
wo	wolframite
Zn	zinc

2.5 Acknowledgements

The author acknowledges the kind assistance and courtesies extended to him during his property visits by the Barros family, Adriano and João Barros, and the Minerália personnel, including Vitor Arezes, Luis Lima and Avelimo Pinheiro.

3 RELIANCE ON OTHER EXPERTS

This Technical Report was prepared by Minorex Consulting, under the supervision of the author of the Technical Report who is qualified person ('**QP**') pursuant to NI 43 101 for Deeprock and ACM.

In preparing this Technical Report, the QP has fully relied upon certain work, opinions and statements of experts concerning legal, political, environmental, or tax matters relating to the Project. The author considers the reliance on other experts, as described in this section, as being reasonable based on his knowledge, experience and qualifications. The following professional advisors have been retained by Deeprock and ACM to prepare various reports for the Project and have been relied upon in preparation of this Technical Report. The advisors and their involvement are listed as follows:

- Viera De Almeida Law Firm, located in Lisbon, Portugal provided a title opinion in respect of the ownership and good standing of the Tungsten Projects and a corporate law opinion for the ownership and good standing of PanMetals dated April 29, 2024 (the '**Title Opinion**'); and

- Aird and Berlis LLP, a law firm located in Toronto, Canada provided a corporate law opinion for the valid existence and good standing in respect of ACM dated April 29, 2024 (the '**Corporate Opinion**').

The QP believes the information provided by the third parties to be reliable, but cannot guarantee the accuracy of conclusions, opinions or estimates that rely on such third-party sources for information that is outside their area of technical expertise. This Technical Report is intended to be used by Deeprock and ACM as a Technical Report for Canadian securities regulatory authorities pursuant to applicable Canadian provincial securities laws.

4 PROPERTY LOCATION and DESCRIPTION

4.1 Property Description and Location

Borralha is a small settlement surrounding the past productive Borralha tungsten-tin mine that is accessible via the National Road N103. The subject property is situated approximately 3 kilometres south of the Venda Nova Dam, 40 kilometres east of the city of Braga, or 100 kilometres northeast from the Francisco Sá Carneiro airport in the major city of Porto. The location of the Borralha property is approximately UTM 29 T 584751 East by 4612060 m North. The Borralha property is currently beneficially owned by PanMetals and is held beneficially in trust for PanMetals by Minerália under Mining License C-167 covering an area of 382.48 hectares, which includes the old Borralha tungsten mine and surroundings.

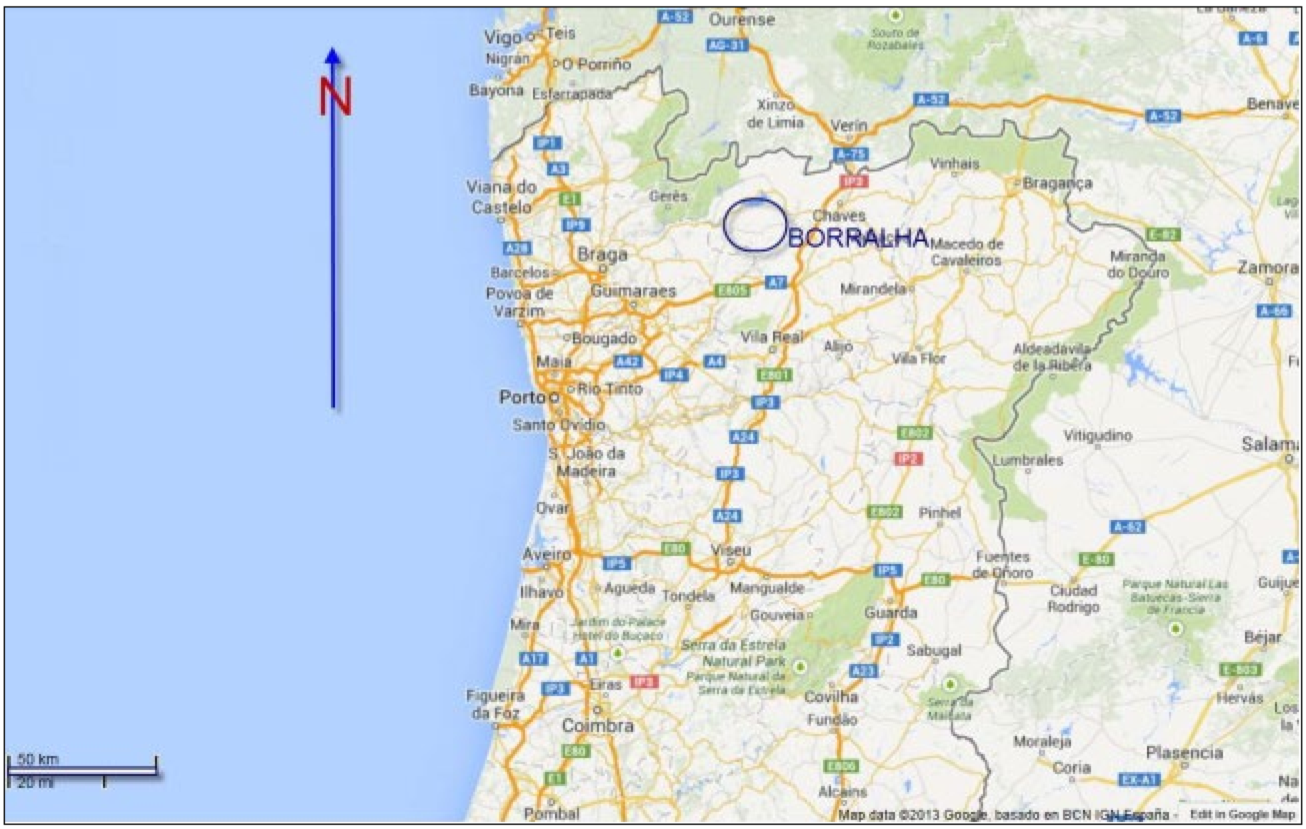


Figure 4.1: Location Map of the Borralha Property, Northern Portugal

Portugal has established mining laws with reasonable regulations and good communications with the Government and Mining Bureau; both of which have pragmatic attitudes to project development, a flexible approach to problem-solving, and an excellent support and working relationship with Geological Survey where there is available data, including old drill core and regional surveys.

The national infrastructure has good road and electrical power systems. In addition, there is a positive attitude towards the mining industry and a ready and experienced mining work force near the Project.

4.2 Project Experimental Mining License

The Project's initial exploration concession (MN/PP/033/12) covered an area of 12,750 hectares (127.5 square kilometres). In 1926, the property comprised 36 concessions with a total area of about 1,179 hectares. It was later increased to 1,781 hectares and finally to about 1,788 hectares.

The initial Prospecting and Research Licence awarded to Minerália (MN/PP/033/12) covered an area of 12,750 hectares (127.5 square kilometres), including all the old titles and was valid up to 2016. Three-year extensions were applied for and approved. The exploration permit was granted by the Direção Geral de Energia e Geologia ('DGEG' or 'General Directorate for Energy and Geology'). In 2018, once the proposed work and investments were fulfilled, Minerália was able to request an Experimental Mining Licence. The application was publicized in the official gazette of Portugal – Diário da República Nº 35, dated 29th September 2019, under Aviso nº 2709/2019 (Figure 4.2).

PanMetals currently holds beneficial title to the Borralha Property, which is licensed in the name of Minerália beneficially in trust for PanMetals pursuant to an agreement dated effective April 29, 2024 (the "Property Agreement"), and Minerália holds the Property through a Mining Licence (C-167) granted by the DGEG of the Government of Portugal and covers an area of 382.48 hectares. Under the Property Agreement, Minerália holds title of the Property beneficially in trust for PanMetals and has agreed to transfer the legal registration of the Mining License to PanMetals by paying a final €125,000 licencing payment and committing to continue further exploration work on the Property. The Mining Licence is issued with the proviso that full scale mining will commence within a 5-year period commencing October 28, 2021 to October 28, 2026. Prior to full scale mining, a Definitive Feasibility Study (DFS) and Environmental Impact Study (EIS) needs to be completed to the satisfaction of the DGEG, but in the interim further exploration and pilot mining of up to 150,000 tonnes per annum is permitted. The terms of the Mining Licence include a 3% production royalty payable to the Government of Portugal.

4.3 Property Ownership

This Technical Report has been prepared on behalf of Deeprock and ACM, by the author on behalf of Minorex Consulting ('**Minorex**') in connection with a proposed reverse takeover (the "**RTO**") of Deeprock by ACM which beneficially owns the Borralha property through its wholly-owned subsidiary, Pan Metals. Pursuant to the RTO, Deeprock will, among other things, under a statutory plan of arrangement transfer all of its other mineral properties to a wholly owned subsidiary in exchange for shares to be distributed pro rata to the shareholders of Deeprock as a spinout transaction, after which the post-spinout Deeprock ("**New Deeprock**") will consolidate all its issued and outstanding shares on a 40-to-1 basis and change its name to "Allied Critical Metals Corp.", and a wholly-owned subsidiary of New Deeprock will amalgamate (the "**Amalgamation**") with ACM ("**Amalco**") and all of the securityholders of ACM will receive like securities of New Deeprock on a 1-for-1 basis and the securityholders and business of ACM will become the securityholders and business of New Deep as the resulting issuer (the "**Resulting Issuer**"). Prior to the Amalgamation, ACM will complete a concurrent equity financing to provide sufficient net proceeds to meet the working capital requirements of the Resulting Issuer, the common shares of which will be listed and posted for trading on the Canadian Securities Exchange (the **"Exchange**"), subject to Exchange approval.

ACM is an Ontario corporation in Canada. ACM acquired 100% ownership of Pan Metals effective on April 29, 2024 (the '**Acquisition**'). Pan Metals holds beneficial title to the Borralha Property, which is licensed in the name of Minerália beneficially in trust for Pan Metals pursuant to an agreement dated effective April 29, 2024 (the "**Property Agreement**"), and Minerália holds the Property through a Mining Licence (C-167) granted by the DGEG of the Government of Portugal. Under the Property Agreement, Minerália holds title of the Property beneficially in trust for PanMetals and has agreed to transfer the legal registration of the Mining License to Pan Metals by paying a final €125,000 licencing payment and committing to continue further exploration work on the Property. The Mining Licence is issued with the proviso that full scale mining will commence within a 5-year period commencing October 28, 2021 to October 28, 2026. Prior to full scale mining, a Definitive Feasibility Study (DFS) and Environmental Impact Study (EIS) needs to be completed to the satisfaction of the DGEG, but in the interim further exploration and pilot mining of up to 150,000 tonnes per annum is permitted. The terms of the Mining Licence include a 3% production royalty payable to the Government of Portugal.

ACM acquired 100% ownership of Pan Metals (through a wholly-owned subsidiary named ACM Tungsten Unipessoal Lda. incorporated in Madeira, Portugal. Under the Acquisition, Pan Metals became 100% owner of the tungsten mineral projects (the '**Tungsten Projects**') in Portugal known as the Borralha Tungsten Project ('**Borralha**' or the '**Project**') and the Vila Verde Tungsten Project ('**Vila Verde**'), in consideration for transferring 10% beneficial interest in the Tungsten Projects (the '**Retained Interest**') to Dalmington Investments Limitada ('**Dalmington**') and granting a 1% net smelter returns royalty in respect of all production from the Tungsten Projects (the '**1% NSR**') to Dalmington.

Accordingly, ACM now owns 90% of the Tungsten Projects and the only royalty on the Tungsten Projects (other than government taxes, fees or royalties under the laws of Portugal) is the 1% NSR, as well as another 1% net smelter returns royalty which was purchased on September 17, 2024 by ACM on behalf of Pan Metals for a purchase price of $300,000 USD. ACM also has the right to repurchase the 10% Retained Interest in respect of Borralha and Vila Verde from Dalmington upon commencement of commercial production from the Borralha and Vila Verde properties, respectively at a purchase price equal to a 30% discount to 10% of the net present values (using a discount rate of 7%) for the respective Tungsten Projects payable 30% in cash and 70% in shares of ACM (or its listed issuer parent company) at a share price equal to the 20-day volume weighted average price. Prior to commencement of commercial production at the respective Tungsten Projects, the Retained Interest will be a fully-carried, non-participating interest, and after it then becomes a participating net profits interest. ACM has the right, after production commencing at the Tungsten Projects, to purchase 50% of the 1% NSR for a cash purchase price equal to 70% of 1% of the combined net present value of the Tungsten Projects.

Photograph 4.1: Old Borralha Millsite looking Northeasterly from Santa Helena Breccia

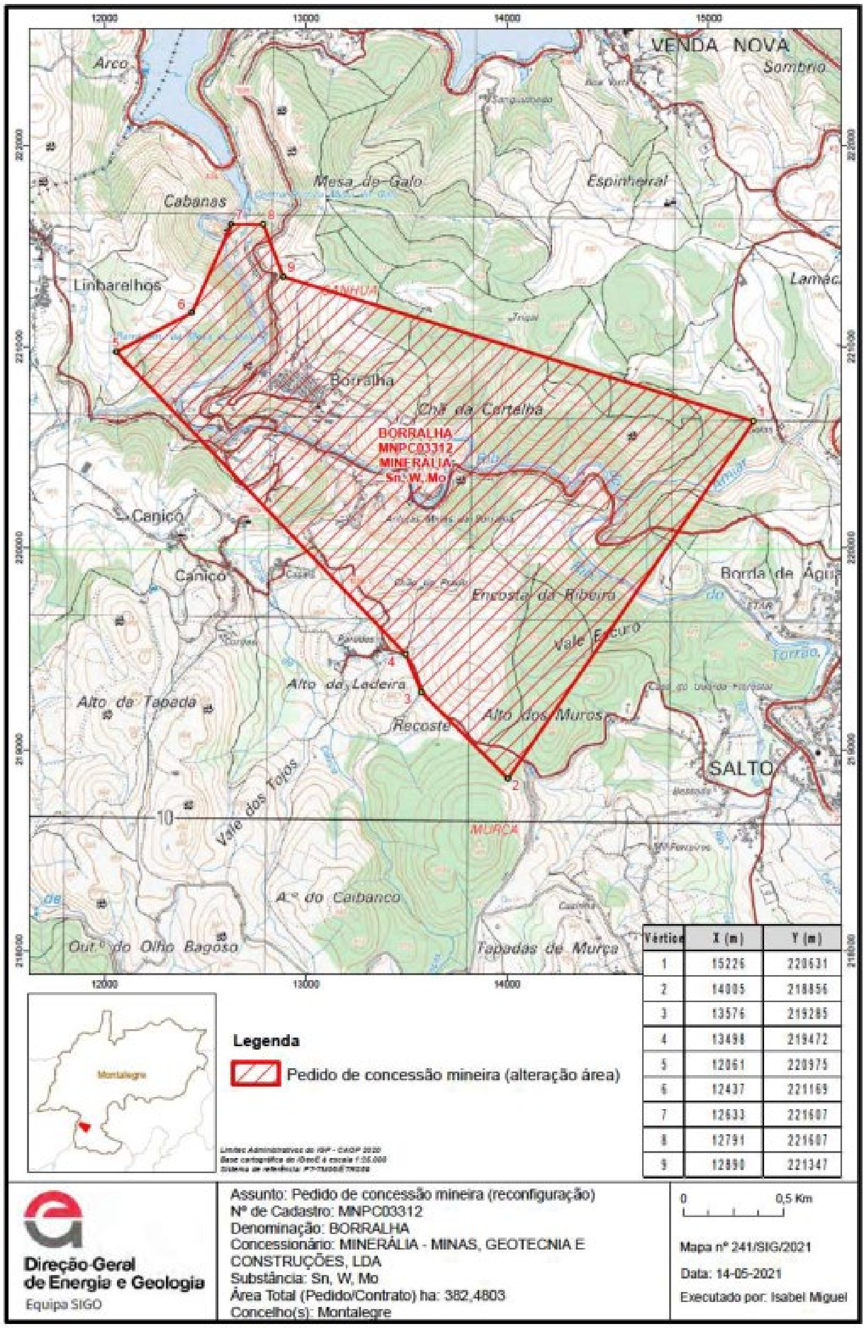


Figure 4.2: Area of Experimental Mining Licence (Minerália, 2022)

4.4 Location of Mineralization

The Borralha Experimental Mining Licence is much larger than the old historic mining and milling areas. All the proposed advanced exploration and development work on the mineralized intrusive breccia stock is situated well within the mining camp and the permitted area.

4.5 Exploration and Surface Rights, Environmental, Reclamation and Permitting

The surface and water rights where the main exploration activities have taken place are privately owned where persons are currently renting or have acquired surface rights for farming activities. The work on the Property was conducted with the approval of the property owners and without any issues with the community.

Minerália delivered the Environmental Impact Assessment ('EIA') and preliminary Mine Plan were submitted to the Environmental regulator, Agência Portuguesa do Ambiente ('APA'), on June 13th, 2024 under the Decree-law 151-B/2013 of October 31st. Both documents will be reviewed by an Evaluation Committee established by APA. It is common for the reviewers to request additional details. Once those additional details are delivered to the regulator and if they are satisfied with the answers provided, they will declare the conformity of the project and the EIA will proceed with the revision. Only after the regulator declares the conformity of the project and EIA, it goes for public consultation, and only at that time, can the EIA document be made available to all stakeholders. The revision period from delivery to its final approval ('DIA' - Environmental Impact Declaration) is 120 days, but the timing stops when APA request additional details and resumes after requested information is delivered.

Future exploration work does not require additional permits, though they must be proposed for approval by General Directorate for Energy and Geology. Besides industry-standard environmental responsibilities that are to be followed, the Property Owner does not have any responsibilities concerning some pre-existing environmental liabilities from historic underground and surface mining. The core logging and sampling facilities are located off the Property.

Exploration activities do not require additional permits, although they must be proposed to DGEG for approval. Aside from normal environmental responsibilities, the Company does not have any responsibilities concerning any pre-existing environmental liabilities, such as the waste dumps from historic mining operations. In fact, the landowner has excavated and sold much of the various waste dumps for local roadbed material.

Photograph 4.2: Inclined Production Shaft in the Sta. Helena Breccia Open Pit

Photograph 4.3: View looking northward at the Borralha Penstocks and Power Plant

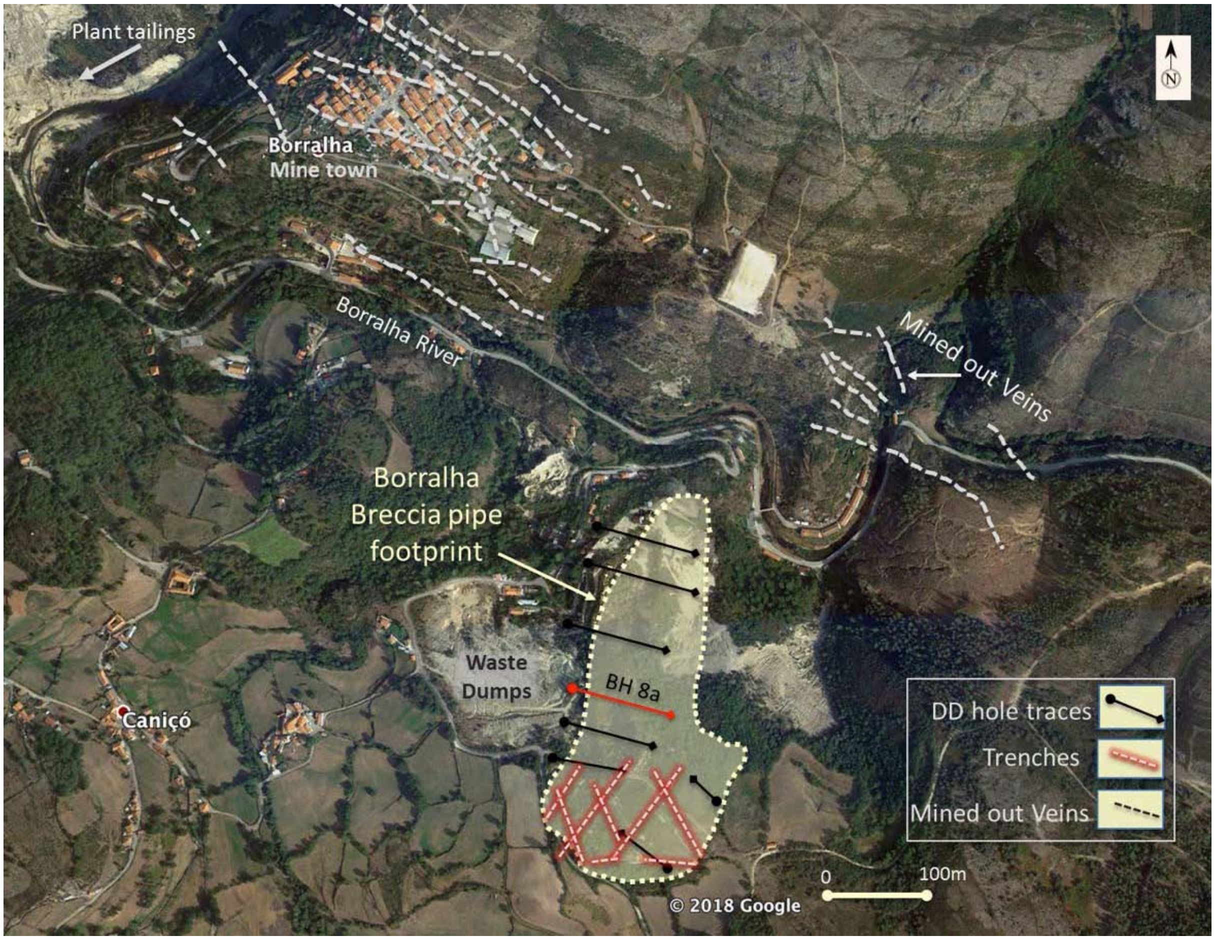


Figure 4.4: Satellite Image of the Borralha Mine Area and the SHB Intrusion (after PanMetals, 2020)

4.6 Significant Factors or Risks Affecting Access, Title or Ability to Perform Work

The surface and water rights where the main exploration activities have taken place are privately owned. The work on the Property was conducted with the approval of the property owners and without any issues with the community. Future exploration work does not require additional permits, although they must be proposed for approval by General Directorate for Energy and Geology.

The Project is readily accessible year-round by good, paved highways and within the Property there are several paved and good gravel roads that are accessible year-round by truck or car. Much of the property has been cleared because of either the various mining operations or farming activity. Local forests are commonly covered by pine and oak trees. In addition, the climate is suitable for work all year round, but sometimes industrial work is limited in July and August as the local fire department is under-staffed due to summer fire-fighting duties elsewhere in Portugal.

Except as described above, there are no other significant risks or factors are present that would affect access, title, or ability to perform work on the Property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

5.1 Accessibility

The Borralha property is accessible year-round by good paved highways extending northeastwardly from the city of Porto, Portugal, or easterly via National Road N103 from the city of Braga. It is approximately 110 km from Porto's Francisco Sá Carneiro International Airport (OPO) to the property; the same distance by road as it is to the nearby seaport of Leixões. Alternatively, it is approximately 60 km via the paved National Highway 103 from Braga to the property.

There are also several paved and good gravel roads within the property that are accessible by truck or car. It is 35 km from the property via N103 to the Municipal capital of Montalegre and 5 km to the Salto parish.

5.2 Climate and Vegetation

The Atlantic Ocean influences the weather and climate of mainland Portugal, the most westerly country in Europe. Its southerly latitude provides a Mediterranean type of climate, like that of the State of California, but the summer heat is tempered by the Atlantic Ocean. Their winters on the coastal regions are quite mild. In contrast, the northern and central interior of Portugal are quite mountainous with plateaus rising locally to over 1,800 m AMSL. Also, the summer season is much cooler, and winters may be quite cold.

Summer sunshine and temperatures and winter mildness increase southwards. Snow is very rare at sea level in Portugal, but it becomes more frequent inland and at higher elevations in the north, like in Borralha where some sporadic snow can occur during the winter. Winter rainfall is rather heavy north of Lisbon and the weather in the far north is often wet and stormy. In northern Portugal daily sunshine averages are from four to five hours in winter and ten to eleven hours in summer in the north. These figures rise to six hours in winter and twelve hours in summer further south. One of the warmest European countries, yearly temperature averages in mainland Portugal are 13°C (55°F) in the north and 18°C (64°F) in the south. The climate in northcentral Portugal and the Property itself is mild with temperatures ranging from freezing to highs in the mid-30^{o}'s C with an average annual temperature of 13°C (55°F).

Much of the Property has been cleared of trees because of either the various mining operations or farming activity. The forests are sparsely to thickly covered commonly by pine and oak trees. The cleared areas are covered by a variety of grasses and low shrubs, except where they have been sown with hay and seed crops. There are a few vineyards mainly for personal use.

5.3 Surface and Water Rights

The surface rights where the main exploration activities are being proposed are rented or were acquired for farming activities. All the exploration activities have been conducted with the approval of the landowners and local communities without any issues. As an example, the drill core logging and sample storage facility used by Minerália during their recent exploration work was made available, free of charge, by the Montalegre Municipality.

5.4 Local Resources and Infrastructure

Borralha is close to essential infrastructures such as roads, electric power lines, ports and airports. Electricity and water have been readily available throughout the mining history of the Borralha. Hydroelectric power is available from a dam and hydroelectric plant 3 km to the north, and plentiful water is available from the Borralha River that crosses through the property. There is also a small population of retired or unemployed mining personnel living locally for a ready labour force.

Board and lodging for exploration personnel are available in the nearby town of Salto. With the advancement of the project mine offices and housing in Borralha might also be obtained for on-site work programs. Heavy equipment and specialized contractors are readily available in the area due to the regular maintenance and upgrades to the local dam and powerlines. The adjacent settlement of Caniçó and other nearby settlements are rural and agricultural without accommodations for a large exploration work force.

5.5 Physiography

The property is situated within upland hilly terrain with relatively low relief, varying from 700 to 950 m AMSL. The Borralha River bisects the property separating the southern prospective Santa Helena Breccia from the northern area of sub-horizontal vein structures, the focus of the historic Borralha mining operations.

Photograph 5.1: View looking Southward at the Santa Helena Open Pit and Waste Dump.

6 HISTORY

6.1 Borralha Mining and Production History

The Borralha mine was discovered by Domingos Borralha when he found wolframite-bearing rocks on his land. In 1902 the mining concession was granted to the Compagnie de Mines d'Étain et Wolfram which in 1909 became the Mines de Borralha, SA Brussels and in 1914 became Mines de Borralha SA Paris. By 1910 the mine had become the largest tungsten source in the country. Mining continued almost uninterrupted from 1903 to 1985 but there were two standstill periods: one from mid-1944 to late-1946 that was imposed by governmental law, and another from early-1958 to late-1962.

At one period in its history, the Borralha Mine was the largest tungsten mine in Portugal, but later slipped to second in terms of production when Panasqueira mines continued their production after Borralha output decreased. During low tungsten price periods Borralha was traditionally more profitable than Panasqueira. Borralha was traditionally richer in grade but with higher operational costs due to natural and managerial reasons.

The global production of wolframite and scheelite concentrates from 1904 until the mine's closing in 1985 is estimated at about 18,500 tonnes concentrate, although this number is an approximate and certainly much less than the true value. The largest annual production was in 1955 with 524.3 tonnes of concentrate, of which 44.39 tonnes came from mining vein structures by 'collecting workers' (aka. 'apanhistas') and 58.37 tonnes from the open pit on the Santa Helena Breccia ('SHB'). Productions from the Borralha property from 1904-1985 totalled 10,280.92 tonnes wolframite concentrate with an average grade of 66% WO_3 (see Table 6.1).

The monthly production record of concentrate was 100 tonnes in May 1944, one month before the production was terminated by law (order/decree: 33 707). During 1975 to 1980, the average annual production was 302.8 tonnes and the total production during this period was 1,816.95 tonnes. Actual mined tonnes and original grades of tungsten are not well-documented.

Most of the production at Borralha was wolframite concentrate. Scheelite concentrates represented about 18% of the total production. In the period between 1975 and 1980 there was also the production of chalcopyrite concentrates which had a small silver component. From 1975 to 1980 the total production of chalcopyrite concentrates at Borralha was 1,711.65 tonnes (1.06 tonnes of tungstate concentrates to 1 tonne of chalcopyrite concentrates). The chalcopyrite concentrates had silver values in the order of 0.3 %. There was also a small production of tin concentrates from the associated cassiterite mineralization.

During 1981 to 1985 the tungsten ore prices decreased by more than 50%, from approximately USD $147 per metric tonne unit ('MTU') to approximately USD $63 per MTU in July 1985. The average production costs increased more than 30% and there was a crisis in the worldwide supply. Many mines closed their operations worldwide, including Borralha.

	WOLFRAMITE Production		SCHEELITE Production		CASSITERITE Production	
Year	**Grade (%)**	**Tons**	**Grade (%)**	**Tons**	**Grade (%)**	**Tons**
1907	65	146				
1907	65	25				
1908	65	241				
1908	64.5	47				
1909	70	25				
1909	65	267				
1910	65	26				
1910	65	384				
1911	65	440				
1912	65	400				
1913	65	361				
1914	65	220				
1915	65	200				
1915	65	15.8			70.7	2.1
1916	65	321				
1922	65	77.4				
1923						
1924						
1925	15	36.1			65	8.5
1926	65	192.7			65	4.1
1927	65	92.3			65	8.3
1928	65	111.6				
1929	65	119.3				
1930	65	102.5			60	11
1931						
1932	65	82				
1934	65	84.7				
1935	55	135.9				
1936	65	135.1			65	1.6
1937					49.7	4
1937	70.43	139.3			40	2.1
1938	68.4	222.8				
1939	68.4	222.8			70	3.4
1963	70	123.2	65	10.7		
1964	70	134.8	65	15.4		
1965	70	145.9	65	13		
1966	70	214.7	65	19.6		
1967	70	253.3	65	20.4		
1968	55.68	435.7				
1969	70	425.8				
1970	70	304.5	70	80.9		
1971	70	306.4	70	67.4		
1972	70	305.7	70	69		
1973	70	279.9	70	65.7		
1974	70.66	305	73.64	55		
1975	70.48	319.2	75.07	57.9		
1976	70.27	265.3	70.8	45.6		
1977	70.35	187	68.65	39.2		
1978	69.9	202.5	70.96	39.4		
1979	70.52	278	70.7	72.6		
1980	69.9	240.2	69.8	76.3		
1981	68.9	266.6	68.4	82.9		
1982	68.74	202.1	67.13	65		
1983	68.63	210.5	67.66	40.6		
	Average %	**Total Tons**	**Average %**	**Total Tons**	**Average %**	**Total Tons**
Rounded	**66**	**10,278.92**	**69**	**936.3**	**61**	**45.1**

Table 6.1: Total Production of Concentrates (after Mining Bureau data, 2020)

6.2 Historical Mineral Resource Estimate

In their technical report on the Project dated August 19, 2020, Minerália reported a mineral resource estimate for the Santa Helena Breccia body. The technical report was not publicly published but was prepared for private company purposes in connection with submissions made to Portuguese regulatory authorities. The estimate was based upon the results from nine diamond drill holes and channel samples from nine trenches within an area with a strike length of 500 m and up to 200 m deep. Two drill holes were excluded as they finished prematurely when they intersected old artisanal workings at shallow depths resulting in poor core recovery. The data spacing varied from 20m to 100m between drilling and trenches. Only the tungsten resources were estimated.

All the trench channel samples, composited into 5-metre lengths, and drill hole core samples, commonly of 1-metre length, showed a high variation in grade distribution within the breccia body indicating that the tungsten mineralization is very 'nuggety'. Coarse-grained wolframite and patches of high-grade wolframite disseminations were commonly observed on surface, in trenches and locally in SHB drill core.

Minerália personnel modelled the SHB mineralization in three dimensions and used Ordinary Kriging for grade interpolation, later comparing the results with an Inverse Distance interpolation. The results of each interpolation compared favourably.

In their 2020 technical report, Minerália provided a historical estimate of Inferred mineral resources of the Santa Helena Breccia amounting to 17,898,289 tonnes of mineralized material grading 1,420 gpt WO_3 using a grade cut-off of 500 gpt WO_3 and a density of 2.70 g/cm^3. While the historical estimate is helpful to understand the mineralization of the Project based on the parameters and methods described above, especially regarding submissions to the Portuguese mining regulatory authorities pertaining to the license for the Project, Minerália is not independent from the Project. In addition, the author (or another independent qualified person, as defined under NI 43-101) would need to obtain updated new assay analyses for the samples verified from the applicable drill holes as well as additional drilling and assays to verify the previous assay analysis and complete the corresponding resource estimate to determine a current mineral resource.

An independent qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and neither the author nor the Company is treating the historical estimate as current mineral resources or mineral reserves.

7 GEOLOGICAL SETTING and MINERALIZATION

7.1 Regional Geology

The Iberian Peninsula, including Spain and Portugal, is part of the Variscan Fold Belt that in Europe is strongly arcuate, contrasting with the linear pattern of other continental Palaeozoic fold belts, such as the Caledonides and Uralides.

The Iberian Massif is a well exposed fragment of Variscan basement that has escaped significant Alpine rejuvenation except along its margins. The massif has been divided into several zones with specific palaeogeography, tectonics, pre- and syn-orogenic magmatism, and metamorphism.

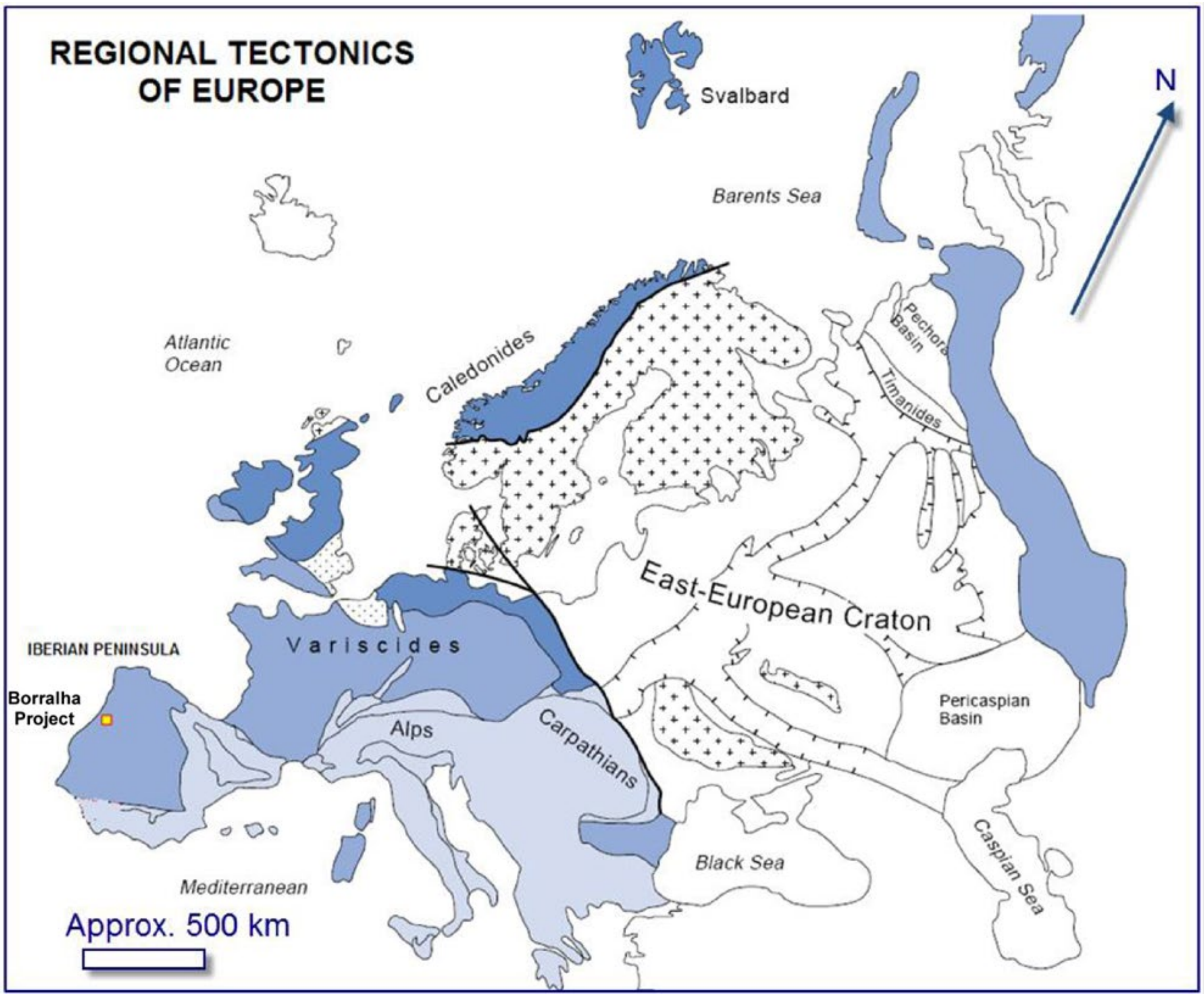


Figure 7.1: Tectonic Map of Europe (after Price, 2013)

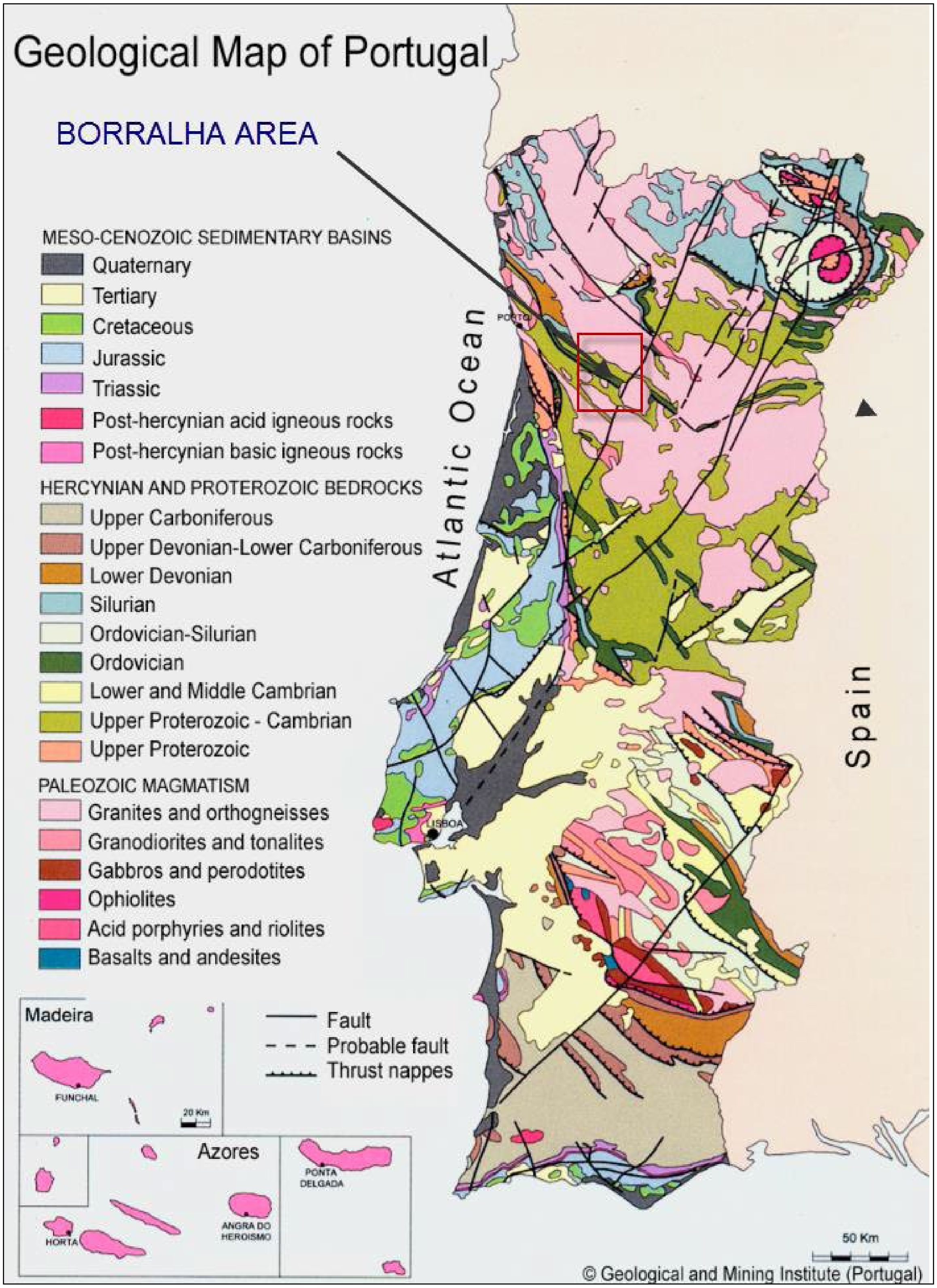


Figure 7.2: Geological Map of Portugal

The geology of Portugal is diverse and complex. The territory can be subdivided into two terranes: the Hesperian Massif and the Epi-Hercynian Cover. The latter includes the western and southern Meso-Cenozoic borders and the basins of the Tagus and Sado rivers. The Hesperian Massif, known for its metallic mineral resources, can be subdivided into various geotectonic zones. The most important zone in northern Portugal is the 'Galicia - Trás-os-Montes' zone ('**GTOMZ**') that hosts the tungsten deposits at Borralha.

The GTOMZ is characterized mainly by the existence of two mafic and ultramafic polymetamorphic massifs known as 'Bragança' and 'Morais'. The surrounding formations date chiefly from the Silurian period and are characterized by the existence of acid and basic volcanic rocks that are in large low angle thrust faults contact with the overlying massifs. Alkalic granite, porphyritic granite, biotite and calc alkaline granite also occur locally. The Morais and Bragança massifs host: chrome, platinum and, possibly, copper, nickel and cobalt mineralization. The surrounding country rocks have the potential for hosting: tungsten, tin, precious metals, uranium and, probably, polymetallic sulphides.

7.2 Property Geology

The Borralha mine is situated in the Minho and Tras-os-Montes geologic provinces in northern Portugal. The terrane is a Precambrian-age 'schisto-graywacke' complex comprised of schist, graywacke, quartzite, and amphibolite. Various granites occur within the complex but only the quartz-rich Penedos granite is unambiguously intrusive (Noronha, 1972). All the granites have been dated by Mendes (1968) and are related to the Hercynian orogeny. All other tungsten and tin mineralization in western and central Europe are also a consequence of the Hercynian orogeny.

The Borralha tungsten deposits occur in a contact zone between Precambrian metasedimentary formations and two-mica, porphyritic coarse-grained granite called the 'Borralha syn-tectonic granite". The country rocks and hosts to the mineralization are almost exclusively mica schists and granites locally intruded by aplite to pegmatite dykes.

A major characteristic of the Borralha deposit is the presence of large siliceous, intrusive breccia bodies that are probably the source of the fault- and fracture-controlled sub-vertical and sub-horizontal vein systems (Noronha, 1972). Mineral deposits are comprised of: wolframite, scheelite, chalcopyrite, pyrite, pyrrhotite, sphalerite, and molybdenite. Both breccia intrusions and veins are mineralized but only the latter were extensively mined.

Geological mapping by Minerália personnel has shown that there are three distinguishable zones hosting the deposits. They are:

- An upper 'Granitic Zone' in the southwestern part of the property is underlain predominantly by the Borralha syn-tectonic, porphyritic granite;
- A lower 'Metasedimentary Zone' underlain predominantly by micaceous schist; and
- A middle 'Black Zone' that is typically wider than the upper and lower zones consisting of biotitic fine- to medium-grained transitional rocks.

Between the middle black zone and the underlying schist zone, there is a band which is characterized by the occurrence of various closely-spaced lithological units. These units appear 'blended' into 'plates' that vary in thickness from a few centimetres to several metres. Elsewhere, in the upper granitic zone at the southern end of the -60-level underground drift that crosses the Sta. Helena Breccia a medium-grained, two-mica granite is visible instead of the surrounding porphyritic granite (Price, 2012). Also, within the lower schist zone there are bands of quartz-rich schists with intercalated micaceous bands that together give this zone a striped appearance. This important marker horizon occurs towards the northeastern side of the project area. These geological units are all intruded by breccias, aplitic to pegmatitic dykes and mineralized quartz veins.

Several later fault systems have displaced both the breccias and mineralized veins. The country rocks are concordant with the larger regional fault and fold structures that are related to the last phase (D3 phase) of the Hercynian folding at azimuths 130° and 140° (Minerália 2012).

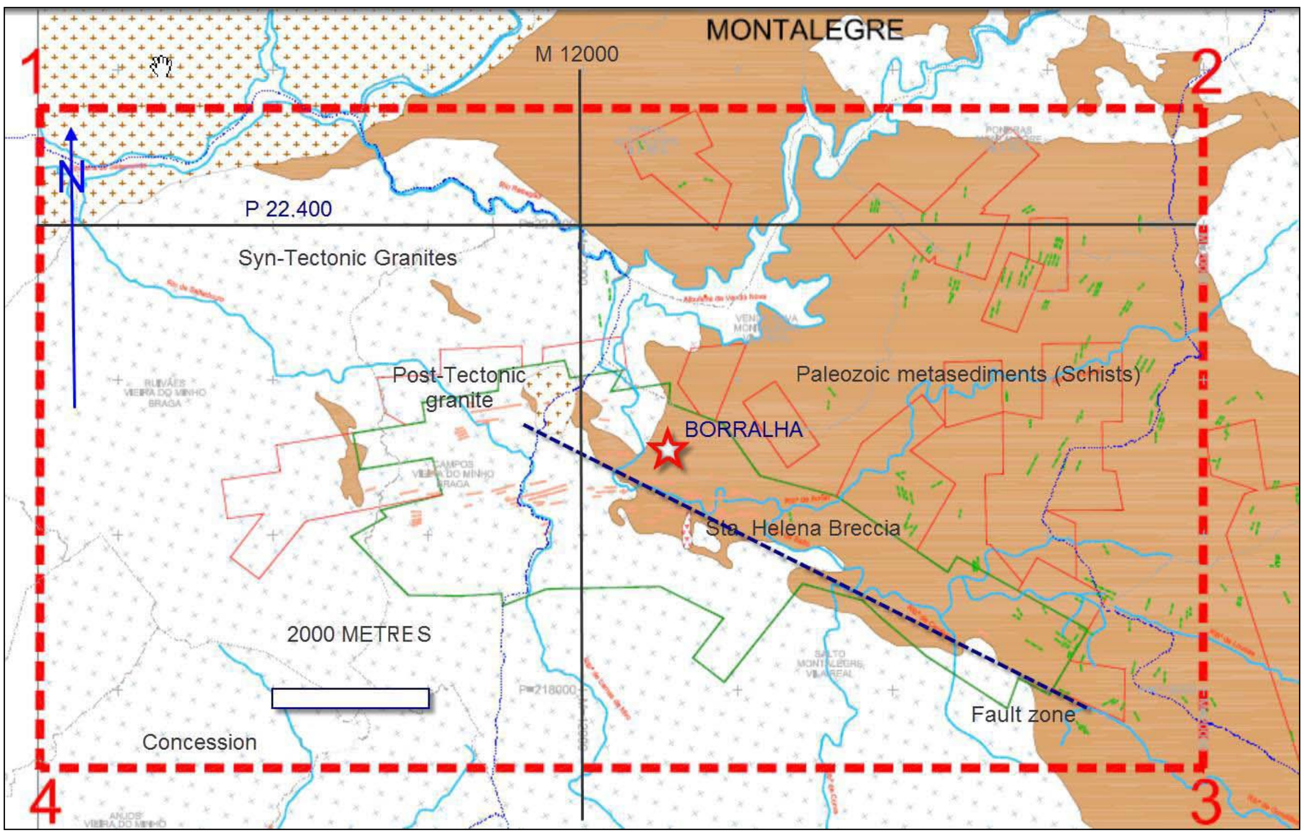


Figure 7.3: Simplified Geological Map of the Borralha Area (Minerália, 2022)

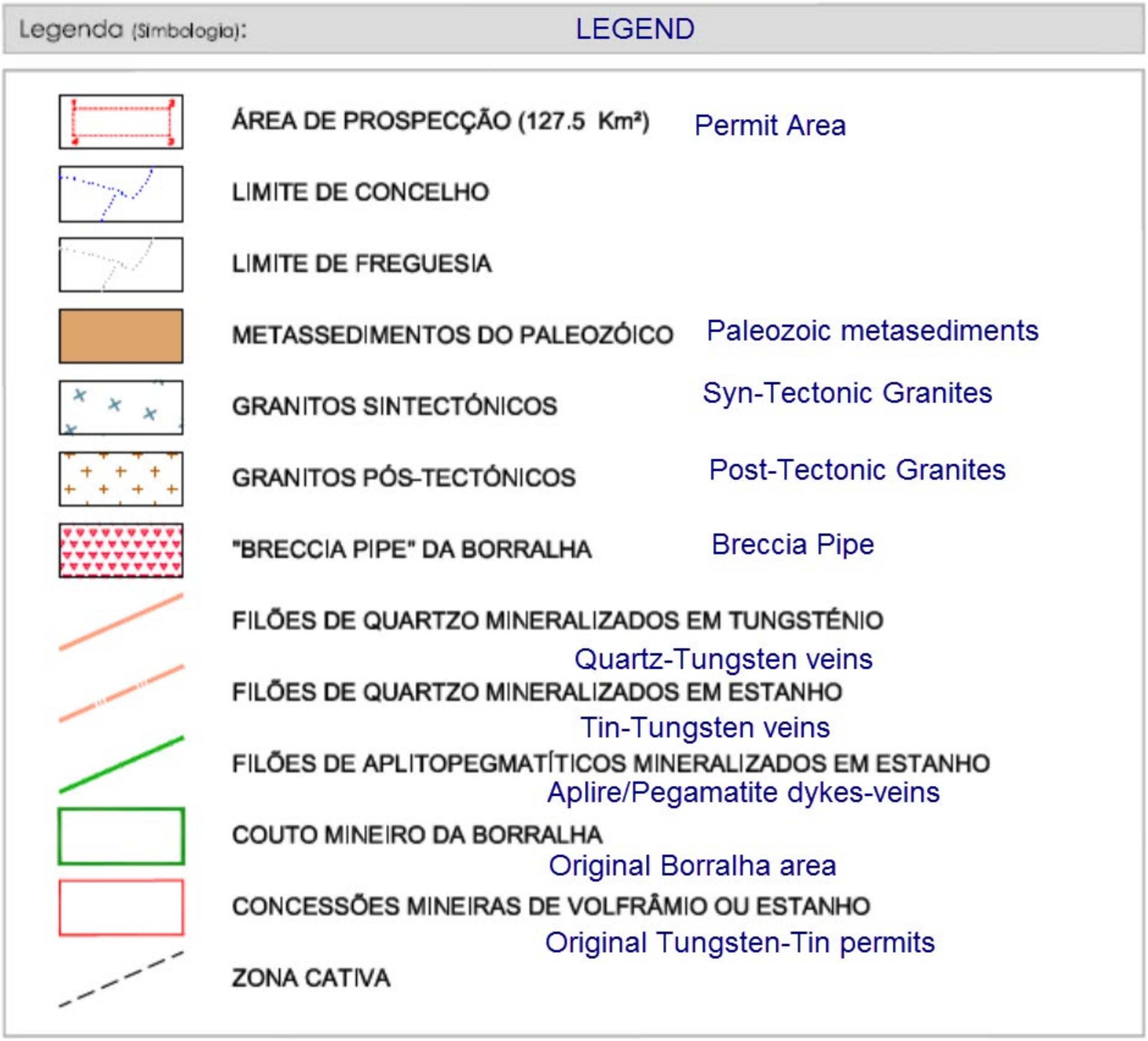


Figure 7.4: Legend for Geological Map of the Borralha Area (Minerália, 2022)

There are two known mineralized intrusive breccias, called the 'Santa Helena' and 'Venise'. Outcrops and drill logs show the Santa Helena Breccia is a mineralized collapsed and intrusive breccia that was superficially mined both underground and a small open pit. The top of the Venise breccia was intersected underground by historical underground quartz vein mining but was never mined. Both breccias host wolframite mineralization; however, there are verbal reports that the Venise breccia also hosts considerable molybdenite. Figure 7.5 illustrates the three-dimensional view of the outcropping Sta. Helena Breccia in relation to the underground Venise Breccia on the -60 m mine level.

7.3 Mineralization

Most of the historical mining was carried out underground on the sub-vertical veins. There was also limited surface open pit mining conducted on the northern portion of the Saint Helena Breccia intrusion. Wolframite with lesser scheelite, chalcopyrite, pyrite, pyrrhotite, sphalerite and molybdenite mineralization was mined underground hosted by quartz veins, wall rocks and the SHB breccia intrusion (Noronha, 1983).

There are three distinct hosts for the Borralha mineralization:

- Quartz veins with wolframite, scheelite and sulphide mineralization;
- Aplite-pegmatite veins with cassiterite mineralization; and
- Intrusive breccia bodies as pipe-like bodies and/or collapse breccias.

Local low grade tin mineralization occurs within the quartz veins within the historical mine area and west of the project area. Aplite-pegmatite veins are reportedly present only in the eastern part of the property, east of the confluence of the rivers Ribeira de Amear with Ribeira do Salto.

The Santa Helena Breccia crops out. It has been partially mined by a series of underground workings and numerous small and shallow surface pits in areas of more extensive tungsten-bearing quartz veins. These tungsten veins have been scavenged over the years, often by ‘apanhistas’ or illegal miners. Detailed historical underground mapping and surface geological mapping indicate that the mineralized Santa Helena Breccia may be at least 500 metres in length north-south, between 80 to 120 m wide east-west, and open to depth.

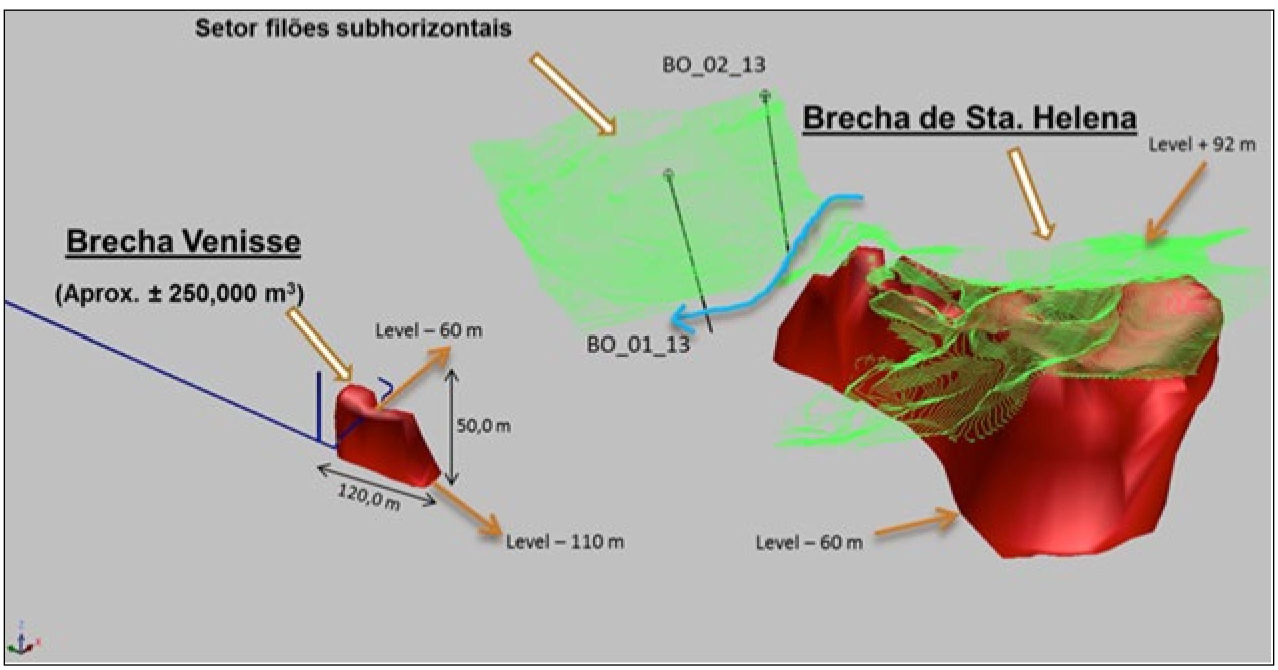


Figure 7.5: 3D View of the Venise and Sta. Helena Breccia (Minerália, 2012)

The Venise Breccia also appears to be oriented north-south and open to depth. At the -60 m mine level, the water level in the old workings, the breccia body has a reported strike length of 80 m with a width of 30 m.

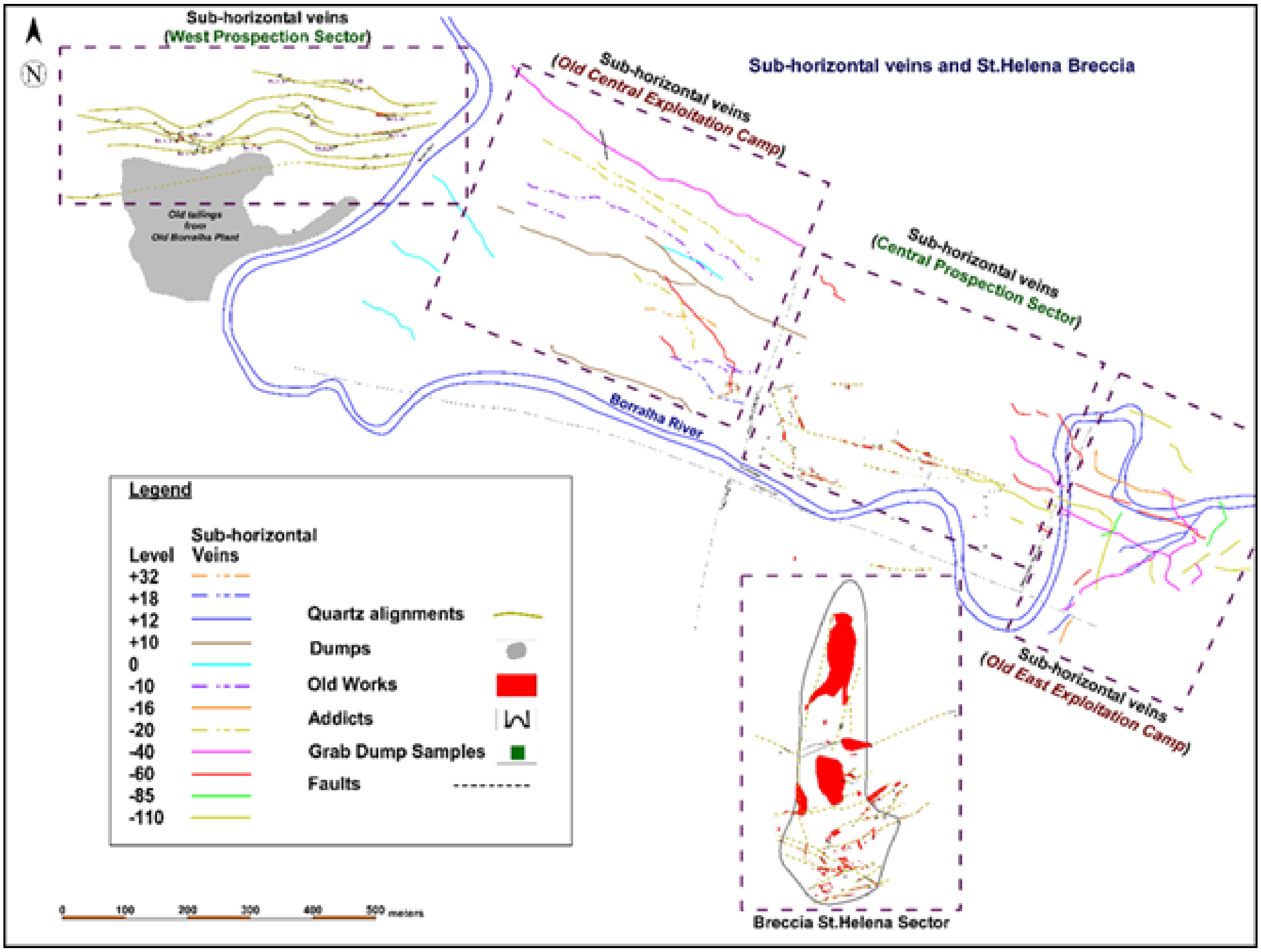


Figure 7.6: Plan of the Known Sub-horizontal Veins and the Sta. Helena Breccia.

Within the Borralha Mining Concession area the quartz veining zones can be grouped as follows:

- Borralha;
- Cruzinhas, Vale de Corças and Châo d`Além-Rio;
- Aguas Terças, Quebrada and Além-Rio; and
- Cerdeira

The Borralha zone was the focus of most of the historical mining and hosted some of the richest tungsten grades and tonnages. The Borralha mines are located approximately in the centre of the mining area, covering portions of five legacy concessions, namely: Borralha, Monte Borralha No. 1, 3 and 4, and Caniçó. The five concessions covered an area about 2,000 m long in an east-west direction, about 1,000 m wide, and to a depth of 210 meters below the 772 m Z-level which was considered the zero level of the mine. Most of the historical mining was conducted underground with some limited small and shallow open pit mining. Prior to 1956 open pit mining focused on surface veins, alluvial and eluvial material, and surficial parts of the Santa Helena Breccia.

Historical mining activity was designated in 'Groups' with letters from A to I. The most recent mining was only conducted in four of these groups: A, B, D and E (see Figures 7.6 and 7.7).

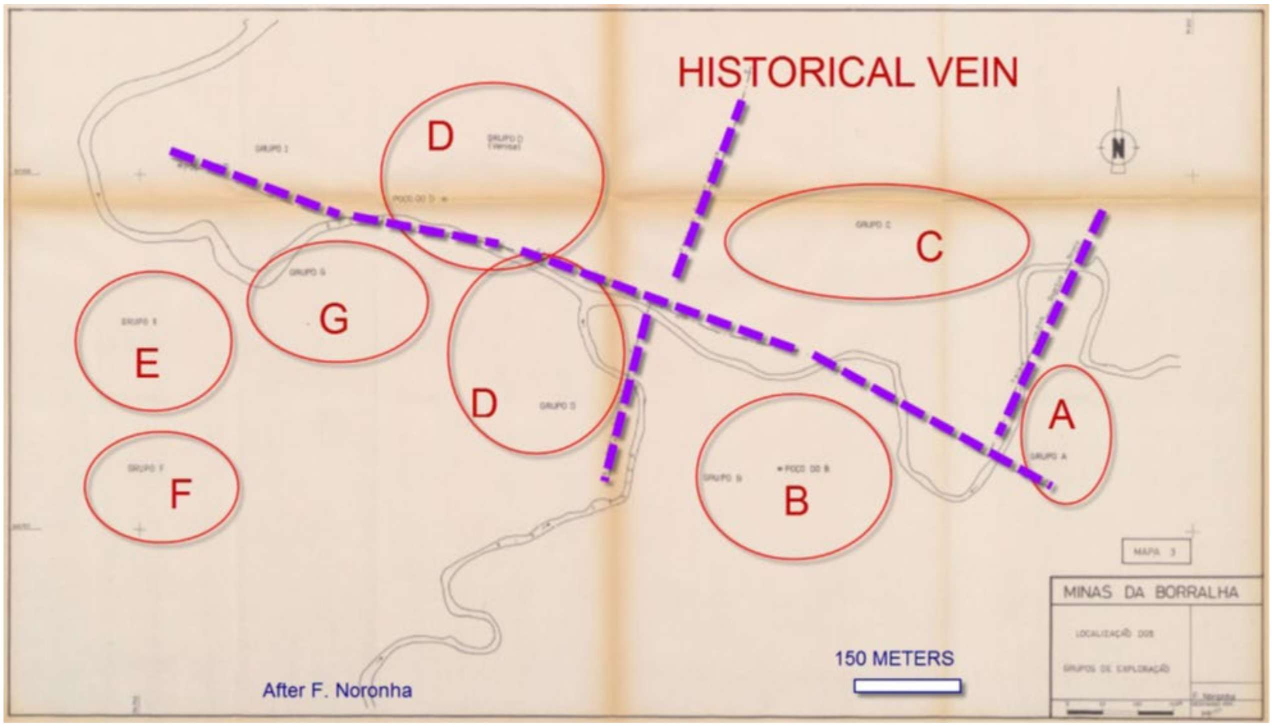


Figure 7.7: Plan of the Historical Vein Groups (Noronha, 1983)

A description of the groups follows (Minerália, 2012).

A Group (or 'A mine') - is located mostly in the eastern part of the original Borralha concession with the veins occurring almost exclusively in the schist zone;

B Group - includes part of Borralha and Monte Borralha No. 4 concessions where the historical production shafts are situated. The Borralha River runs through this zone and the Santa Helena Breccia is included in this group as it extends well to the south;

C Group - is located north of the Borralha River within the Borralha concession and is bounded to the east by the A Group and to the west by the Venise breccia in the D Group;

D Group - adjoins the B Group to the east and includes part of the Monte Borralha No. 1 concession. It is a group with the largest north-south axis, including the Venise breccia body to the north;

E Group – is situated west of the deposit, and includes the 'S. José' vein and 'René' vein to the south;

F Group - is the most western group, including the 'Cruzinhas' and 'Vale de Corças' mines in the granitic zone;

G Group – was short- above the 0 level on the southern bank of the Borralha River;

H and I Groups - were very small with limited mine life. The I Group was situated west of the D Group within the Venise Breccia sector and north of the E Group. The H Group was limited to some surface mining located north of the I Group in the Monte Borralha No. 3 concession.

The Santa Helena Breccia ('SHB') is situated within the contact between syn-D3 Borralha granitic rocks, Silurian-age metasedimentary rocks, and a mixture or transition zone characterized by granites including large xenoliths of metasedimentary rocks (Noronha, 1983). The eastern and western contacts of the breccia are marked by extremely fractured, large and barren north-south striking quartz veins. Detailed historical underground, surface geological mapping and recent drilling of SHB indicate it is at least 575 m long, over 150 m wide and, at least, 250 m in depth (tested to the -110-metre mine level). The major axis of the breccia body strikes north.

The breccia is comprised of mainly angular polylithic fragments varying in size from centimetres to a metre or more. The lithological composition of the fragments is identical to the surrounding granite, tonalite and metasedimentary rocks. The breccia body has been interpreted as a collapsed breccia pipe by Noronha (1983). Hydrothermal alteration occurs near the selvages of breccia fragments and in late fractures. This alteration occurs with varying intensity and is characterized by the occurrence of muscovite I and II, quartz and four generations of chlorite (Gonçalves and Noronha, 2017). Fragments are of granite, pegmatite, or aplite where K-feldspar and plagioclase are partially replaced by quartz II + muscovite II and biotite by chlorite.

The Santa Helena Breccia hosts tungsten, copper, zinc and molybdenum mineralization with associated minor niobium, tin, thorium, uranium, rare earths, bismuth, silver and lead. Generally, wolframite occurs as fine-grained disseminations in breccia fragments, associated with other minerals, and/or in zones with obvious hydrothermal alteration. However, there are also late clear quartz veinlets with coarse-grained wolframite cutting the breccia.

A microscopic study of drill core from the Santa Helena Breccia identified different types of tungsten mineralization. Wolframite and minor scheelite are the main tungsten minerals followed by different disseminated tungstates as: 1) fine to very fine-grained wolframite and scheelite in the fragments (see Figure 7.8a); 2) medium (> 5 to 10 mm) to coarse-grained (> 10 mm) wolframite in the siliceous cement (see Figure 7.8b), in both cases associated with muscovite I and II ± quartz ± Fe chlorite; and

3) coarse-grained (> 10 mm) wolframite in late quartz veins cutting the breccia (Fig. 7.8c). The sulphides occur associated with magnesium-iron chlorite (Bobos and Noronha, 2017).

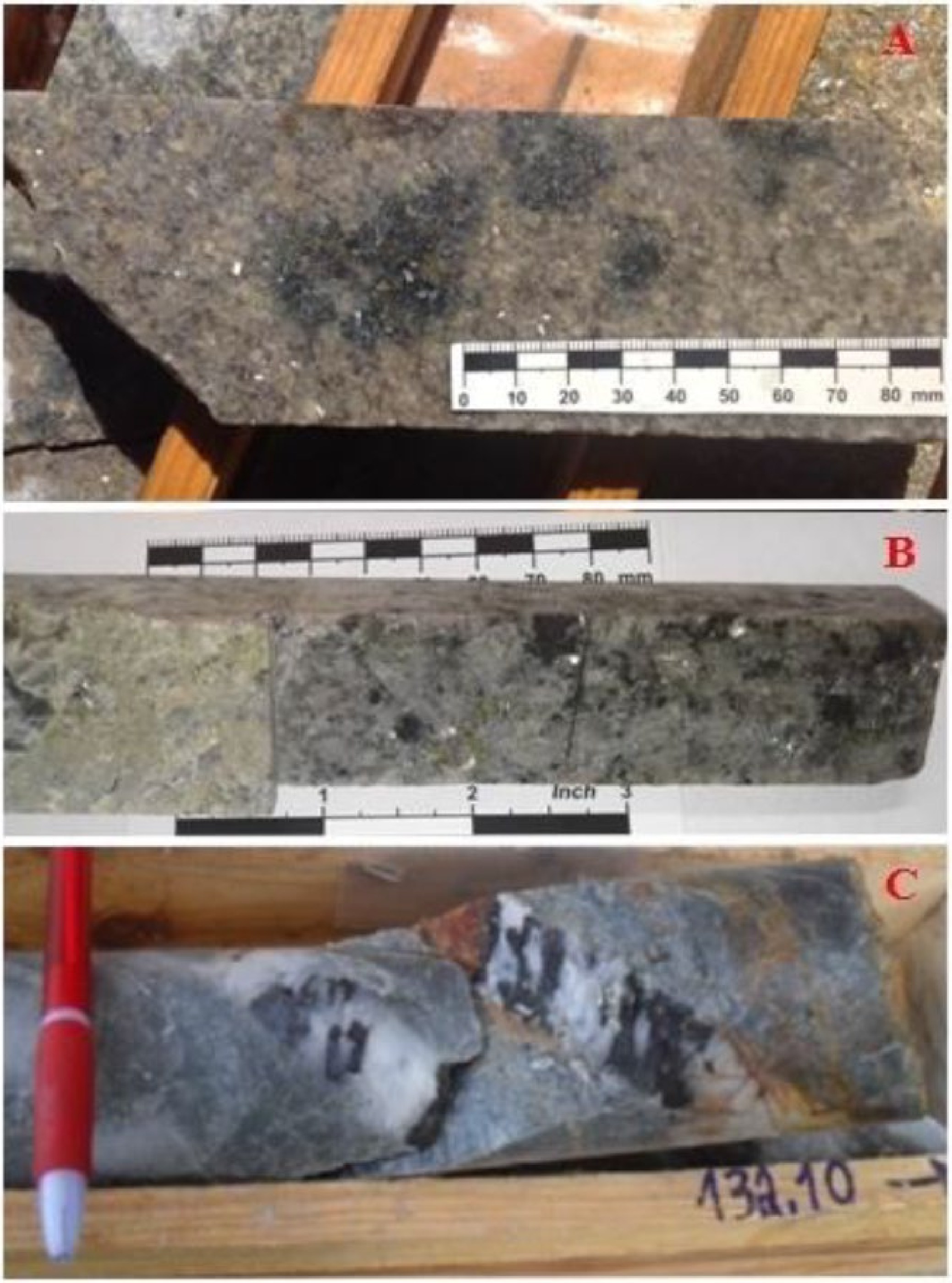


Figure 7.8 a to c: Occurrences of tungsten mineralization in the Santa Helena Breccia (Bobos and Noronha, 2017)

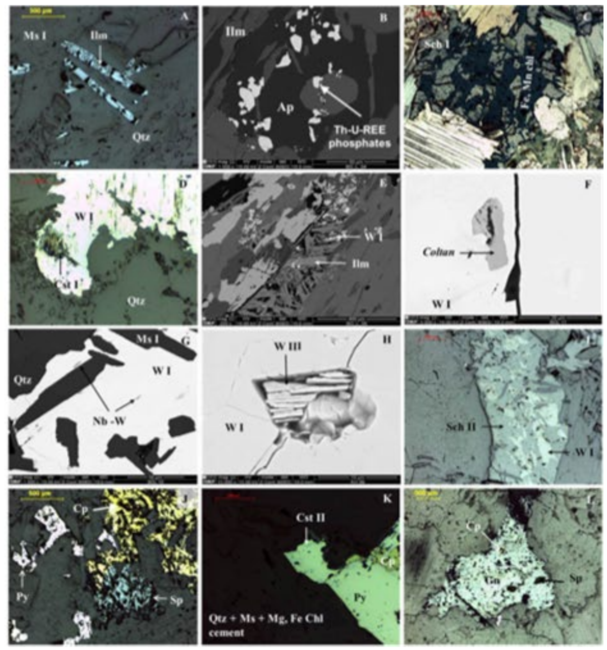
The mineralizing events of the Borralha deposit have been studied by Gonçalves *et al*. (2017). The results of this work have identified four mineralizing stages. They are:

- Stage I – Titanium-Tin-Tungsten-Rare Earth mineralization;
- Stage II – Tungsten-Niobium-Tantalum mineralization;
- Stage III – Iron-Copper-Zinc +/- Tin mineralization; and lastly
- Stage IV – Bismuth-Lead-Silver mineralization.

The following Figure 7.9 illustrates the four mineralizing stages from the Gonçalves et al. (2017) study.

- ***Stage I*** - ilmenite (Fig. A) ± cassiterite I ± apatite ± REE phosphates (Fig. B) ± scheelite I (Fig. C) ± muscovite I ± Fe, Mn chlorite ± biotite ± quartz I;
- ***Stage II*** - wolframite I and II* (Fig. D,E,F) ± scheelite II (Fig. I) ± muscovite II ± Fe chlorite ± quartz II;
- ***Stage III*** – Nb-W oxides (Fig. G) ± cassiterite II (Fig. K) ± major sulphides (pyrite ± chalcopyrite ± sphalerite) (Fig. J) ± Mg, Fe chlorite;
- ***Stage IV*** – wolframite III (Fig. H) ± native bismuth ± minor sulphides (bismutinite ± molybdenite ± galena (Fig. L) ± matildite ± aikinite ± pavonite ± stannite ± greenockite).

*these two wolframites are distinguish by its distinct reflector power promoted by an enrichment in iron - W $I_{(FeO)}$<W $II_{(FeO)}$



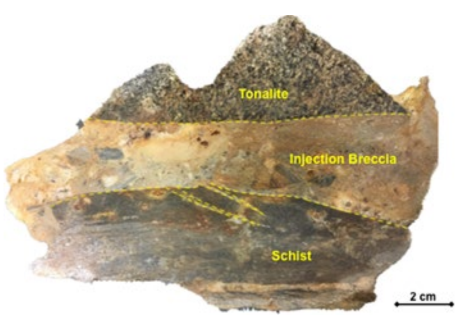


Figure 7.9: Examples of disseminated Wolframite from the Santa Helena Breccia (Minerália, 2012)

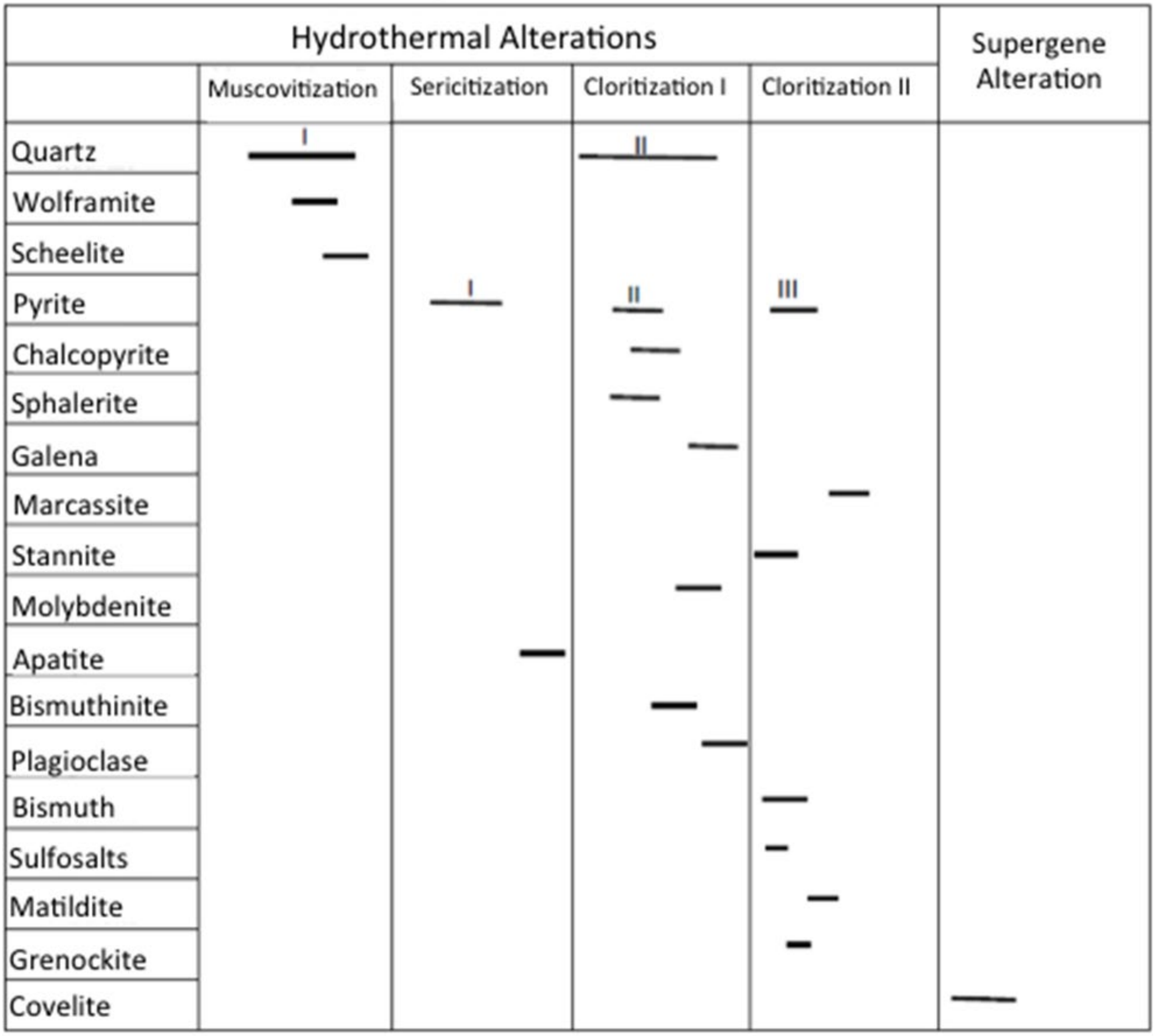


Table 7.10: Santa Helena Breccia Hydrothermal Alteration (Gonçalves *et al.*, 2017)

8 DEPOSIT TYPES

The mineral deposits at Borralha occur as greisens, breccias and veins related to young two-mica granites intruding Paleozoic metasedimentary rocks.

There were two main types of veins ranging from 10 to more than 100 cm wide: 1) 'vertical' veins with -45° to -60° inclinations and strikes of 080° to 130°, and 2) 'horizontal' veins with inclinations less than -30° (Price, 2013). During its mining history, vertical veins were the most productive at Borralha, largely because the miners were used to mining them and they were easily recognized, but the horizontal veins became an important ore source when mining the shallower levels.

Based upon recent drilling results it appears that the Santa Helena Breccia body is an intrusion that has collapsed, brecciated and been later silicified and mineralized with fine- to coarse-grained wolframite with minor cassiterite and base metal sulphides. The northern end of this breccia body was partially mined from underground workings and a small open pit. This breccia body and that of the unmined Venize breccia are of current economic interest.

Mateus et al. (1986) described the formation of Borralha mineral deposits at Borralha as follows.

"*The Borralha tungsten deposit (85% wolframite. 15% scheelite) is composed of several sets of veins (vertical and sub horizontal) up to one meter thick and hundreds of meters long, and two well-developed breccia pipes unique in the Portuguese tin-tungsten province. Vein and breccia formation was controlled by the evolution of the local stress field. related to emplacement of a prolate granitic cupola under the Iode. and also to pre-existing lithological and structural anisotropies.*

Previous paragenetic and fluid inclusion studies [coupled with detailed petrography. mineral chemistry and whole rock geochemistry of wall rocks indicate that ore genesis took place as follows:

(1) Emplacement of a late-tectonic granitic pluton at shallow crustal levels was accompanied by hydraulic fracturing of host rocks and release of magmatic fluids [relatively high K and pH) at temperatures around 500-400 degrees C. produced early potassic alteration (early albite + orthoclase + muscovite + quartz) with concomitant increase of K and Si, and removal of Fe, Mg and Ca. under conditions of vertical and horizontal radial and tangential stresses;

(2) Heating of wall rock meteoric pore fluids leads to large scale convection around the pluton, with cooling and [H+] increase. During this stage. sharp decrease of pC02 lead to the main phase of tungstate precipitation and gradual evolution of wall rock alteration into propylitic assemblages [microcline + chlorite + quartz + sericite + albite). Slight variations in the pH value and in Fe. Mn and Ca concentrations in solution are responsible for variations in the composition of wolframites and scheelite precipitation.

A first fracturing episode affects all minerals formed up to this stage, probably related with a change in the stress conditions with opening of a funnel shaped set of normal tensional fractures that includes early sub horizontal veins [W-bearing), possibly emplaced with reopening of pre-existing fractures.

(3) Further cooling, low values of pH and f0, and progressive rise of sulphur pressure, lead to precipitation of late tungstates and to the main stage of sulphide precipitation [including molybdenite).

Alteration is propylitic (calcite + epidote + quartz + K-feldspar + albite). with gains in Fe. Mg. Ca. P and Na. and 1055 of K and Si. This stage probably corresponds to crystallization of the apex of the pluton. with consequent contraction and fracturing lesser vertical pressure leading to the formation of late sub horizontal tensional fractures, which complete the main episodes of vein formation [stages 1 to 3). The (collapse) breccia pipes seem to have formed at this stage.

(4) High water/rock ratios and marked changes in the composition of mineralizing fluids lead to alteration of pyrrhotite, and precipitation of siderite + fluorite followed by adularia and vermicular chlorite. This contrast is probably related to reaction with previously formed alteration minerals, and to f1uid access into the fractured pluton. with increase of pH.

(5) Late-stage fracturing and further cooling to sub hydrothermal temperatures leads to late argillization along fractures. reflecting slow percolation of large volumes of essentially unmodified meteoric water. It is worth noting that many of the above observations and interpretations are similar to those reported in studies of porphyry-Cu and porphyry-Mo deposits."

The tungsten-tin deposits in northern Portugal are thought to be like the reduced, intrusion-related gold deposits as described by Hart (2006) for the Yukon-Alaskan gold and several tungsten deposits.

Photograph 8.1: Black Wolframite surrounding Quartz Fragment in Santa Helena Breccia

9 EXPLORATION

No exploration work was carried out on the property from 1983 until Blackheath Resources Inc. optioned the property from Minerália in 2011 who continued working as the exploration contractor.

9.1 Digitizing, Surveying and Geological Mapping

Minerália's 2011 exploration work included collecting available historical geological maps and mining plans and digitizing them. This work identified two exploration targets worthy of immediate interest, the under-exploited sub-horizontal veins north of Borralha River in the historic mining area and the Santa Helena Breccia south of the river.

Due to the lack of historical maps showing the 'illegal' small workings, many of the overgrown workings and outcrops had to be cleared, surveyed and mapped. Some of the accessible shallow adits were surveyed, mapped and validated with the old maps, and the results compared with the detailed geological mapping by Noronha (1983). In addition to this work, topographic surveying, establishment of survey grid and soil geochemical sampling work were conducted during the initial exploration phase (Minerália, 2020)

9.2 Trenching and Channel Sampling

The Santa Helena Breccia had never been explored with trenching or drilling prior to 2011. Following the geological mapping work, exploration focused on the area beyond the partially mined open pits with a series of long trenches across the southern part of the SHB. Nine trenches were excavated, cleaned, mapped, and channel samples were cut using a hand-held rock saw and/or chisels. Channel samples were collected at 5-metre intervals (Minerália, 2020).

Trench	Start		Finish		Length
No.	E (UTM)	N (UTM)	E (UTM)	N (UTM)	(m)
T1	585545	4611132	585596	4611219	100
T2	585570	4611175	585566	4611168	135
T3	585455	4611171	585491	4611228	65
T4	585621	4611160	585558	4611257	110
T5	585584	4611133	585516	4611227	115
T6	585524	4611126	585585	4611146	65
T7	585530	4611127	585467	4611205	100
T8	585548	4611553	585540	4611440	125
T9	585527	4611553	585521	4611464	100

Table 9.1: Locations of the 2011 Trenches and Channel Sampling (Minerália, 2022)

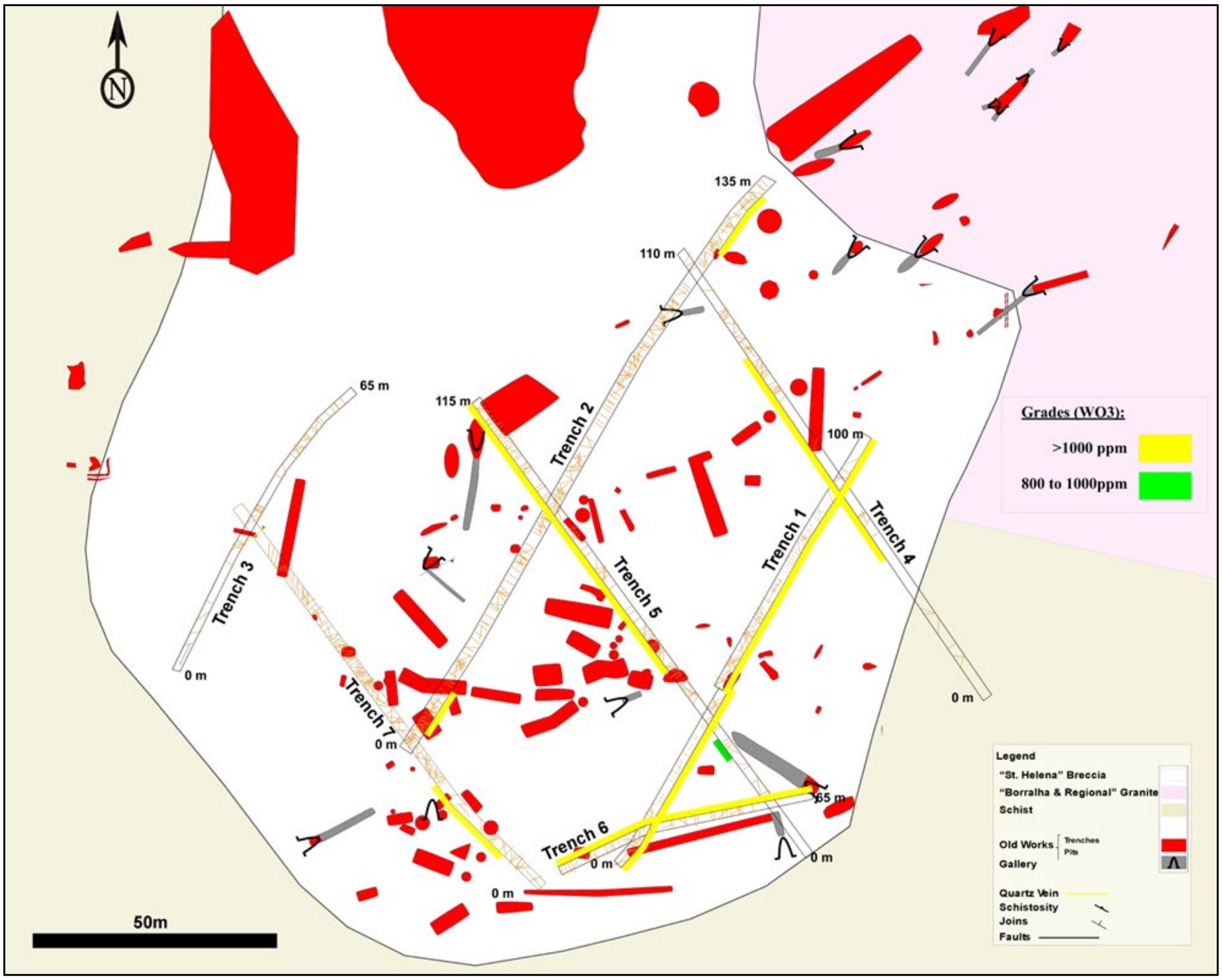


Figure 9.1: Plan of Trenches and Composite Sample Grades in the Southern Portion of the Santa Helena Breccia (Minerália, 2022)

The analytical results from the 2011 channel sampling were very encouraging, such as reported 20 m grading 0.33% WO_3 including 5 m grading 1.09% WO_3. Seven of the trenches returned lengths and grades worthy of further exploration, and disseminated wolframite was discovered in all trenches hosted by the breccia. The composite intervals grading more than 0.1% WO_3 are shown on Figure 9.1. Minerália (2020) tabulated the channel sample composite results, and they are shown in the following Table 9.2.

It is the author's opinion that the trenching and sampling procedures documented by Minerália were suitable and typical for this type of trenching and sampling. The technical work was carried out by qualified professionals according to industry best practise standards.

Sample	From (m)	To (m)	Width (m)	WO_3 %
Trench T1 (all samples)	0	100	100	0.13
including	75	95	20	0.33
including	85	90	5	**1.09**
Trench T2	0	5	5	0.23
and	120	125	5	0.27
Trench T4	35	85	50	0.10
including	35	65	30	0.14
Trench T5	55	110	55	0.14
including	55	65	10	0.41
and including	85	90	5	0.24
and including	105	110	5	0.33
Trench T6	0	50	50	0.10
including	0	25	25	0.13

Table 9.2: 2011 Channel Sample Composite Tungsten Results (Minerália, 2022)

Photograph 9.1: Santa Helena shaft with Overgrown 2011 Trench 10 m to South (right)

9.2 Diamond Drilling

There have been four recent phases of drilling on the Property. They include: 1) two 2013 diamond drill holes, totalling 297.75 m, were completed north of the Borralha River to test for sub-horizontal veins in the main historical mine area, 2) nine 2014 diamond drill holes, totalling 1,383.55 m, within the SHB tested for its tungsten-tin mineralization, 3) two 2017 diamond drill holes, totalling 236.25 m, to continue testing the SHB mineralization, and in 2023 and 2024 three diamond drill holes were drilled with two being completed, totalling 490.4 m, and thirteen reverse circulation ('RC') drill holes, totalling 3,195.00 m, continued testing the SHB mineralization. The total meterage of diamond and RC drilling on the Property since 2013 is 5,602.95 metres. A full discussion of the various phases of exploration drilling follows in Section 10.

10 DRILLING

During Blackheath Resources' tenure thirteen diamond drill holes were completed on the property, totalling 1,917.55 m of mostly HQ-size core. In 2013, two drill holes tested the sub-horizontal veins on the north side of Borralha River, and later in 2014 and 2017 eleven drill holes tested the mineralization of the Santa Helena Breccia (see Table 10.1).

Company	Period	Total Holes	Total Length (m)
Blackheath	2013	2	297.75
Blackheath	2014	9	1,383.55
Blackheath	2017	2	236.25
Total	**2013 - 2017**	**13**	**1917.55**

Table 10.1: Summary of 2013-2017 Diamond Drilling (Minerália, 2022)

10.1 Phase 1 - Drilling of Sub-Horizontal Veins

The two diamond drill holes, BO_1_13 and BO_2_13, totalling 297.75 m, tested an unmined area on strike with past productive, sub-horizontal quartz-wolframite veins on the north side of the Borralha River. This drilling was intended to prove the presence and thicknesses of any vein structures since the vein-hosted wolframite mineralization was known to be nuggety, erratic and localized in shoots.

Both holes were geologically interesting as Hole BO-1_13 intersected 14 quartz veins and veinlets, and Hole BO_2_13 intersected 4 quartz veins and veinlets. At a drilling length of 29 m drill hole BO_1_13 intersected what appears to be an old illegal working with 90 cm of no core recovery. These two holes proved the existence of mineralized quartz-wolframite veins within this unmined area of the Borralha mine complex. The significant mineralized intercepts from the 2013 drilling were tabulated by Price (2013) in the following Table 10.2.

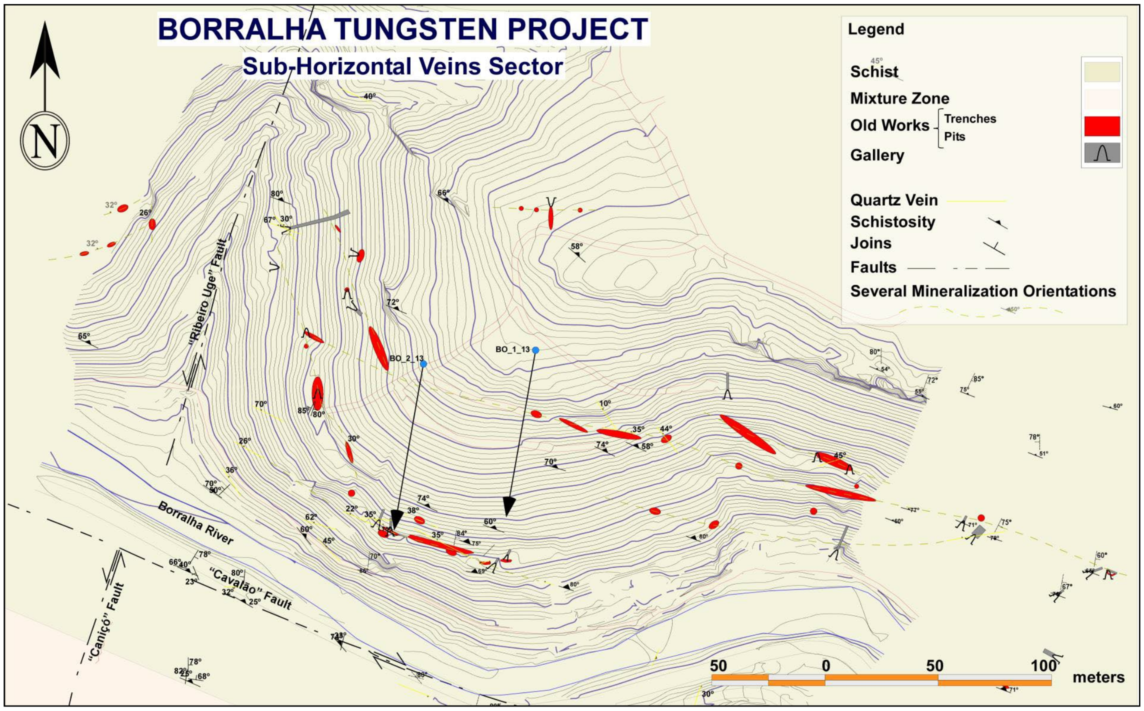


Figure 10.1: Plan of the 2013 Diamond Drill Holes (Price, 2013)

Drillhole	From (m)	To (m)	Interval (m)	WO_3 %
BO_1/13	19.4	20.4	1	0.23
BO_1/13	47.3	48.3	1	0.21
BO-2_13	48	49	1	0.29

Table 10.2: Table of Intercept Results from 2013 Drilling Sub-Horizontal Veins

10.2 Phases 2 and 3 - 2014 and 2017 Diamond Drilling Programs

During 2014 and 2017 eleven HQ-size diamond drill holes tested the SHB, totalling 1,619.8 m. Most of the SHB is covered beneath 1 to over 5 m of till and waste from the numerous test pits. Thus, the drilling programs were intended to prove the consistency of the mineralization over an area measuring 500 m north-south by 100 m east-west and to a depth greater than 200 m below the highest collar elevation. Two drill holes, BO_08 and BO_11, were abandoned because they intersected old illegal underground workings.

Table 10.3 summarizes the reported notable drill hole intersections of tungsten mineralization within the SHB that are documented by Minerália (2020). Figures 10.5 and 10.6 show the geology of the SHB and the locations and orientations of the 2014 and 2017 drill holes, and Photograph 10.1 illustrates the coarse-grained wolframite mineralization intersected during the drilling of the SHB.

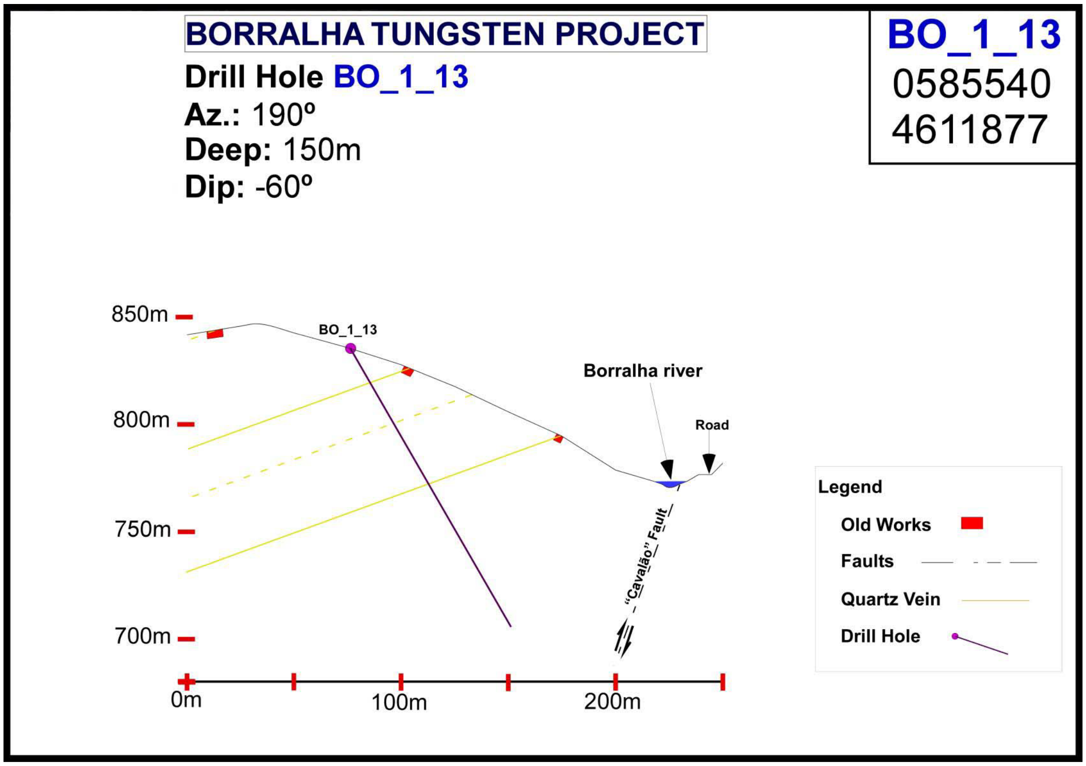


Figure 10.2: Vertical Cross-Section of Diamond Drill Hole BO_1_13 (Price, 2013)

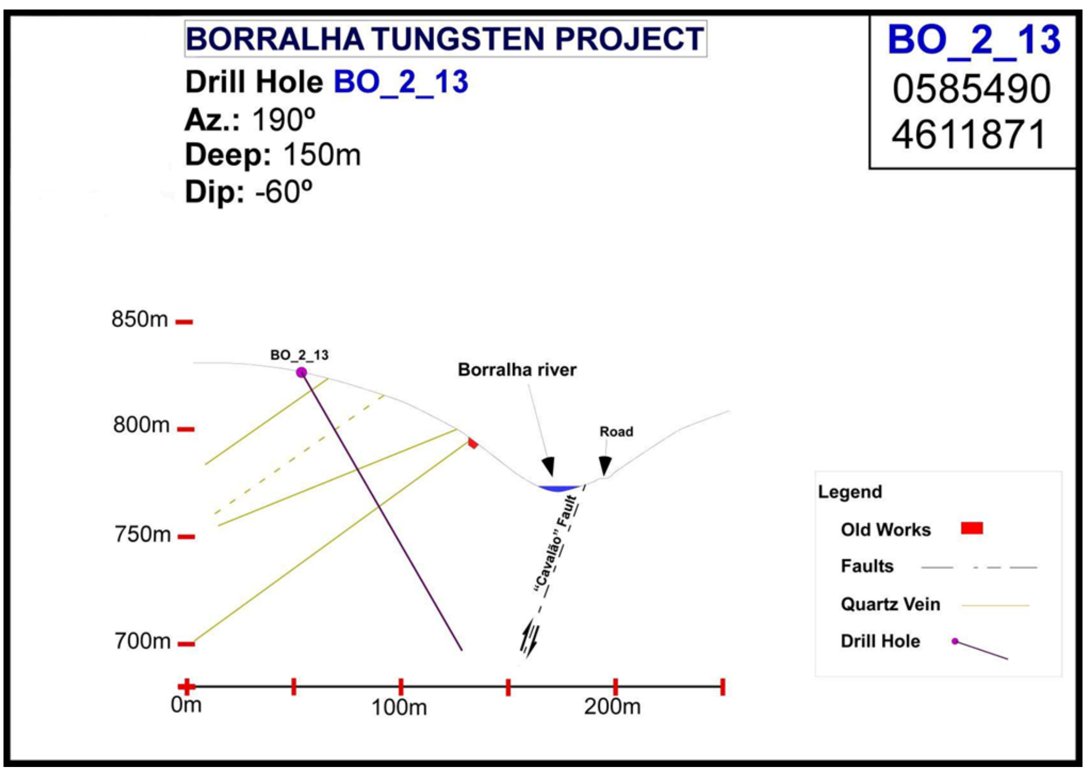


Figure 10.3: Vertical Cross-Section of Diamond Drill Hole BO_2_13 (Price, 2013)

Table 10.3 summarizes the reported notable drill hole intersections of tungsten mineralization within the SHB that are documented by Minerália (2020). Figures 10.5 and 10.6 show the geology of the SHB and the locations and orientations of the 2014 and 2017 drill holes, and Photograph 10.1 illustrates the coarse-grained wolframite mineralization intersected during the drilling of the SHB.

Figures 10.7 shows a simplified geologic vertical section of drill hole BO_8A/14 illustrating SHB profile looking north-northeastward, and Figure 10.8 is a vertical cross-section of drill hole BO_12/17 illustrating the tungsten distribution within the SHB and country rock hosts.

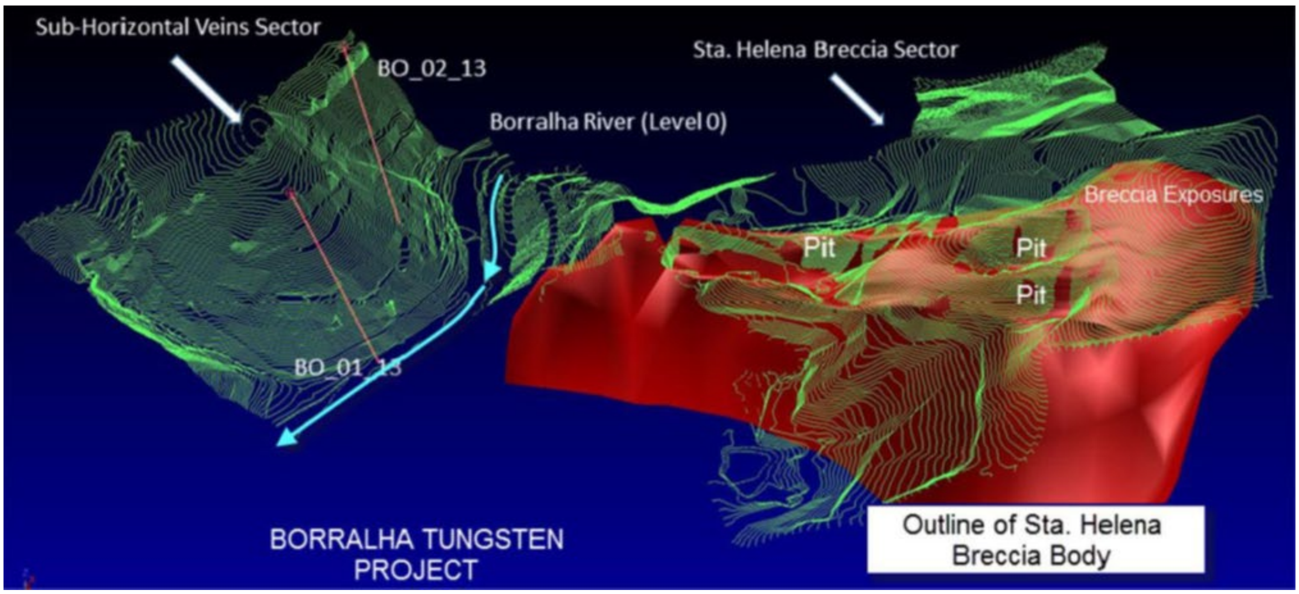
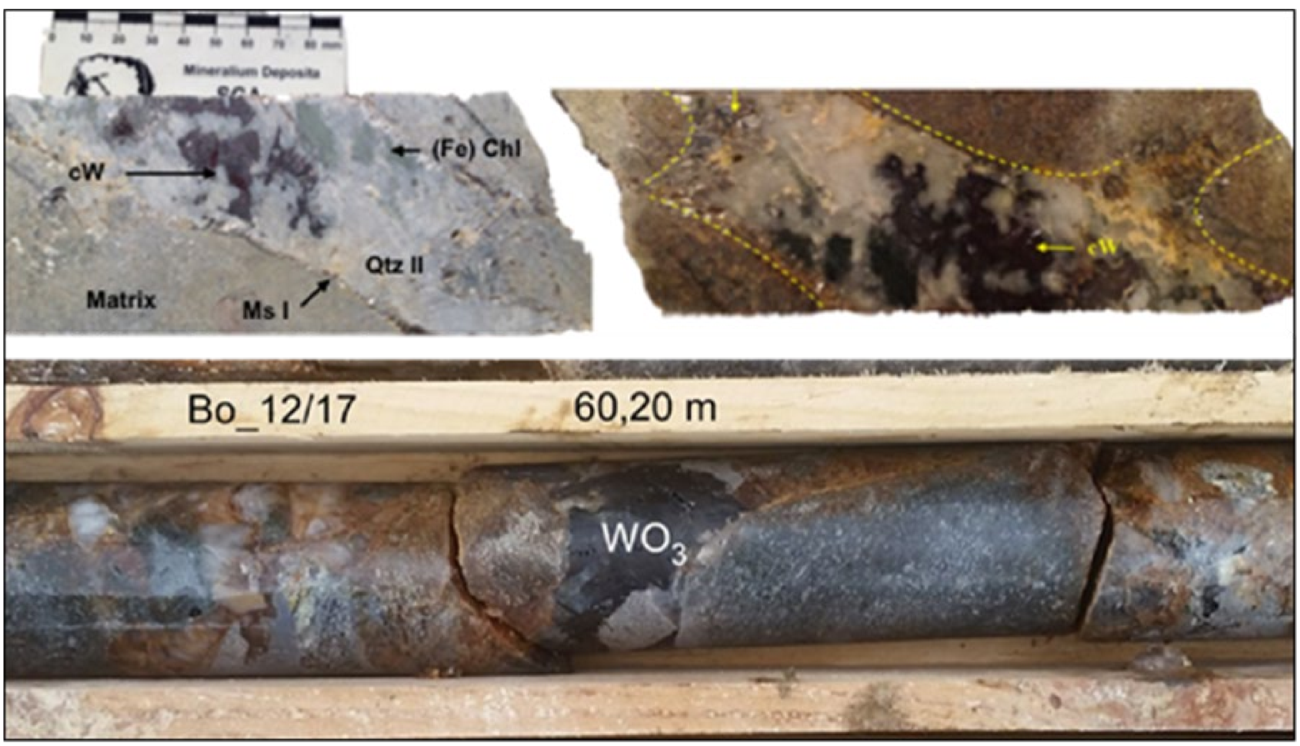


Figure 10.4: 3D Plot of the Santa Helena Breccia (Price, 2013)

Bo_03:	7m@ 0.08% WO_3 [from: 29m]
Bo_04:	16m@ 0.06% WO_3 [from: 3m]
Bo_05:	96m@ 0.14% WO_3 [from: 21m] 63m@ 0.20% WO_3 [from: 54m]
Bo_06:	76m@ 0.09% WO_3 [from: 36m] 51m@ 0.12% WO_3 [from: 36m]
Bo_07:	55m@ 0.09% WO_3 [from: 108m] 30m@ 0.13% WO_3 [from: 108m]
Bo_08:	not completed
Bo_08a:	185m@ 0.19% WO_3 [from: 0m] incl. 118m@ 0.29% WO_3 [from: 57m]
Bo_09:	57m@ 0.06% WO_3 [from: 85m] incl. 20m@ 0.11% WO_3 [from: 36m]
Bo_10:	105m@ 0.06% WO_3 [from: 85m] 21m@ 0.15% WO_3 [from: 115m]
Bo_11:	not completed
Bo_12:	176m@ 0.15% WO_3 [from: 0m] incl. 92m@ 0.25% WO_3 [from: 39m]

Table 10.3: Summary of Notable 2014 and 2017 Drill Hole Intercepts within the SHB (Minerália, 2020)



Photograph 10.1: Coarse-grained Wolframite in Santa Helena Breccia Drill Core

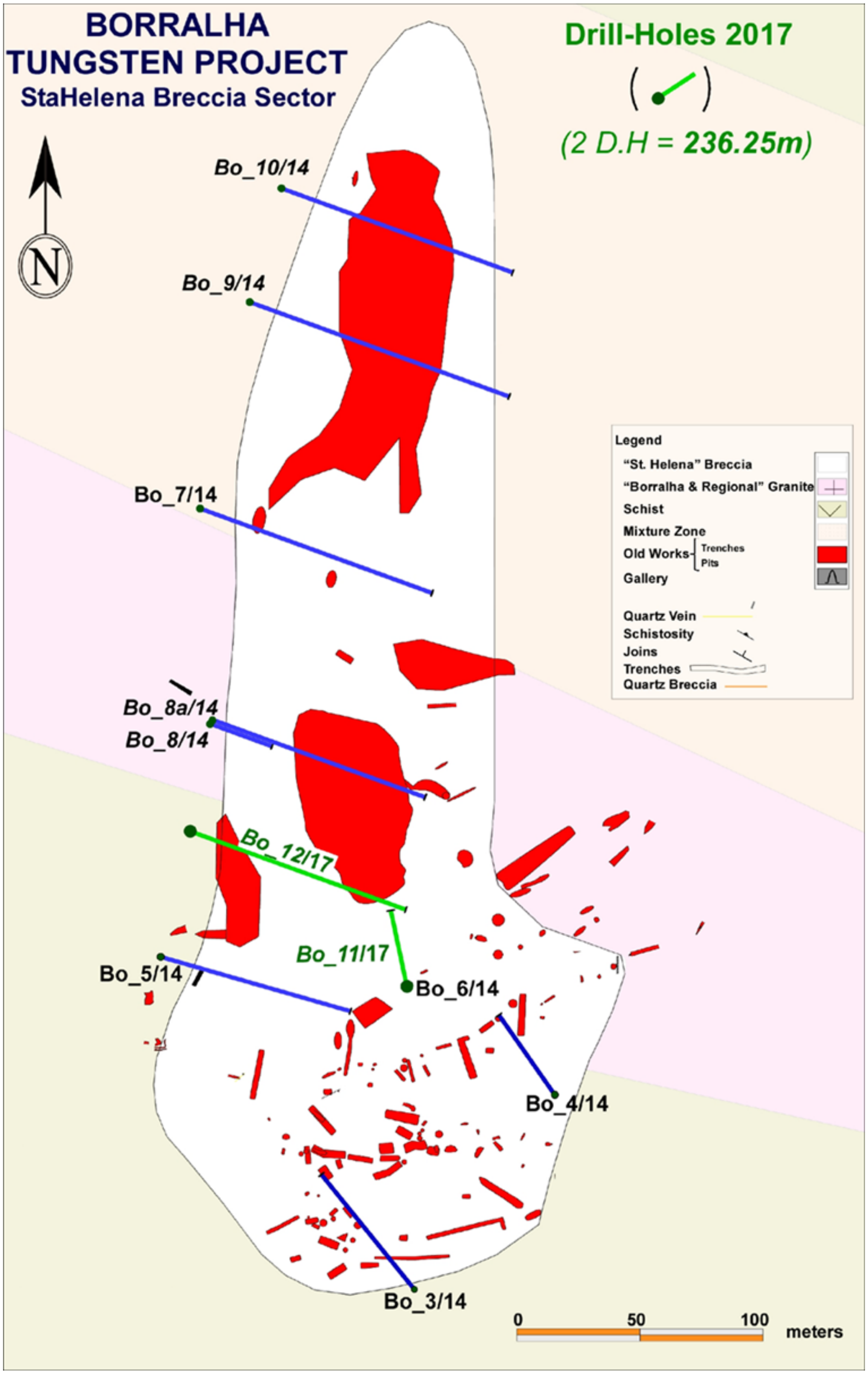


Figure 10.5: 2017 Plan of the Santa Helena Breccia Geology (Minerália, 2020)

Figure 10.6: 2017 Plan of SHB Geology and Drill Hole Cross-Sections (PanMetals, 2020)

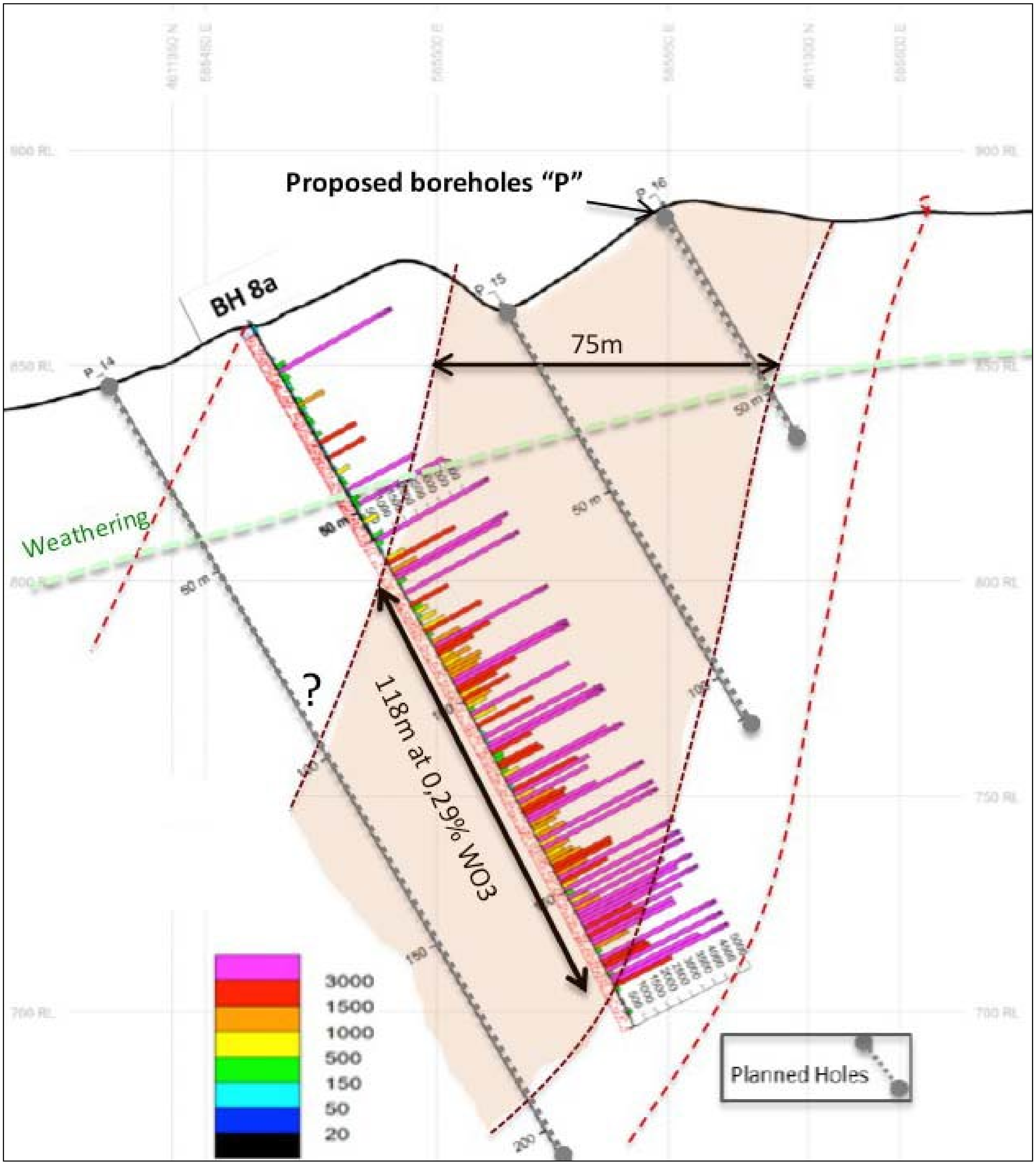


Figure 10.7: Vertical Cross-Section A-B of Drill Hole BO_8A/14 with Tungsten Results (PanEx Resources, 2020)

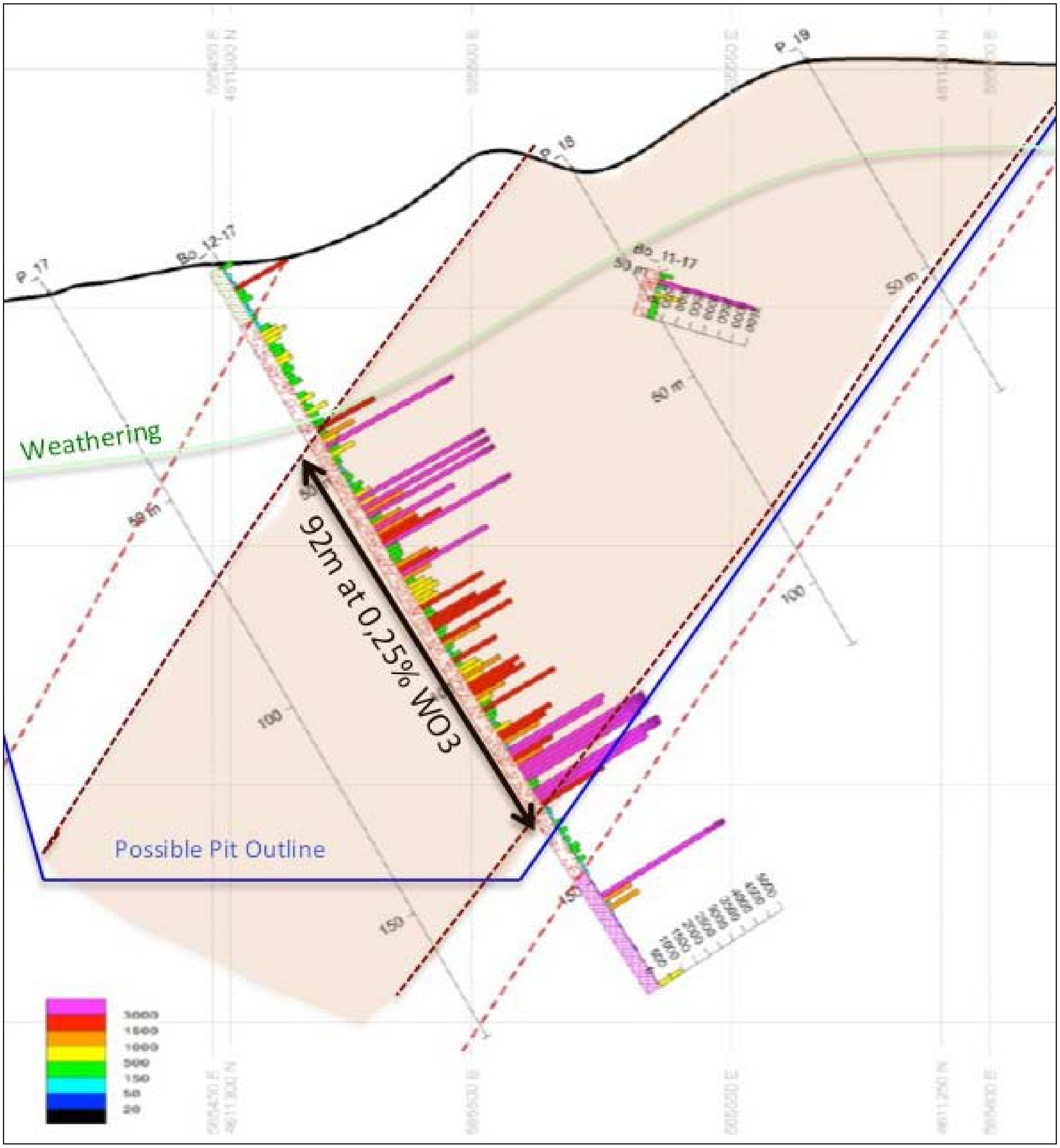


Figure 10.8: Vertical Cross-Section C-D of Drill Hole BO_12/17 with Tungsten Results (PanEx Resources, 2020)

10.3 Phase 4 – 2023-24 Diamond and Reverse Circulation Drilling Program

The most recent fourth phase of drilling focused on testing the southern portion of the SHB during mid-September 2023 to late January 2024. Qualified professional personnel employed by Minerália were contracted to supervise and manage the drilling program that included three P-size diamond drill holes, namely Bo_Met_01, _02 and _ 02a, totalling 490.40 metres of drilling and thirteen reverse circulation drill holes, namely Bo_RC_01 to _13 that totalled 3,195.00.00 metres of drilling. Diamond drill hole Bo_Met_02 intersected old underground workings and the hole had to be abandoned. It was re-drilled nearby as Bo_Met_02a. Both the diamond and reverse circulation drilling personnel and equipment were contracted from Sondeos y Perforaciones Industriales del Bierzo S.A. ('**SPI**') which is based in San Román de Bembibre (León), Spain.

As of the effective date of this report, the Company has drill tested the SHB with 3,685.40 metres of combined diamond and RC drilling, infilling historical drill holes and extending exploration towards the southern part of the SHB. See Table 10.4 for the pertinent diamond and RC drill hole data. Figure 10.9 is a plot of the drill hole plan, and Figures 10.10 and 10.11 for illustrations of drill hole cross-sectional plots.

Drill Hole	UTM (Zone 29T)			Azimuth	Dip	Length
Name	Easting (m)	Northing (m)	Elev (m)	(deg)	(deg)	(m)
Bo_Met_01	585,520.90	4,611,356.90	878.00	179.74	79.42	253.20
Bo_Met_02	585,457.90	4,611,314.80	859.79	110.00	53.00	72.90
Bo_Met_02a	585,459.00	4,611,316.30	860.94	118.25	50.29	164.30
Bo_RC_01	585,520.50	4,611,354.94	878.00	180.00	80.27	219.00
Bo_RC_02	585,469.40	4,611,278.89	859.29	129.19	59.97	150.00
Bo_RC_03	585,466.70	4,611,472.00	836.60	109.00	59.65	237.00
Bo_RC_04	585,587.70	4,611,505.60	824.98	230.00	69.54	264.00
Bo_RC_05	585,588.14	4,611,443.87	835.45	230.00	70.34	306.00
Bo_RC_06	585,586.78	4,611,379.57	852.00	240.00	70.36	236.00
Bo_RC_07	585,423.11	4,611,294.11	855.47	100.00	55.58	195.00
Bo_RC_08	585,416.74	4,611,352.57	839.67	105.00	60.10	236.00
Bo_RC_09	585,454.99	4,611,387.43	846.78	106.00	60.07	250.00
Bo_RC_10	585,460.60	4,611,194.60	892.00	90.00	59.90	150.00
Bo_RC_11	585,539.00	4,611,503.20	815.80	46.30	89.52	376.00
Bo_RC_12	585,383.20	4,611,329.00	845.39	100.00	59.75	300.00
Bo_RC_13	585,405.90	4,611,376.60	837.38	105.00	65.35	276.00
Total 2023-24 Drilling (metres)						**3,685.40**

Table 10.4: Summary of Pertinent 2023-24 Drill Hole Data (after Minerália, 2024)

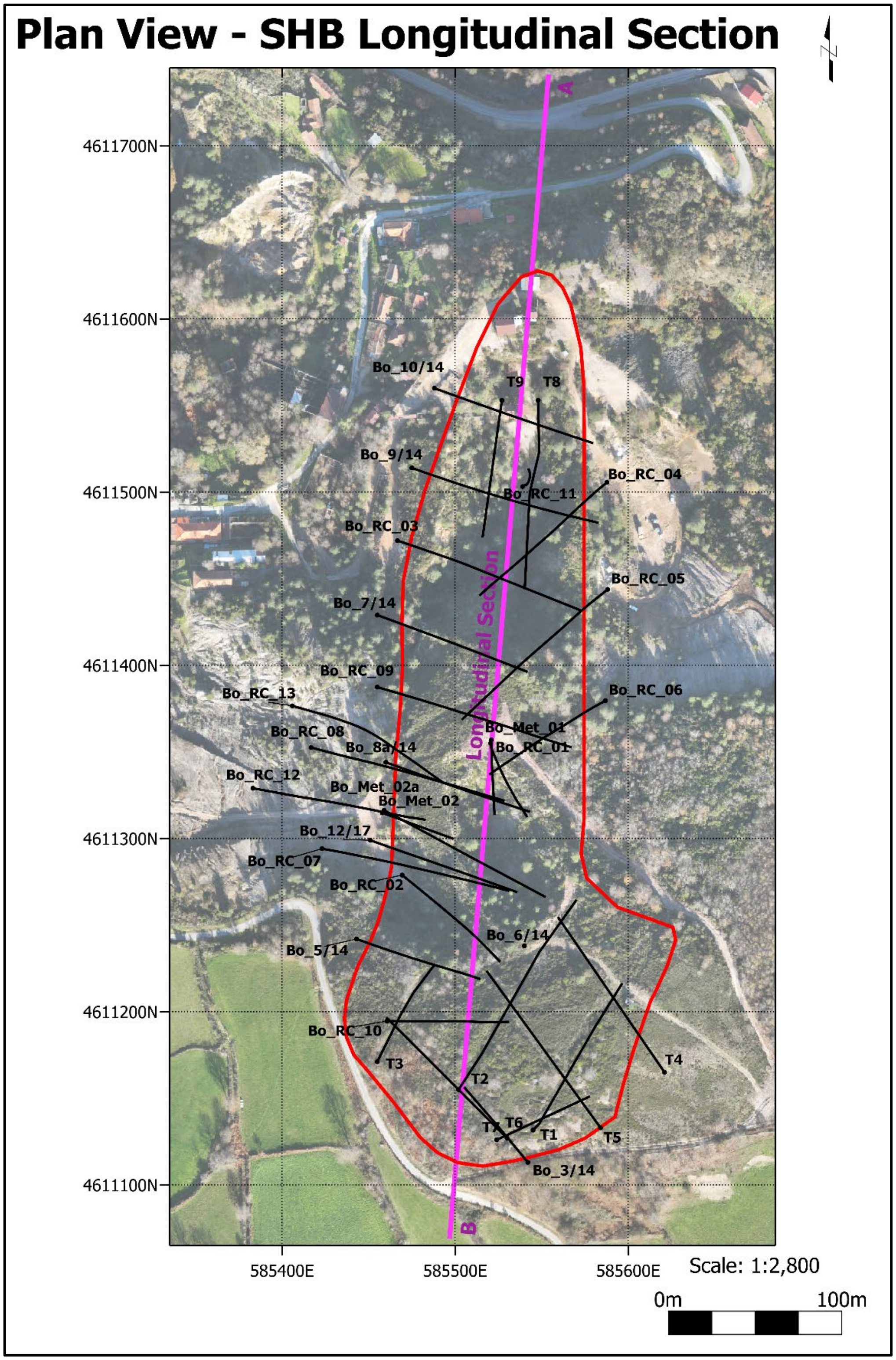


Figure 10.9: Drill Hole Plan for the Santa Helena Breccia Zone (after Minerália, 2024)

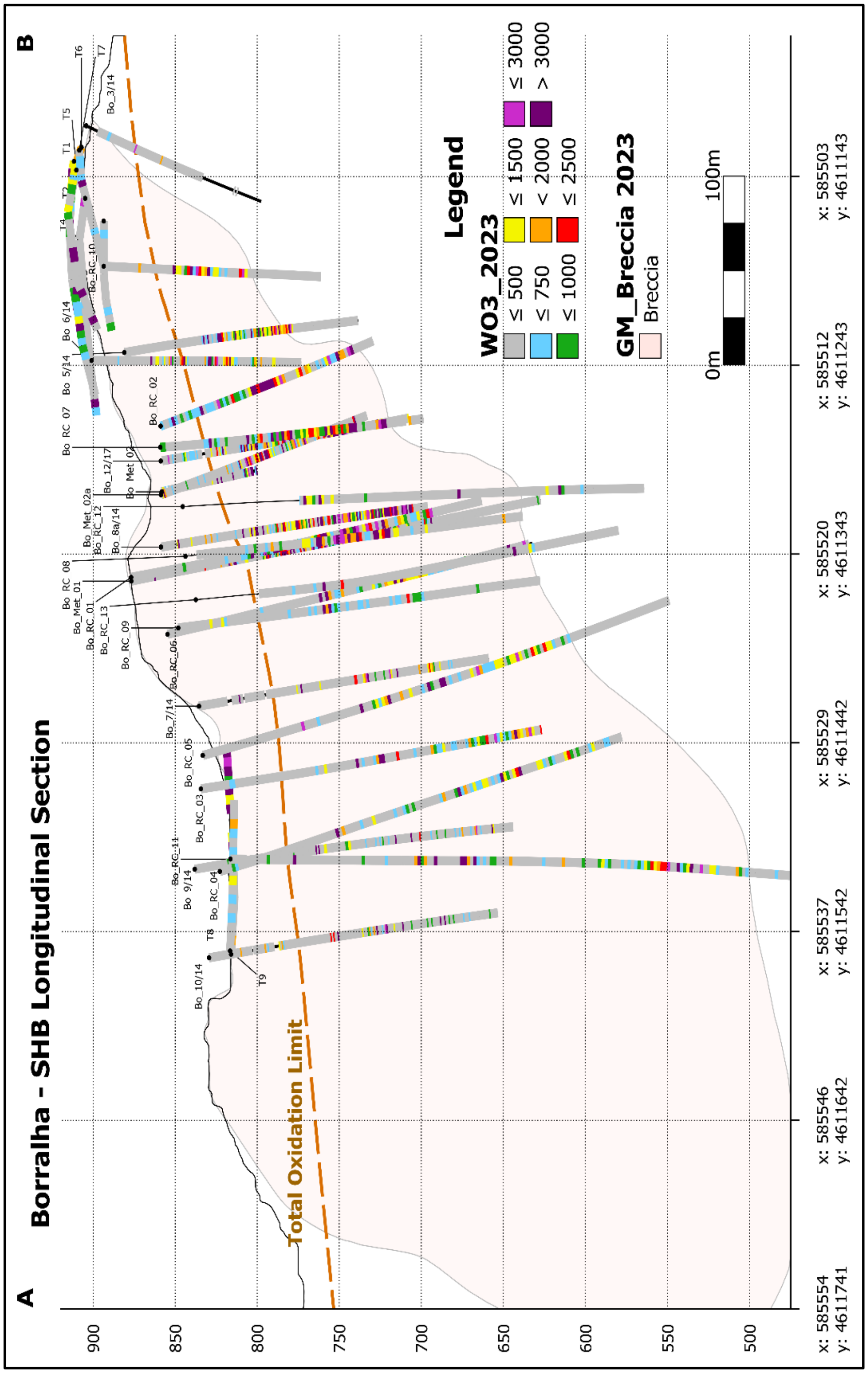


Figure 10.10: Longitudinal Section of SHB Drilling (after Minerália, 2024)

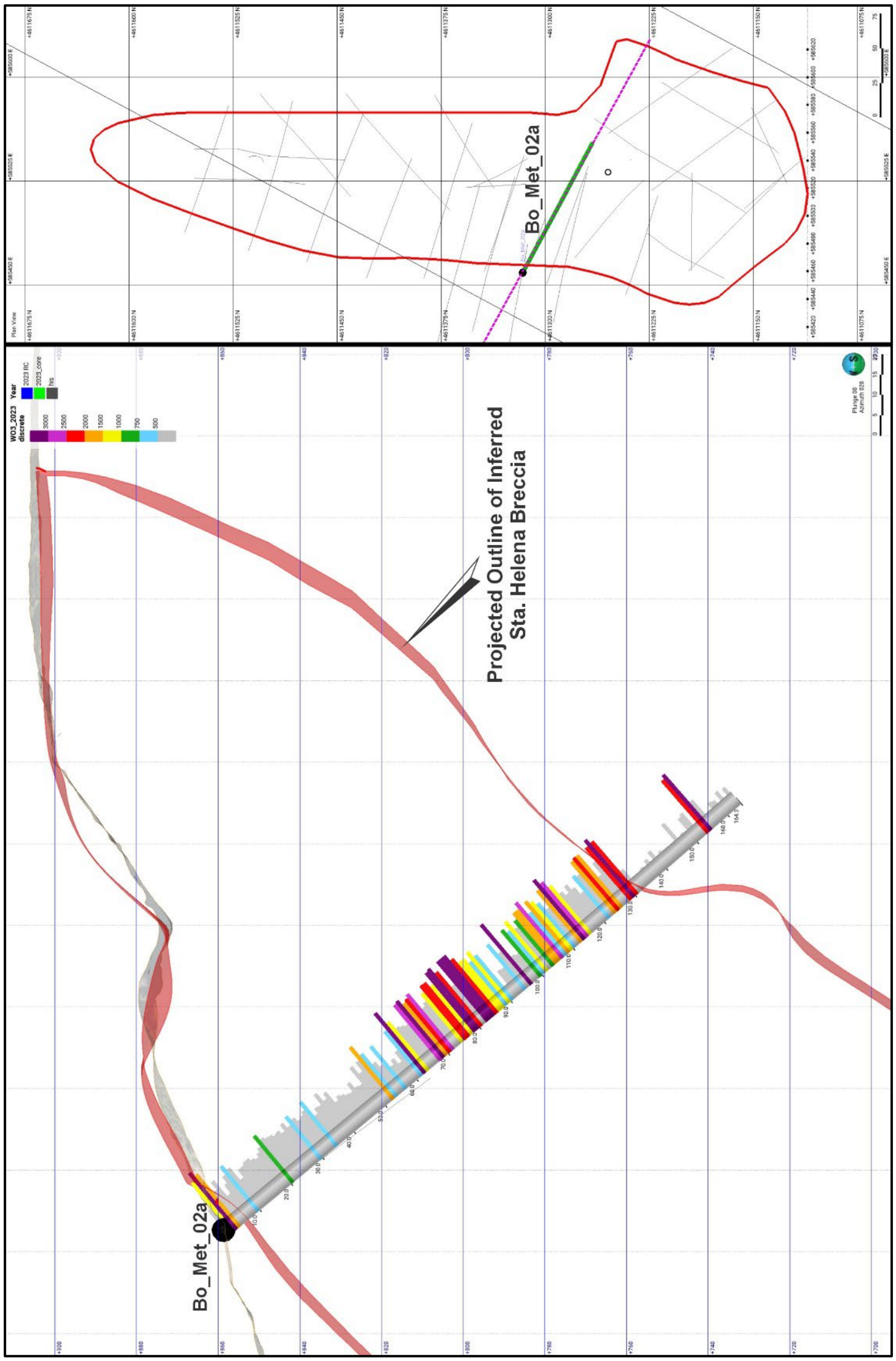


Figure 10.11: Vertical Cross-Section of Drill Hole Bo_Met_02a with WO_3 Grade Distribution (after Minerália, 2024)

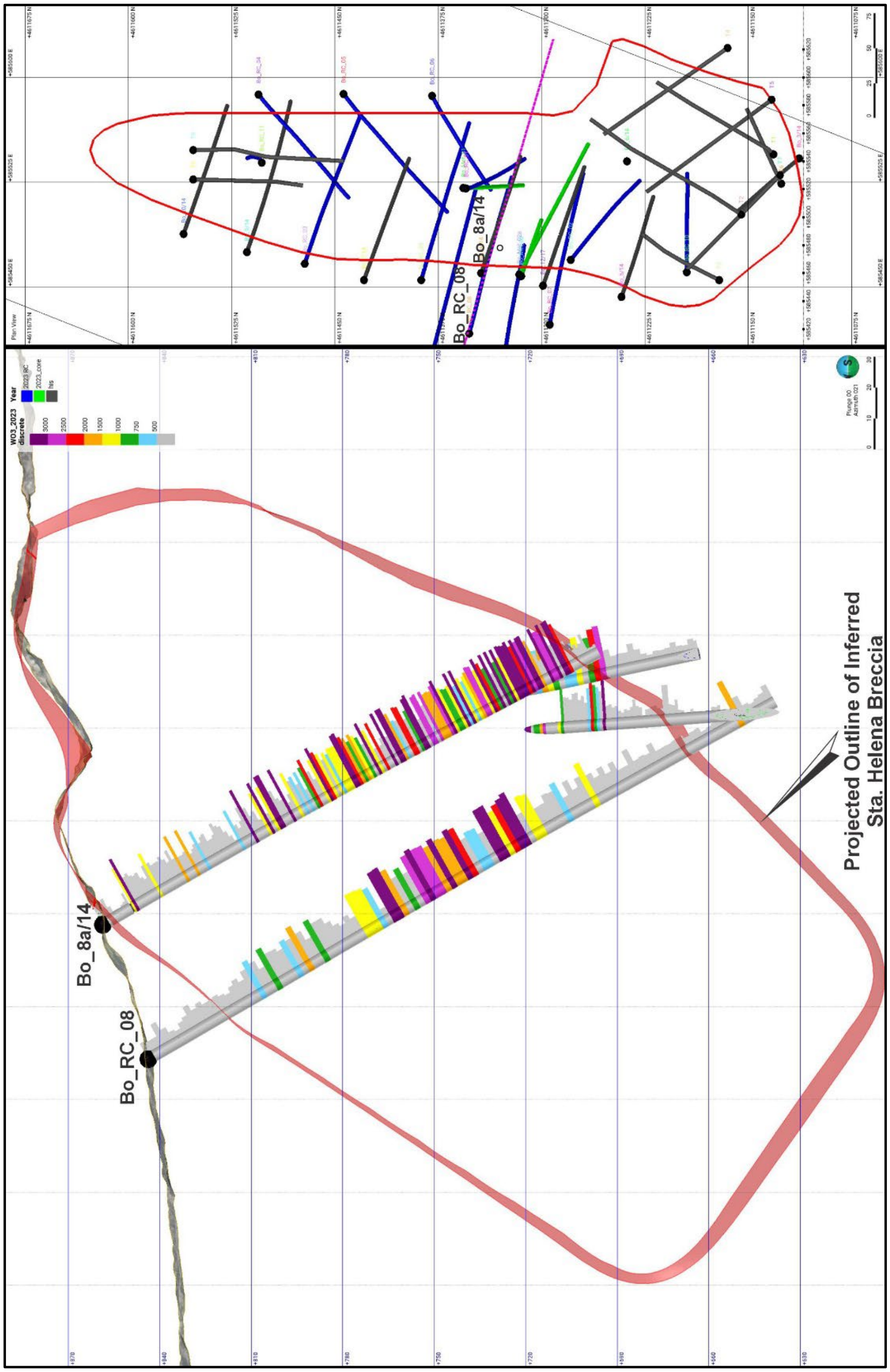


Figure 10.12: Vertical Cross-Section of Drill Hole Bo_RC_08 and B0-8a_14 with WO_3 Grade Distribution (after Minerália, 2024)

DDH Bo-Met_01 - within drilling interval 94.2 to 94.3 m

DDH Bo-Met_01 - within drilling interval 165.3 to 165.4 m

DDH Bo-Met_01 - within drilling interval 172.3 to 172.4 m

Photograph 10.2: Photographs of Wolframite in DDH Bo_Met_01 drill core

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

The 2011 to 2017 trench and drill core samples were all collected, prepared and securely shipped for analyses by qualified Minerália personnel. The 2014 and 2017 drill core reject samples that were collected by the author during his property examination and the 2023-2024 drill core samples were properly described, labelled and securely shipped to the same ISO-accredited facilities of ALS Global Laboratory in Seville, Spain.

11.1 Sample Preparation

11.1.1 Historic Sample Preparation

The following discussion of sample preparation and handling during the 2011 to 2017 exploration programs is quoted from the Sample Preparation section in the 2020 Minerália report and their in-house sampling document.

"*The typical channel sample length is 5.0 m. The samples are placed in new plastic bags along with their respective sample tags. The samples are then catalogued and placed in sealed pails for shipping. The sample shipment forms are prepared on site with one copy inserted into one shipping bag and one copy kept for reference. The samples are transported on a regular basis by a Minerália personnel to the assay laboratory.*

Drill core is collected from the drill rig by Minerália personnel, under the supervision of the Minerália project manager. The drillers use a black marker to label the core boxes and note the depth of the drill hole on wooden blocks within the core boxes. Markers are placed in the core boxes clearly indicating the drilling depth at the end of each drill run. When possible, a digital photograph is taken of the mineralized and host rock core while in the field. The drill core is then transported to the logging/storage facility located on a private property where Minerália personnel had their field offices.

The core boxes are stored in a secure and restricted area during core processing. The drill core is geotechnically logged and digitally photographed. Descriptions of the drill core are documented on paper logs and later transcribed by Minerália personnel into a matrix spreadsheet.

Drill core samples are usually collected at 1.0-metre intervals while respecting any lithologic contacts, and sample assay tags were inserted into the core box at the beginning of the sample interval. High- and low-grade tungsten standards and blanks were inserted approximately every batch of 15 samples. Geological logging protocols record lithology, structures, alteration, mineralization, and oxidation in descriptive columns. Each step of drill core processing is inspected by the Minerália person responsible to ensure integrity. Rock and drill core samples are securely bagged, and securely shipped or delivered directly to a nearby assay laboratory."

11.1.2 Verification Sample Preparation

Little bedrock is exposed within the Santa Helena Breccia intrusion. Most of the intrusive body is covered by displaced till and/or waste dumps from the numerous historic test pits. The only bedrock exposures are inaccessible high in the old open pit walls at the northern end of the intrusion. In addition, there was no rock saw or splitting equipment during the author's examination to quarter the drill core being stored on site. Thus, the author selected for verification ten drill core reject samples originally collected by Minerália from three drill holes at various depths, plus the same standard material sample used previously during the 2017 analyses.

Photograph 11.1: Minerália's Stored Drill Core in the Old Smelter Building at Borralha.

11.1.3 2013 and 2017 Sample Re-Analysis Preparation

It was recommended by the author following his property examination that all the available pulp samples from the nine drill holes that were completed during the 2013 to 2017 drilling campaigns should be re-analysed for tungsten and a full suite of elements using ICP sample preparations and procedures. The pulps and rejects pulps from this drilling had been stored in the secure, dry facilities of the old smelter on site of the Borralha mine. According to Minerália personnel, some of the pulps were not in good condition (i.e. bags broken, lack of identification, etc..) so a set of equivalent rejects in proper condition replaced the damaged samples.

Prior to their shipment, all the samples were renamed according to a numerical sequence and a distinct set of from the five certified materials was placed in a varied order for each set of 20 samples to ensure the quality of the results. After this procedure, the samples are packed into pallets and shipped by a direct courier to the ISO-accredited preparation facilities of ALS Global Laboratory in Seville, Spain together with the sample shipment forms that are inserted in each pallet. There, the samples were handled, weighted and logged into the ALS system. The substituted reject samples were crushed, pulverized and shipped with the other pulps to their certified their assay laboratory in Galway, Ireland.

11.1.4 2023-24 Drill Core and Cuttings Sample Preparation

11.1.4.1 2023 Diamond Drill Core

Two of three P-size diamond drill holes were completed in this recent drilling campaign. Diamond drill hole Bo_Met_02 intersected old underground workings and the hole had to be abandoned and. re-drilled nearby as Bo_Met_02a. All the drill core in core boxes were securely transported by truck from the drilling site to the Borralha core shed on the property by a designated Minerália employee. Each core box lid was protected with straps and metal covers. They were then inspected to ensure that depth markers were in place, photographed, measured for core loss and RQD, geologically logged and marked for sampling.

The core sampling involved cutting/splitting the drill core longitudinally into symmetrical halves followed by sampling. The core cutting process uses fresh water and was overseen by the Minerália core shed supervisor with the saw being cleaned with by pressured water each 1 m of drilled core. The samples were then collected at 1-metre intervals while respecting any logged lithological contacts. The samples were then placed in sample bags which were then sealed. The position of each sample on the remaining half-core in the core box is marked with a corresponding identification tag for reference.

Sample reference sheets summarizing all the samples taken from each hole were completed during the core-cutting process, and these sheets are used to identify where the quality control ('**QC**') samples were added to the sample stream and for preparing the requisition and shipment forms.

11.1.4.2 2023-2024 Reverse Circulation Cuttings

Thirteen reverse circulation ('**RC**') holes been drilled as of the effective date of this report. All sample bags were pre-marked prior to drilling. They were each identified with an internal sequence number used as a sample identifier, both the sample for analysis and its reject sample. Each analytical sample bag is filled with a quarter of 2 m length of drilled rock and each reject sample bag will take a quarter of 1 m length of drilled rock. Thus, each two reject samples will be the equivalent to one assay sample.

The RC drilling process did not require halving. The analytical samples were collected directly from the rig splitter according to a sampling list that documented the metres and sampling sequence for each drill hole. This list also identified which sample should be collected in duplicate as well as which certified reference material ('**CRM**') were to be placed in the numerical sequence. The CRMs were randomly inserted at every 20 samples (5%), and duplicate samples were collected every 20 samples (5%). Thus, there was always alternating CRM and Duplicates every 10th sample. A scoop was used to collect a representative sample from the rejected sample material which was then rinsed and examined and logged with the use of a binocular microscope or hand lens for its lithology and mineralization. A few chips for each 1-metre sample were then stored separately in a 32-compartment chip tray. Each compartment was labelled sequentially inside, and the borehole name and depth range were recorded on the outside of each box. The analytical and reject samples are then transported in boxes from the drilling site to the core shed by a designated Minerália employee. The analytical samples were stored on labelled palettes for later direct shipping to the ALS preparation laboratories in Seville, Spain. Later, the pulp and reject samples were securely stored in the logging room on the property.

11.2 Sample Analyses and Assays

11.2.1 Historic Sample Analyses and Assays

The sampling and assay procedures at the historic Borralha producing mines are not documented.

The diamond drill core samples collected by Minerália personnel from their 2013 to 2017 exploration works were securely delivered to ALS Global ISO-accredited preparatory facilities in Seville, Spain. There they were prepared by crushing each sample to +70% of the material passing a 2 mm screen, split to 250 g, and pulverized under hardened steel to 85% passing a 75 µm screen. ALS in Seville then sent the prepared sample to their certified assay laboratory Dublin Road, Loughrea, Co., Ireland for XFR (‘X-Ray Fluorescence Spectroscopy’) analyses. The remaining sample pulps and rejects were returned to Minerália for storage.

Minerália analysed all their drill core pulps samples for tungsten (W) utilizing the W-XFR05 method that provides results in the range of 10 to 5,000 ppm. Samples that contained more than 5,000 ppm W were re-analysed by W-XRF10 providing results in the range of 0.01 to 50% W.

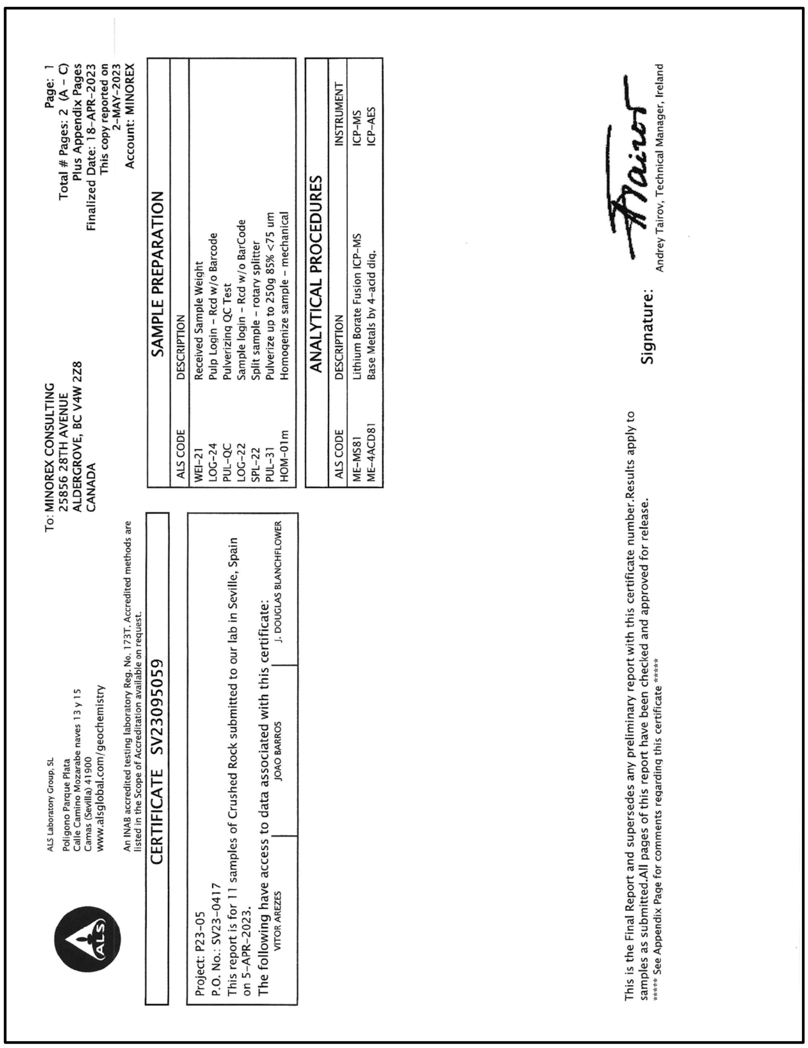
ALS Global Laboratories in Seville, Spain maintained their own QA/QC protocols by routinely conducting pulp duplicate analyses. In addition, Minerália maintained their own internal QA/QC protocols by inserting reference standards and blanks, plus core duplicates into the sample batches on a systematic basis. All standards and blanks were obtained from Geostats Pty Ltd., an Australian reference material provider. The ALS laboratories are not affiliated with Minerália or other parties that may be involved with Borralha project. The ALS laboratories are among several laboratories that regularly participate in the PTP-MAL (Proficiency Testing Program for Mineral Analysis Laboratories).

All analytical and assay results were received directly by Minerália as emails followed by signed assay certificates delivered by courier. The results of the QA/QC samples were continually monitored. Any certified reference material returning values varying more than three standard deviations were considered a failure and the assay batch was re-assayed, as were any blank material samples returning values three times above detection limit.

11.2.2 Verification Sample Analyses and Assays

The author's ten drill core reject samples plus one sample of standard material were properly bagged and securely delivered directly to the ALS Global laboratory in Seville, Spain where the reject samples were re-homogenized and a sample pulp of each was split for analysis. The eleven sample pulps, including the standard pulp, were then shipped directly to the ALS Global assay laboratory in Galway, Ireland for multi-element analyses.

Two procedures were used to analyse the sample pulps. The first procedure (ALS Code ME-4AACD81) analysed for base metals using a 4-acid digestion and provided results for: Ag, As, Cd Co, Cu, Li, Mo, Ni, Pb, Sc, Tl and Zn. The second procedure (ME-MS8S) used a Lithium Borate Fusion and Mass Spectrometry to analyse for: Ba, Ce, Cr, Cs, Dy, Er, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sc, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tm, U, V, W, Y, Yb and Zr. The author received the Certificate of Analysis and QC Certificate for the verification samples, a copy of each these certificates accompanies this report as Figure 11.1 shown below.


ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Page: 1
Total # Pages: 2 (A – C)
Plus Appendix Pages
Finalized Date: 18–APR–2023
This copy reported on
2–MAY–2023
Account: MINOREX

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

CERTIFICATE SV23095059

Project: P23–05
P.O. No.: SV23–0417
This report is for 11 samples of Crushed Rock submitted to our lab in Seville, Spain on 5–APR–2023.
The following have access to data associated with this certificate:

VITOR AREZES	JOAO BARROS	J. DOUGLAS BLANCHFLOWER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI–21	Received Sample Weight
LOG–24	Pulp Login – Rcd w/o Barcode
PUL–QC	Pulverizing QC Test
LOG–22	Sample login – Rcd w/o BarCode
SPL–22	Split sample – rotary splitter
PUL–31	Pulverize up to 250g 85% <75 um
HOM–01m	Homogenize sample – mechanical

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME–MS81	Lithium Borate Fusion ICP–MS	ICP–MS
ME–4ACD81	Base Metals by 4–acid dig.	ICP–AES

This is the Final Report and supersedes any preliminary report with this certificate number.Results apply to samples as submitted.All pages of this report have been checked and approved for release.
***** See Appendix Page for comments regarding this certificate *****

Signature: Andrey Tairov, Technical Manager, Ireland

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Project: P23-05

Page: 2 - A
Total # Pages: 2 (A - C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
Account: MINOREX

CERTIFICATE OF ANALYSIS SV23095059

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-MS81 Ba ppm 0.5	ME-MS81 Ce ppm 0.1	ME-MS81 Cr ppm 5	ME-MS81 Cs ppm 0.01	ME-MS81 Dy ppm 0.05	ME-MS81 Er ppm 0.03	ME-MS81 Eu ppm 0.02	ME-MS81 Ga ppm 0.1	ME-MS81 Gd ppm 0.05	ME-MS81 Hf ppm 0.05	ME-MS81 Ho ppm 0.01	ME-MS81 La ppm 0.1	ME-MS81 Lu ppm 0.01	ME-MS81 Nb ppm 0.05
BO5 65		2.84	373	80.3	49	34.9	2.33	1.10	0.71	39.0	2.99	3.65	0.44	42.3	0.16	23.3
BO5 66		2.74	333	54.6	131	32.9	1.92	0.87	0.58	36.5	2.71	3.09	0.31	28.1	0.15	24.1
BO5 114		3.10	219	87.5	36	41.9	2.18	0.83	0.47	43.0	2.91	2.20	0.35	48.1	0.12	30.0
BO5 115		3.82	230	20.4	9	38.4	1.88	0.79	0.18	49.3	2.32	1.86	0.31	9.7	0.07	23.8
BO8A 89		3.06	463	79.6	69	24.8	3.53	2.09	0.92	27.6	4.50	7.29	0.72	39.7	0.33	18.70
BO8A 95		2.12	316	64.8	39	30.5	3.53	2.04	0.65	32.8	3.76	4.42	0.70	32.5	0.28	29.8
BO8A 158		1.02	220	32.3	16	32.4	1.71	0.91	0.41	40.6	2.02	2.35	0.30	15.6	0.10	25.9
BO9 109		1.82	333	54.6	49	26.9	2.94	1.66	0.68	21.3	3.34	3.91	0.56	26.1	0.24	13.30
BO9 111		2.58	285	55.7	72	21.3	3.05	1.72	0.72	17.9	3.72	6.74	0.58	26.9	0.25	12.85
BO9 167		2.02	217	27.5	47	18.50	1.54	0.86	0.36	22.0	1.68	2.63	0.27	13.8	0.12	15.25
BO1 Standard		0.02	36.5	6.1	2480	328	1.40	0.85	0.22	7.7	1.30	0.47	0.25	2.6	0.15	3.48

***** See Appendix Page for comments regarding this certificate *****

ALS Laboratory Group, SL

Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Page: 2 - B
Total # Pages: 2 (A - C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
Account: MINOREX

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

Project: P23-05

CERTIFICATE OF ANALYSIS SV23095059

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	Nd	Pr	Rb	Sc	Sm	Sn	Sr	Ta	Tb	Th	Ti	Tm	U	V	W
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOD	0.1	0.02	0.2	0.5	0.03	0.5	0.1	0.1	0.01	0.05	0.01	0.01	0.05	5	0.5
BO5 65		31.3	9.21	366	8.1	4.71	131.0	35.5	4.3	0.38	13.10	0.26	0.17	6.73	48	3600
BO5 66		22.7	6.28	360	9.6	3.66	115.5	35.9	3.4	0.33	10.10	0.21	0.17	9.00	42	4830
BO5 114		31.4	9.54	436	6.0	3.82	208	23.9	6.1	0.37	10.50	0.18	0.13	15.85	23	4570
BO5 115		8.4	2.37	477	4.6	2.11	191.0	14.0	4.8	0.34	4.50	0.09	0.10	16.75	21	2470
BO8A 89		32.2	9.26	258	10.3	5.44	103.0	29.2	2.6	0.60	14.35	0.33	0.29	6.66	54	969
BO8A 95		25.9	7.31	362	6.7	4.09	137.0	20.4	4.3	0.56	12.65	0.20	0.29	12.35	31	5630
BO8A 158		13.0	3.79	466	5.5	2.10	140.0	14.2	3.8	0.28	6.37	0.11	0.13	12.70	22	4610
BO9 109		22.6	6.08	283	8.0	4.13	65.3	34.6	2.0	0.49	9.05	0.23	0.22	4.51	39	437
BO9 111		23.1	6.35	246	6.8	4.14	57.9	41.2	2.3	0.54	10.65	0.22	0.36	6.05	32	514
BO9 167		11.4	2.92	279	6.2	2.14	68.7	36.0	6.4	0.24	6.33	0.10	0.12	11.60	19	823
BO1 Standard		3.4	0.83	513	33.1	1.08	16.8	23.8	1.2	0.19	0.60	0.14	0.14	0.37	139	1555

***** See Appendix Page for comments regarding this certificate *****

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Project: P23-05

Page: 2 - C
Total # Pages: 2 (A - C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
Account: MINOREX

CERTIFICATE OF ANALYSIS SV23095059

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81	ME-4ACD81
	Analyte	Y	Yb	Zr	Ag	As	Cd	Co	Cu	Li	Mo	Ni	Pb	Sc	Tl	Zn
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.1	0.03	1	0.5	5	0.5	1	1	10	1	1	2	1	10	2
BO5 65		11.3	1.02	144	6.7	13	6.5	12	1605	190	20	15	11	7	<10	288
BO5 66		9.2	1.04	121	7.4	11	4.8	10	1550	170	28	15	18	6	<10	216
BO5 114		10.4	0.78	72	17.8	16	7.0	10	5760	150	51	15	35	3	<10	248
BO5 115		10.0	0.51	51	18.5	10	18.6	6	3900	120	179	10	53	3	10	749
BO8A 89		19.8	1.76	273	9.2	74	7.8	11	2240	160	21	21	28	8	<10	791
BO8A 95		20.4	1.88	156	9.4	19	6.9	10	2140	180	25	17	29	5	<10	719
BO8A 158		9.1	0.75	73	9.4	<5	8.5	7	832	200	22	13	60	4	<10	601
BO9 109		15.8	1.42	150	1.2	5	2.1	10	404	140	4	18	12	6	<10	179
BO9 111		17.8	1.74	250	1.5	8	10.6	7	195	120	4	17	18	5	<10	607
BO9 167		7.8	0.83	93	2.3	7	29.5	4	424	60	8	7	34	3	<10	1690
BO1 Standard		8.6	0.95	16	<0.5	189	0.8	54	13	360	16	232	18	36	<10	87

***** See Appendix Page for comments regarding this certificate *****

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 18-APR-2023
Account: MINOREX

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

Project: P23-05

CERTIFICATE OF ANALYSIS SV23095059

CERTIFICATE COMMENTS

ACCREDITATION COMMENTS

The methods immediately below this line are ISO 17025:2017 Accredited. INAB Registration No: 173T

Applies to Method: ME-MS81

LABORATORY ADDRESSES

Processed at ALS Seville located at Poligono Parque Plata, Calle Camino Mozarabe naves 13 y 15, Camas (Sevilla), Spain.

Applies to Method: HOM-01m, LOG-22, LOG-24, PUL-31, PUL-QC, SPL-22, WEI-21

Processed at ALS Loughrea located at Dublin Road, Loughrea, Co. Galway, Ireland.

Applies to Method: ME-4ACD81, ME-MS81

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Page: 1
Total # Pages: 3 (A – C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
This copy reported on
2-MAY-2023
Account: MINOREX

QC CERTIFICATE SV23095059

Project: P23-05
P.O. No.: SV23-0417
This report is for 11 samples of Crushed Rock submitted to our lab in Seville, Spain on 5-APR-2023.
The following have access to data associated with this certificate:

VITOR AREZES	JOAO BARROS	J. DOUGLAS BLANCHFLOWER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-24	Pulp Login – Rcd w/o Barcode
PUL-QC	Pulverizing QC Test
LOG-22	Sample login – Rcd w/o BarCode
SPL-22	Split sample – rotary splitter
PUL-31	Pulverize up to 250g 85% <75 um
HOM-01m	Homogenize sample – mechanical

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81	Lithium Borate Fusion ICP-MS	ICP-MS
ME-4ACD81	Base Metals by 4-acid dig.	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number.Results apply to samples as submitted.All pages of this report have been checked and approved for release.
***** See Appendix Page for comments regarding this certificate *****

Signature:
Andrey Tairov, Technical Manager, Ireland

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Project: P23-05

Page: 2 - A
Total # Pages: 3 (A - C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
Account: MINOREX

QC CERTIFICATE OF ANALYSIS SV23095059

Sample Description	Method / Analyte / Units / LOD	ME-MS81 Ba ppm 0.5	ME-MS81 Ce ppm 0.1	ME-MS81 Cr ppm 5	ME-MS81 Cs ppm 0.01	ME-MS81 Dy ppm 0.05	ME-MS81 Er ppm 0.03	ME-MS81 Eu ppm 0.02	ME-MS81 Ga ppm 0.1	ME-MS81 Gd ppm 0.05	ME-MS81 Hf ppm 0.05	ME-MS81 Ho ppm 0.01	ME-MS81 La ppm 0.1	ME-MS81 Lu ppm 0.01	ME-MS81 Nb ppm 0.05	ME-MS81 Nd ppm 0.1
STANDARDS																
AMIS0343																
Target Range - Lower Bound																
Upper Bound																
OREAS 102a		343	580	30	3.16	17.00	11.05	3.62	19.9	19.20	9.81	3.56	323	1.62	33.7	180.0
Target Range - Lower Bound		300	528	19	2.78	16.25	9.96	3.48	19.8	18.75	8.32	3.19	291	1.52	29.3	162.0
Upper Bound		368	646	42	3.42	19.95	12.25	4.30	24.5	23.0	10.30	3.93	355	1.88	35.9	198.0
OREAS 602b																
Target Range - Lower Bound																
Upper Bound																
REE-1		101.5	4000	282	1.03	856	719	23.4	49.0	446	484	208	1720	94.4	>2500	1485
Target Range - Lower Bound		89.6	3560	244	0.95	762	631	21.1	49.8	390	431	187.0	1495	83.2	3640	1310
Upper Bound		110.5	4360	310	1.19	932	771	25.9	61.0	476	527	229	1825	101.5	>2500	1600
BLANKS																
BLANK																
Target Range - Lower Bound																
Upper Bound																
BLANK		0.8	<0.1	<5	<0.01	<0.05	<0.03	<0.02	<0.1	0.05	<0.05	0.01	<0.1	<0.01	<0.05	<0.1
Target Range - Lower Bound		<0.5	<0.1	<5	<0.01	<0.05	<0.03	<0.02	<0.1	<0.05	<0.05	<0.01	<0.1	<0.01	<0.05	<0.1
Upper Bound		1.0	0.2	10	0.02	0.10	0.06	0.04	0.2	0.10	0.10	0.02	0.2	0.02	0.10	0.2
DUPLICATES																
BO9 109																
DUP																
Target Range - Lower Bound																
Upper Bound																
BO9 167		217	27.5	47	18.50	1.54	0.86	0.36	22.0	1.68	2.63	0.27	13.8	0.12	15.25	11.4
DUP		230	27.4	48	18.25	1.54	0.87	0.43	22.2	1.79	2.87	0.26	13.6	0.14	15.60	11.2
Target Range - Lower Bound		212	26.0	40	17.45	1.41	0.79	0.36	20.9	1.60	2.56	0.24	12.9	0.11	14.60	10.6
Upper Bound		235	28.9	55	19.30	1.67	0.94	0.43	23.3	1.87	2.94	0.29	14.5	0.15	16.25	12.0

***** See Appendix Page for comments regarding this certificate *****

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Page: 2 - B
Total # Pages: 3 (A - C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
Account: MINOREX

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

Project: P23-05

QC CERTIFICATE OF ANALYSIS SV23095059

Sample Description															
Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
Analyte	Pr	Rb	Sc	Sm	Sn	Sr	Ta	Tb	Th	Ti	Tm	U	V	W	Y
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
LOD	0.02	0.2	0.5	0.03	0.5	0.1	0.1	0.01	0.05	0.01	0.01	0.05	5	0.5	0.1
STANDARDS															
AMIS0343															
Target Range - Lower Bound															
Upper Bound															
OREAS 102a	57.9	261	8.1	24.2	7.3	40.8	2.5	2.84	37.0	0.17	1.55	647	35	12.1	102.0
Target Range - Lower Bound	52.2	231		22.2	5.7	37.0	2.0	2.74	35.6	0.14	1.47	596	23	7.3	94.4
Upper Bound	63.8	282		27.2	8.4	45.4	2.6	3.37	43.6	0.20	1.81	728	47	10.2	115.5
OREAS 602b															
Target Range - Lower Bound															
Upper Bound															
REE-1	457	1035	<0.5	381	522	137.5	226	106.5	749	0.39	106.0	140.0	8	8.6	5920
Target Range - Lower Bound	391	942		343	448	116.0	208	95.6	666	0.34	95.4	123.5	<5	8.5	4930
Upper Bound	479	1150		419	548	142.0	254	117.0	814	0.43	116.5	151.0	20	11.5	6030
BLANKS															
BLANK															
Target Range - Lower Bound															
Upper Bound															
BLANK	0.02	<0.2	<0.5	0.06	<0.5	0.1	<0.1	<0.01	<0.05	<0.01	0.02	<0.05	<5	0.6	<0.1
Target Range - Lower Bound	<0.02	<0.2		<0.03	<0.5	<0.1	<0.1	<0.01	<0.05	<0.01	<0.01	<0.05	<5	<0.5	<0.1
Upper Bound	0.04	0.4		0.06	1.0	0.2	0.2	0.02	0.10	0.02	0.02	0.10	10	1.0	0.2
DUPLICATES															
BO9 109															
DUP															
Target Range - Lower Bound															
Upper Bound															
BO9 167	2.92	279	6.2	2.14	68.7	36.0	6.4	0.24	6.33	0.10	0.12	11.60	19	823	7.8
DUP	3.27	276	5.1	2.03	72.2	36.1	6.6	0.24	6.45	0.10	0.12	12.40	19	809	8.7
Target Range - Lower Bound	2.92	263	4.9	1.95	66.4	34.1	6.1	0.22	6.02	0.09	0.10	11.35	13	775	7.7
Upper Bound	3.27	292	6.4	2.22	74.5	38.0	6.9	0.26	6.76	0.12	0.14	12.65	25	857	8.8

***** See Appendix Page for comments regarding this certificate *****

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Page: 2 - C
Total # Pages: 3 (A - C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
Account: MINOREX

Project: P23-05

QC CERTIFICATE OF ANALYSIS SV23095059

Sample Description (Method / Analyte / Units / LOD)	ME-MS81 Yb ppm 0.03	ME-MS81 Zr ppm 1	ME-4ACD81 Ag ppm 0.5	ME-4ACD81 As ppm 5	ME-4ACD81 Cd ppm 0.5	ME-4ACD81 Co ppm 1	ME-4ACD81 Cu ppm 1	ME-4ACD81 Li ppm 10	ME-4ACD81 Mo ppm 1	ME-4ACD81 Ni ppm 1	ME-4ACD81 Pb ppm 2	ME-4ACD81 Sc ppm 1	ME-4ACD81 Tl ppm 10	ME-4ACD81 Zn ppm 2
STANDARDS														
AMIS0343			<0.5	18	<0.5	3	52	7010	3	13	6	<1	30	80
Target Range - Lower Bound			<0.5	<5	<0.5	<1	47	6300	<1	11	<2	<1	<10	70
Upper Bound			1.1	24	1.0	5	56	7730	6	17	10	2	50	90
OREAS 102a	10.45	367												
Target Range - Lower Bound	9.78	311												
Upper Bound	12.00	383												
OREAS 602b			>100	873	4.9	5	4930	20	7	15	495	3	<10	761
Target Range - Lower Bound			106.5	782	3.6	3	4610	<10	5	11	442	<1	<10	686
Upper Bound			100.0	966	6.1	7	5310	40	10	17	544	6	20	842
REE-1	678	>10000												
Target Range - Lower Bound	610	17200												
Upper Bound	746	>10000												
BLANKS														
BLANK			<0.5	<5	<0.5	<1	1	<10	<1	<1	<2	<1	<10	3
Target Range - Lower Bound			<0.5	<5	<0.5	<1	<1		<1	<1	<2			<2
Upper Bound			1.0	10	1.0	2	2		2	2	4			4
BLANK	<0.03	<1												
Target Range - Lower Bound	<0.03	<1												
Upper Bound	0.06	2												
DUPLICATES														
BO9 109			1.2	5	2.1	10	404	140	4	18	12	6	<10	179
DUP			1.3	5	2.2	10	384	130	4	19	10	6	<10	170
Target Range - Lower Bound			0.7	<5	1.5	9	379	120	3	17	8	5	<10	164
Upper Bound			1.8	10	2.8	12	409	150	5	20	14	7	20	185
BO9 167	0.83	93												
DUP	0.88	100												
Target Range - Lower Bound	0.78	91												
Upper Bound	0.93	102												

***** See Appendix Page for comments regarding this certificate *****

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Page: 3 - A
Total # Pages: 3 (A - C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
Account: MINOREX

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

Project: P23-05

QC CERTIFICATE OF ANALYSIS SV23095059

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	Ba	Ce	Cr	Cs	Dy	Er	Eu	Ga	Gd	Hf	Ho	La	Lu	Nb	Nd
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.5	0.1	5	0.01	0.05	0.03	0.02	0.1	0.05	0.05	0.01	0.1	0.01	0.05	0.1
DUPLICATES																
JP_01_159		85.9	12.0	85	43.8	1.47	0.61	0.16	22.8	1.28	1.44	0.23	5.5	0.10	17.10	5.3
DUP		90.9	11.2	89	42.8	1.25	0.68	0.18	23.6	1.38	1.27	0.23	5.5	0.09	16.90	5.1
Target Range - Lower Bound		83.5	10.9	78	41.1	1.24	0.58	0.14	21.9	1.21	1.24	0.21	5.1	0.08	16.10	4.8
Upper Bound		93.3	12.3	96	45.5	1.48	0.71	0.20	24.5	1.45	1.47	0.25	5.9	0.11	17.90	5.6

***** See Appendix Page for comments regarding this certificate *****

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Page: 3 - B
Total # Pages: 3 (A - C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
Account: MINOREX

Project: P23-05

QC CERTIFICATE OF ANALYSIS SV23095059

Sample Description	Method / Analyte / Units / LOD	ME-MS81 Pr ppm 0.02	ME-MS81 Rb ppm 0.2	ME-MS81 Sc ppm 0.5	ME-MS81 Sm ppm 0.03	ME-MS81 Sn ppm 0.5	ME-MS81 Sr ppm 0.1	ME-MS81 Ta ppm 0.1	ME-MS81 Tb ppm 0.01	ME-MS81 Th ppm 0.05	ME-MS81 Tl % 0.01	ME-MS81 Tm ppm 0.01	ME-MS81 U ppm 0.05	ME-MS81 V ppm 5	ME-MS81 W ppm 0.5	ME-MS81 Y ppm 0.1
DUPLICATES																
JP_01_159		1.46	473	5.3	1.26	56.4	28.0	4.0	0.23	2.95	0.05	0.10	15.95	<5	1275	7.8
DUP		1.46	477	4.9	1.28	54.4	27.2	3.9	0.24	2.91	0.05	0.13	16.80	<5	1260	7.7
Target Range - Lower Bound		1.37	451	4.3	1.18	52.1	26.1	3.7	0.21	2.73	0.04	0.10	15.50	<5	1205	7.3
Upper Bound		1.55	499	5.9	1.36	58.7	29.1	4.2	0.26	3.13	0.06	0.13	17.25	10	1330	8.2

***** See Appendix Page for comments regarding this certificate *****

ALS Laboratory Group, SL
Poligono Parque Plata
Calle Camino Mozarabe naves 13 y 15
Camas (Sevilla) 41900
www.alsglobal.com/geochemistry

To: MINOREX CONSULTING
25856 28TH AVENUE
ALDERGROVE, BC V4W 2Z8
CANADA

Page: 3 - C
Total # Pages: 3 (A - C)
Plus Appendix Pages
Finalized Date: 18-APR-2023
Account: MINOREX

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

Project: P23-05

QC CERTIFICATE OF ANALYSIS SV23095059

Sample Description	Method / Analyte / Units / LOD	ME-MS81 Yb ppm 0.03	ME-MS81 Zr ppm 1	ME-4ACD81 Ag ppm 0.5	ME-4ACD81 As ppm 5	ME-4ACD81 Cd ppm 0.5	ME-4ACD81 Co ppm 1	ME-4ACD81 Cu ppm 1	ME-4ACD81 Li ppm 10	ME-4ACD81 Mo ppm 1	ME-4ACD81 Ni ppm 1	ME-4ACD81 Pb ppm 2	ME-4ACD81 Sc ppm 1	ME-4ACD81 Tl ppm 10	ME-4ACD81 Zn ppm 2
DUPLICATES															
JP_01_159		0.63	37												
DUP		0.69	33												
Target Range - Lower Bound		0.60	32												
Upper Bound		0.72	38												

***** See Appendix Page for comments regarding this certificate *****

Figure 11.1: Verification Samples' Certificate of Analysis and Quality Control Certificate

11.2.3 Re-Analysis of 2017 Diamond Drill Samples

The re-analysis of the 2017 diamond drill core samples from the SHB was mainly to re-assess the WO_3 content as well as to evaluate the values of the associated metals such as copper. silver, tin, molybdenum and rare earth elements. A total of 1,264 samples from the SHB were re-analysed in the ALS preparation and assay laboratories using the ME-MS81 and ME-4ACD81 analytical methods.

The ME-MS81 procedure applies a lithium borate fusion to the sample and the fused sample is measured by ICP-MS procedures. This analysis is very effective for quantitative results of all elements including those encapsulated in resistive minerals. The ranges of detectable elements are shown in the following Table 10.5.

Table 10.5: ALS method ME-MS81 analyzed elements and ranges.

Element	Range (ppm)	Element	Range (ppm)	Element	Range (ppm)	Element	Range (ppm)
Ba	0.5-10,000	**Hf**	0.05-10,000	**Sm**	0.03-1,000	**V**	5-10,000
Ce	0.1-10,000	**Ho**	0.01-1,000	**Sn**	0.5-10,000	**W**	0.5-10,000
Cr	5-10,000	**La**	0.1-10,000	**Sr**	0.1-10,000	**Y**	0.1-10,000
Cs	0.01-10,000	**Lu**	0.01-1,000	**Ta**	0.1-2,500	**Yb**	0.03-1,000
Dy	0.05-1,000	**Nb**	0.05-2,500	**Tb**	0.01-10,000	**Zr**	1-10,000
Er	0.03-1,000	**Nd**	0.1-10,000	**Th**	0.05-1,000		
Eu	0.02-1,000	**Pr**	0.02-1,000	**Ti**	0.01%-10%		
Ga	0.1-10,000	**Rb**	0.2-10,000	**Tm**	0.01-10,000		
Gd	0.05-1,000	**Sc**	0.5-500	**U**	0.05-1,000		

Table 10.5: ALS ME-MN81 Ranges for Analysing Elements

In addition to ICP-MS analyses, the samples were also analysed using ALS's ME-4ACD81 procedures which reports base metal contents using a 4-acid digestion followed by an ICP-MS analysis. The ranges of detectable elements using these procedures are shown in the following Table 10.65. It is important to mention that when a sample exceeded the W over-limits it was analyzed with W-XRF15b procedures using a lithium borate fusion with an XRF analysis.

Table 10.6: ALS method ME-4ACD81 analyzed elements and ranges.

Element	*Range (ppm)*	*Element*	*Range (ppm)*	*Element*	*Range (ppm)*	*Element*	*Range (ppm)*
Ag	***0.5-100***	***Co***	***1-10,000***	***Mo***	***1-10,000***	***Sc***	***1-10,000***
As	***5-10,000***	***Cu***	***1-10,000***	***Mi***	***1-10,000***	***Tl***	***10-10,000***
Cd	***0.5-1,000***	***Li***	***10-10,000***	***Pb***	***2-10,000***	***Zn***	***2-10,000***

Table 10.6: ALS ME-4ACD81 Ranges for Analysing Base-Metal Elements

11.2.4 2023-24 Sample Analyses

ALS preparation laboratory in Seville, Spain the 2023-24 core and RC samples were prepared by crushing the sample with up to 70% of the material passing a 2 mm screen, and then each sample was split to 250 g and pulverized with hardened steel to 85% passing a 75 µ screen. Each resultant sub-sample was then direct shipped to their certified assay laboratory Dublin Road, Loughrea, Co., Ireland. The remaining sample pulps and sample rejects were returned to Minerália.

The samples are analyzed by the ME-MS81 ALS method that applies a lithium borate fusion to the sample and the result of this fusion is measured by applying an ICP-MS. It is also applied to the ALS ME-4ACD81 procedure which reports base metals by a 4-acid digestion and later analyzed by an ICP-MS procedure. Any over-limit tungsten values were re-analysed at the same laboratory by a W-XRF15b procedure that uses a lithium borate fusion with an XRF analysis. The analytical results were then securely emailed to Minerália.

The analytical results of the 2023-24 diamond and RC drilling, approximately or over a minimum grade of 0.1% WO3 and a minimum mining width of 2 m, are shown in the following Table 10.7

Bo_Met_01	From (m)	To (m)	Length (m)	**WO3 (%)**	**Sn (ppm)**	**Cu (ppm)**	**Ag (ppm)**
	0.00	207.00	**207.00**	0.13	100	733	5
inc.	14.00	186.00	**172.00**	0.15	99	722	5
inc.	60.00	186.00	**126.00**	0.19	110	914	6
inc.	60.00	166.00	**106.00**	0.21	107	863	5
	60.00	65.00	**5.00**	0.60	105	247	2
	93.00	101.00	**8.00**	0.48	104	949	5
	111.00	121.00	**10.00**	0.48	105	1469	10

Bo_Met_02	From (m)	To (m)	Length (m)	**WO3 (%)**	**Sn (ppm)**	**Cu (ppm)**	**Ag (ppm)**
	38.00	72.00	**34.00**	0.17	106	671	5
	42.00	70.00	**28.00**	0.20	114	742	5
inc.	54.00	70.00	**16.00**	0.28	122	1074	7
inc.	63.00	70.00	**7.00**	0.36	123	1228	7

Bo_Met_02a	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	1.00	155.00	**154.00**	0.14	90	651	4
inc.	62.00	131.00	**69.00**	0.26	97	1011	6
inc.	62.00	115.00	**53.00**	0.31	111	1063	5
inc.	62.00	97.00	**35.00**	0.40	112	1118	5
inc.	62.00	85.00	**23.00**	0.53	113	1215	6

Bo_RC_01	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	0.00	188.00	**188.00**	0.15	97	609	4
inc.	74.00	188.00	**114.00**	0.23	111	787	5
inc.	74.00	158.00	**84.00**	0.27	106	734	5

Bo_RC_02	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	0.00	134.00	**134.00**	0.19	97	1019	4
inc.	26.00	134.00	**108.00**	0.22	106	1170	5
inc.	62.00	86.00	**24.00**	0.49	117	1258	4
inc.	62.00	78.00	**16.00**	0.63	130	1533	5
	116.00	134.00	**18.00**	0.33	109	1551	6

Bo_RC_03	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	108.00	237.00	**129.00**	0.10	76	405	3
inc.	108.00	138.00	**30.00**	0.17	70	633	4
inc.	108.00	128.00	**20.00**	0.23	74	700	4
	216.00	237.00	**21.00**	0.16	73	355	2

Bo_RC_04	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	76.00	82.00	**6.00**	0.16	51	621	4
	146.00	246.00	**100.00**	0.09	77	515	3
inc.	156.00	198.00	**42.00**	0.13	87	503	2
inc.	156.00	162.00	**6.00**	0.26	77	392	2
	184.00	198.00	**14.00**	0.18	91	571	3

Bo_RC_05	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	64.00	236.00	**172.00**	0.09	66	530	4
inc.	102.00	228.00	**126.00**	0.11	80	594	4
inc.	102.00	158.00	**56.00**	0.14	75	434	3
inc.	146.00	158.00	**12.00**	0.26	80	507	4

Bo_RC_06	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	98.00	194.00	**96.00**	0.10	104	536	5
inc.	98.00	114.00	**16.00**	0.17	70	354	2
inc.	98.00	106.00	**8.00**	0.24	67	388	2
	140.00	154.00	**14.00**	0.21	116	501	5

Bo_RC_07	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	36.00	168.00	**132.00**	0.16	107	843	5
inc.	64.00	168.00	**104.00**	0.18	119	971	6
inc.	82.00	98.00	**16.00**	0.24	108	790	3
	122.00	146.00	**24.00**	0.30	136	1087	7
	160.00	168.00	**8.00**	0.34	80	746	7

Bo_RC_08	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	82.00	150.00	**68.00**	0.21	70	445	4
inc.	92.00	144.00	**52.00**	0.24	81	509	4
inc.	132.00	144.00	**12.00**	0.42	62	356	3

Bo_RC_09	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	100.00	114.00	**14.00**	0.16	89	722	5
inc.	100.00	106.00	**6.00**	0.29	89	815	6

Bo_RC_10	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	0.00	102.00	**102.00**	0.09	89	529	46
inc.	24.00	100.00	**76.00**	0.12	99	609	33
inc.	48.00	100.00	**52.00**	0.16	109	589	38
inc.	48.00	74.00	**26.00**	0.22	96	608	55

Bo_RC_11	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	0.00	316.00	**316.00**	0.11	57	312	2
inc.	112.00	310.00	**198.00**	0.16	62	335	2
inc.	112.00	150.00	**38.00**	0.56	51	295	2
inc.	140.00	150.00	**10.00**	1.75	52	204	2
	256.00	288.00	**32.00**	0.15	66	364	4
inc.	256.00	268.00	**12.00**	0.20	78	436	4

Bo_RC_12	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	44.00	250.00	**206.00**	0.14	50	394	5
inc.	82.00	102.00	**20.00**	0.50	108	2087	10
inc.	82.00	94.00	**12.00**	0.78	122	2038	9
	182.00	184.00	**2.00**	5.79	52	334	4
	238.00	250.00	**12.00**	0.40	56	600	2
inc.	246.00	250.00	**4.00**	1.12	74	1260	5

Bo_RC_13	From (m)	To (m)	Length (m)	WO3 (%)	Sn (ppm)	Cu (ppm)	Ag (ppm)
	84.00	98.00	**14.00**	0.09	71	395	5
inc.	84.00	86.00	**2.00**	0.34	73	921	6
	208.00	220.00	**12.00**	0.13	72	366	3
inc.	208.00	210.00	**2.00**	0.68	68	217	2

Table 11.7: Significant Mineralized Intervals from 2023-24 Drilling Program

1.3 Sample Security

All the data collection, including sampling, insertion of control samples, packaging, and transportation were conducted under the supervision of a qualified Minerália project geologist. No employee, officer, director, or associate of the issuer were involved in the preparation of samples for analysis.

All analytical samples were placed in sequence onto pallets which are labelled with the company code and sample series. The sample requisition forms were compiled using the sample reference sheets that were generated since the previous shipment. The pallets were sealed and then stored in a locked sample dispatch room. When a full analytical sample shipment was ready the sealed bags were shipped directly to the ALS preparatory laboratory in Seville via courier. The ALS laboratory personnel checked to ensure that no seal has been tampered with and acknowledged receipt of samples in good order via email to Minerália.

The author's ten drill core verification samples were securely bagged and directly shipped to ALS Global laboratory in Seville, Spain according to industry-standard procedures to ensure the analytical results are reliable. The prepared sample pulps from both Minerália's work and the author's verification samples were securely and directly shipped between the two ALS laboratories in Spain and Ireland.

It is the author's opinion that Minerália personnel exercised appropriate care and attention handling, preparing and securely shipping all their rock, core and cuttings samples. Furthermore. it is the author's opinion that the sample preparation, handling and security for both the author's verification samples and Minerália's channel and drilling samples were carried out according to industry's best practice standards.

12 DATA VERIFICATION

12.1 Historic Data Verification

When Minerália acquired the Borralha license they first confirmed the locations of the numerous historic underground workings. However, most workings are either blocked or unsafe to enter so the author has been unable to make a personal inspection of the underground workings or obtain samples from there. Nevertheless, Minerália verified the available exploration and mining data prior to creating a comprehensive exploration database which the author verified through samples at surface and obtaining assays of reject samples corresponding to past drill holes.

12.2 2013 and Original 2017 Minerália Data Verification

Minerália maintains a well-documented quality assurance/quality control ('QA/QC') procedure. Two certified standard samples were alternately inserted as every 20th sample in the sample sequence. Two blanks are also placed in every assay sequence. A Minerália geologist is responsible for assessing the conditions of the preparatory laboratory during every exploration campaign. Field duplicate core samples are generated by cutting the remaining half core into two resulting in a quarter core being submitted to the laboratory as the field duplicate and a quarter core being retained for reference. See Figure 12.1 for a plot of their Standard Reference Material (GW-03) results over several sample batches assayed by W-XRF5 or 10. Minerália's original verifications of their drill core sample analytical results are adequate to ensure the credibility of the analytical data.

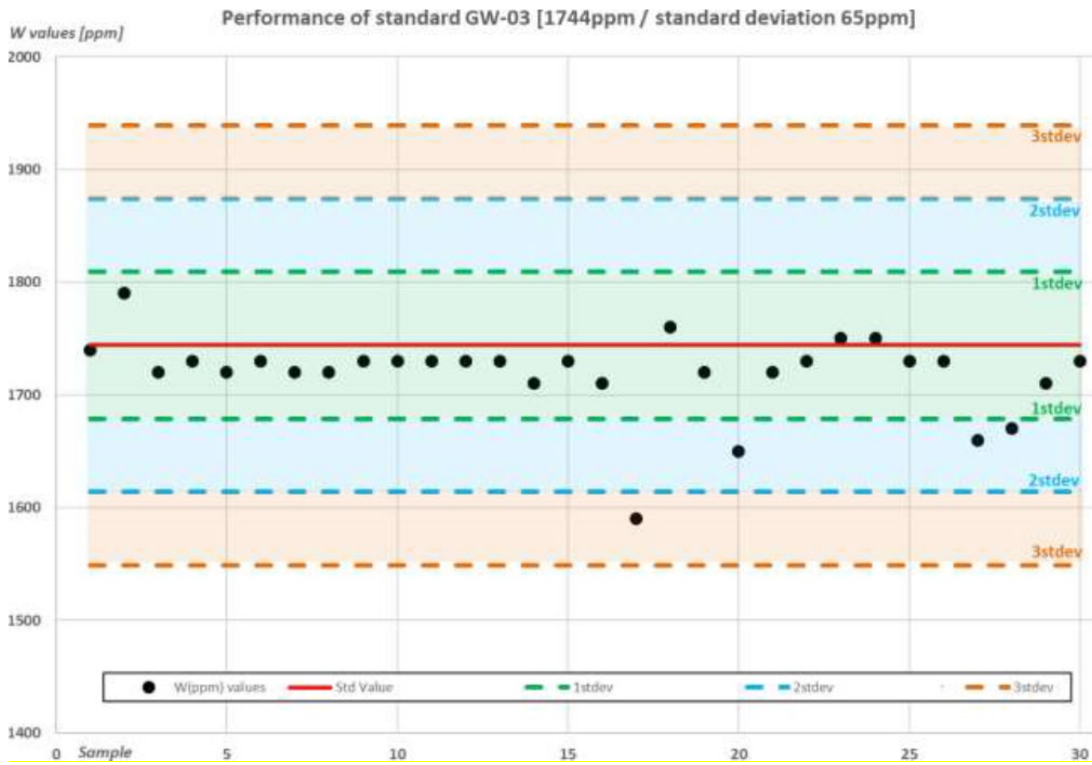


Figure 12.1: 2013 and 2017 Standard Material Sample Results over Several Assay Batches (after Minerália, 2020)

12.3 Independent Verification Sampling

12.3.1 Verification Sampling and Analytical Procedures

During his 2023 property examination the author verified and photographed the locations of various historical workings, by personal inspection both in the Borralha northern zone and south within the SHB. He also examined the records, maps and data pertaining the Borralha project, and especially the Santa Helena Breccia.

Since SHB is poorly exposed, except for the inaccessible walls of the northern open pit, and since there was no means available during the site visit to quarter the stored drill core, the author utilized and submitted ten drill core reject samples from holes BO5, BO8A and BO9 that had been previously set aside for metallurgical testing. The ten verification samples were selected from varying depths in three widely-spaced drill holes with BO9 being the most northerly drill hole, BO8A tested the centre of the SHB and BO5 tested the southern portion of the SHB (see Figure 10.5).

As stated previously, two procedures were used to analyse the drill core reject sample pulps. The first procedure (ALS Code ME-4AACD81) analysed for base metals using a 4-acid digestion and provided results for: Ag, As, Cd Co, Cu, Li, Mo, Ni, Pb, Sc, Tl and Zn. The second procedure (ME-MS8S) used a Lithium Borate Fusion and Mass Spectrometry to analyses for: Ba, Ce, Cr, Cs, Dy, Er, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sc, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tm, U, V, W, Y, Yb and Zr.

The tungsten analytical results for these verification samples have been tabulated in Table 12.1, a table of the most significant analytical results has been tabulated as Table 12.2, and the Certificate of Analysis for the verification samples accompanies this report as Figure 11.1.

12.3.2 Verification Sampling Results

The results of the verification sampling reflect the 'nuggety' distribution of the tungsten mineralization, and the need for complete multi-element analyses of all samples. A comparison between the higher tungsten values in drill holes BO5 and BO8A show that the higher tungsten grades vary between those analysed originally by XRF and those of the verification samples analysed using two analytical procedures (see Figure 12.2).

The low tungsten grades for XRF-analysed samples from drill hole BO9 show a marked difference with the same verification samples returning much higher tungsten grades. There is no obvious explanation for this difference other than the XRF analyses of the original sample pulps did not fully detect the tungsten contents that the later mass spectrometry analyses did.

There is a significant difference between the two tungsten analyses of the Certified W Reference Standard GW-03. According to Minerália (2020), their QA/QC procedures showed their inserted standard samples were largely compliant with the GW-03 standard; only four of thirty batches returned a standard analysis more than 1 standard deviation difference. One explanation of the difference with the standard sample from verification sample batch might be that the GW-03 standard in a small brown envelope had been shelved for six years and was not properly re-homogenized at the laboratory prior to its analysis which resulted in a lower tungsten analysis. However, the ALS internal quality control procedures and results indicate that the results of the ten verification samples are credible and reliable.

Sample No.	DDH No.	From (m)	To (m)	Interval (m)	Geological Log Entry
BO5 65	BO5	65.0	66.0	1.0	SHB w/ veinlets w/ f.g. Wo and Sc diss.
BO5 66	BO5	66.0	67.0	1.0	SHB w/ veinlets w/ f.g. Wo and Sc diss.
BO5 114	BO5	114.0	115.0	1.0	SHB w/ f.g.-m.g. Wo, Cp & Sc diss.
BO5 115	BO5	115.0	116.0	1.0	SHB w/ f.g.-m.g. Wo, Cp & Sc diss.
BO8A 89	BO8A	89.0	90.0	1.0	Fractured SHB w/ possible f.g. Wo.
BO8A 95	BO8A	95.0	96.0	1.0	Fractured SHB w/ possible f.g. Wo.
BO8A 158	BO8A	158.0	159.0	1.0	SHB w/ mafics and f.g. Wo & Sc.
BO9 109	BO9	109.0	110.0	1.0	Fractured and fresh SHB w/ boxworks.
BO9 111	BO9	111.0	112.0	1.0	Fractured & fresh SHB w/ boxworks, c.g. Wo grain.
BO9 167	BO9	167.0	168.0	1.0	Fractured and fresh SHB with boxworks.

Sample No.	DDH No.	From (m)	To (m)	Mineralia Samples			Verification Samples	
				W (ppm)		WO3 (ppm)	W (ppm)	WO3 (ppm)
				(W-XFR05)	(MS8S)	(Wx1.2616)	(ME-MS8S)	(Wx1.2616)
BO5 65	BO5	65	66	4140	4140	5223	3600	4542
BO5 66	BO5	66	67	5200	5090	6560	4830	6094
BO5 114	BO5	114	115	4430	4380	5589	4570	5766
BO5 115	BO5	115	116	2090	2650	2637	2470	3116
BO8A 89	BO8A	89	90	963	N/A	1215	969	1222
BO8A 95	BO8A	95	96	6310	N/A	7961	5630	7103
BO8A 158	BO8A	158	159	4390	N/A	5538	4610	5816
BO9 109	BO9	109	110	450	N/A	568	437	551
BO9 111	BO9	111	112	120	N/A	151	514	648
BO9 167	BO9	167	168	10	N/A	13	823	1038
BO1 Std	Certified W Reference Std GW-03				1744		1555	

Notes:

Cp	*Chalcopyrite*	*f.g.*	*fine grain*	*SHB*	*Sanata Helena Breccia*
Sc	*Scheelite*	*m.g.*	*medium grain*	*N/A*	*Not Assayed*
Wo	*Wolframite*	*c.g.*	*coarse grain*		

Table 12.2: Comparison Table of Original Drill Core XRF Tungsten Values versus Author's 2023 Verification Samples' Tungsten Analytical Values

It was strongly recommended that all rock samples be fully analysed for their full multi-element contents and not tested solely for tungsten using a XRF analysis. A very important result of the verification sample analyses was the detection of significant values for tin, copper and silver. The Borralha mine intermittently produced tin concentrate from 1915 to 1939, copper concentrate from 1963 to 1983, and silver values were noted in historical reports. However, since all the current drill cores from the SHB had only been analysed for tungsten, the grades of accessory minerals were only suspected from observations of chalcopyrite and cassiterite in the drill core. Tungsten returned values ranging from 969 to 4830 ppm with associated copper values ranging from 0.083 to 0.576 % and silver values ranging from 6.7 to 18.5 gpt (see Table 12.3).

Sample No.	From (m)	To (m)	Interval (m)	W ppm	Sn ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Mo ppm	As ppm	Ba ppm
BO5 65	65.0	66.0	1.0	3600	131	6.7	1605	11	288	20	13	373
BO5 66	66.0	67.0	1.0	4830	115.5	7.4	1550	18	216	28	11	333
BO5 114	114.0	115.0	1.0	4570	208	17.8	5760	35	248	51	16	219
BO5 115	115.0	116.0	1.0	2470	191	18.5	3900	53	749	179	10	230
BO8A 89	89.0	90.0	1.0	969	103	9.2	2240	28	791	21	74	463
BO8A 95	95.0	96.0	1.0	5630	137	9.4	2140	29	719	25	19	316
BO8A 158	158.0	159.0	1.0	4610	140	9.4	832	60	601	22	<5	220
BO9 109	109.0	110.0	1.0	437	65.3	1.2	404	12	179	4	5	333
BO9 111	111.0	112.0	1.0	514	57.9	1.5	195	18	607	4	8	285
BO9 167	167.0	168.0	1.0	823	68.7	2.3	424	34	1690	8	7	217

Table 12.3: Significant Results from the 2023 Verification Sample Analyses.

12.3 2023-24 Diamond Core and Reverse Circulation Sample Verification

During the re-analysis of the 2017 diamond drill samples from the SHB (i.e. drill hole B0_04 to _07, _08A, _09 to _12) plus all the 2023-24 diamond and RC samples 156 of the four different elemental standards were inserted into the various sample batches to verify the assay results for tungsten, copper, tin, silver, molybdenum, lead and zinc. In addition, twenty blank standards of sand were inserted to verify the cleanliness of the crusher and pulverizer used during each batch of analytical samples.

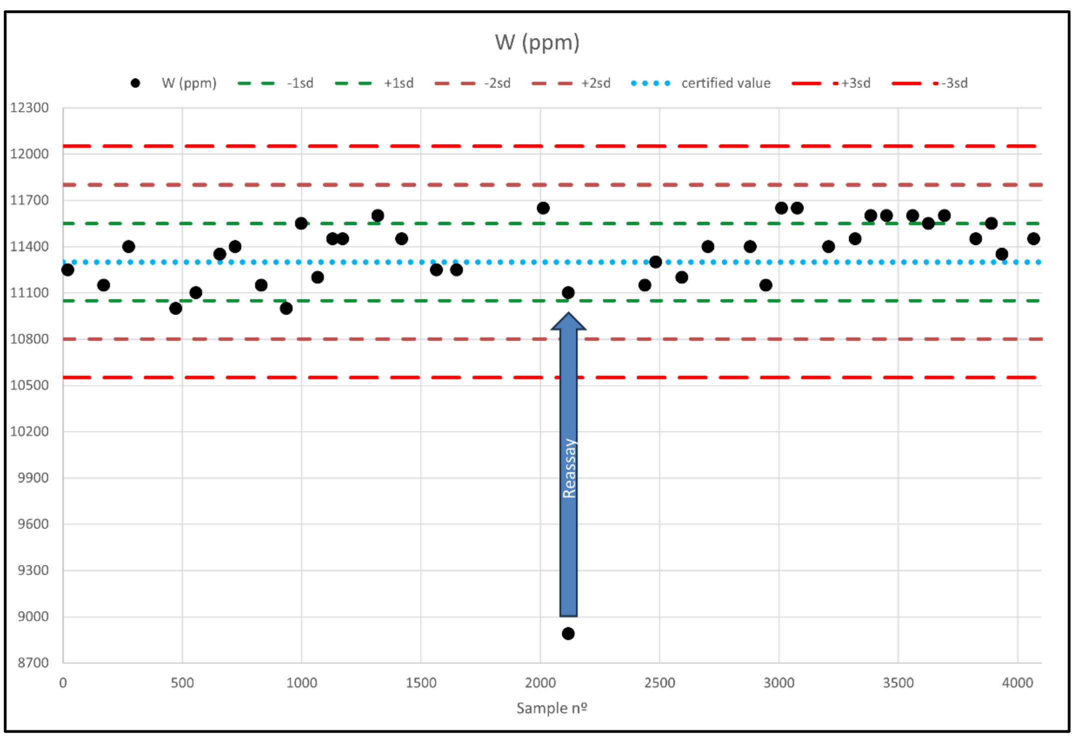
All standards and blanks were obtained from an independent third-party provider (e.g. CDN Resource Laboratories Ltd., Geostats Pty Ltd. and OREAS) with a total of five different control reference materials (‘CRM’) being utilized for a different element suite. The CDN-ME-1404 CRM was purchased from CDN Resource Laboratories Ltd to test higher grades of base metals, such as copper, lead, zinc with associated silver. The GM-11 and GW-03 CRMs were purchase from Geostats Pty Ltd. to test for the grades of primarily molybdenum and tungsten, respectively. The last CRMs Oreas 700 and Oreas 21f were purchased from OREAS. The Oreas 700 CRM tests for high grades of tungsten with low grades of tin, copper and zinc while the Oreas 21f CRM is a blank of a barren regional granite used to check the cleaning of the plates in the crushing and milling process. Table 12.4 of this report documents the various standards plus their grades, lithological sources, types and retailer.

Standard	W (ppm)	Sn (ppm)	Mo (ppm)	Cu (ppm)	Ag (ppm)	Pb (ppm)	Zn (ppm)	Source	Standard Type	Company
RB-Oreas 21	0.11	0.40	0.48	4.90	<0.05		3.28	Granite	Blank	OREAS
Oreas 700	11300	182		2040			231	skarn tungsten-magnetite ore	High-W-Cu	OREAS
ME-1404				4840	59	3810	20800	Sulfide mineralization	Low Multi-element	CDN Resource
GW-03	1744							Pilbara granite, sheelite / wolfromite	High-W	Geostats
GM-11	0.80		2937.00	115.50	0.89	31.90	101.00	Mo Concentrate / Basalt Composite	High-Mo	Geostats

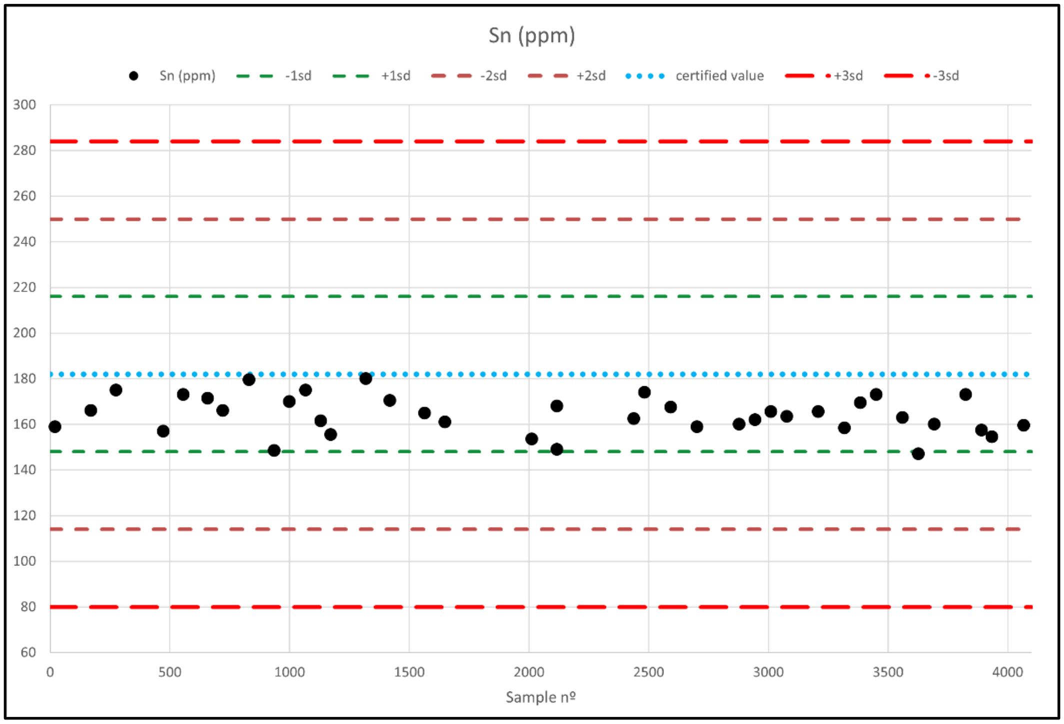
Table 12.4: List of Standards Used During 2023-24 Exploration Program (Minerália, 2024)

The following plots of the significant elements versus the noted standard illustrate the QA/QC verifications of the 2017 and 2023-24 drilling samples.

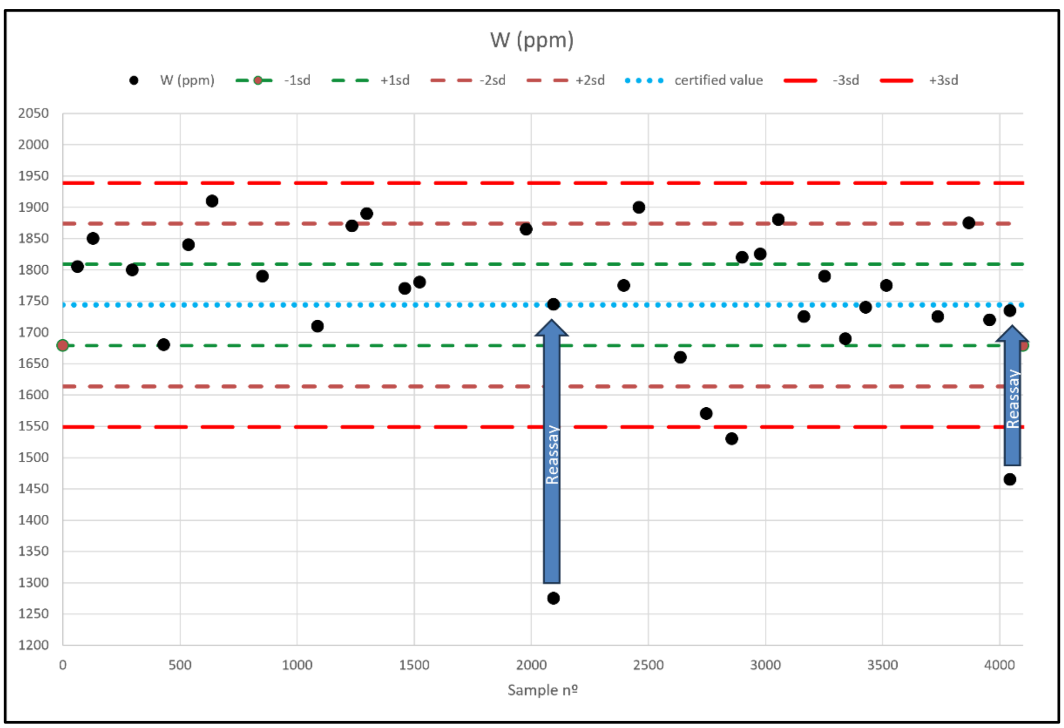
Oreas 700 Standard



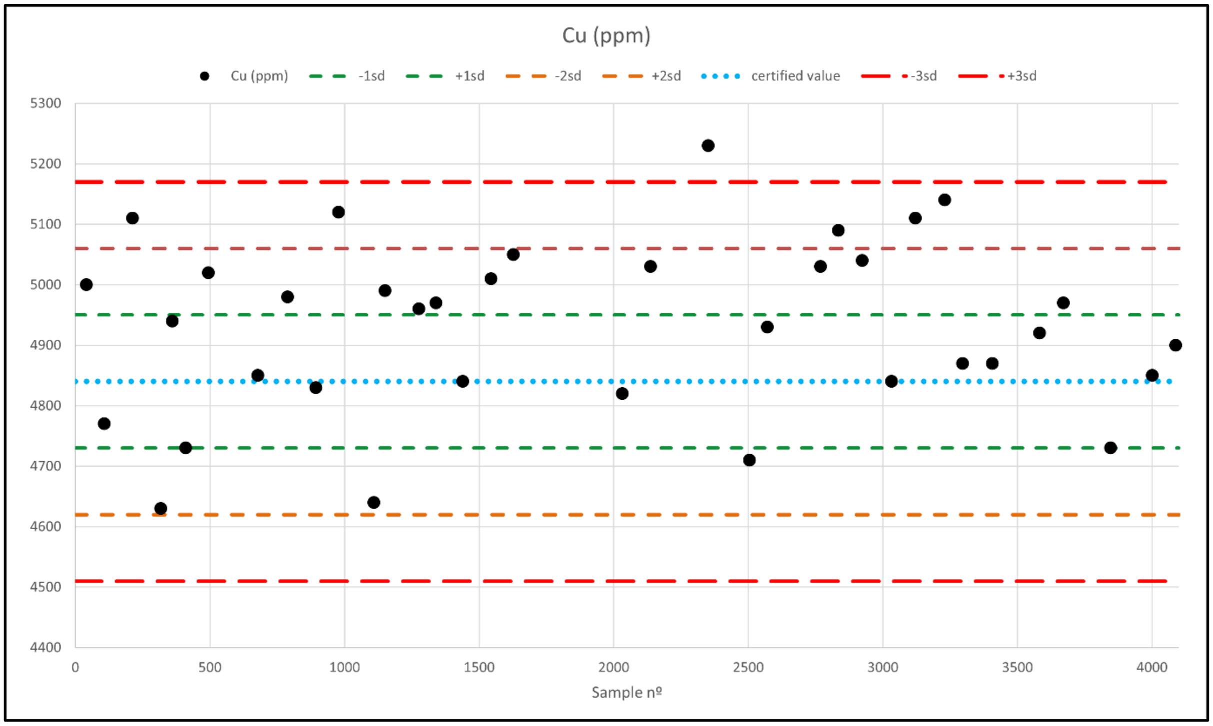
Oreas 700 Standard

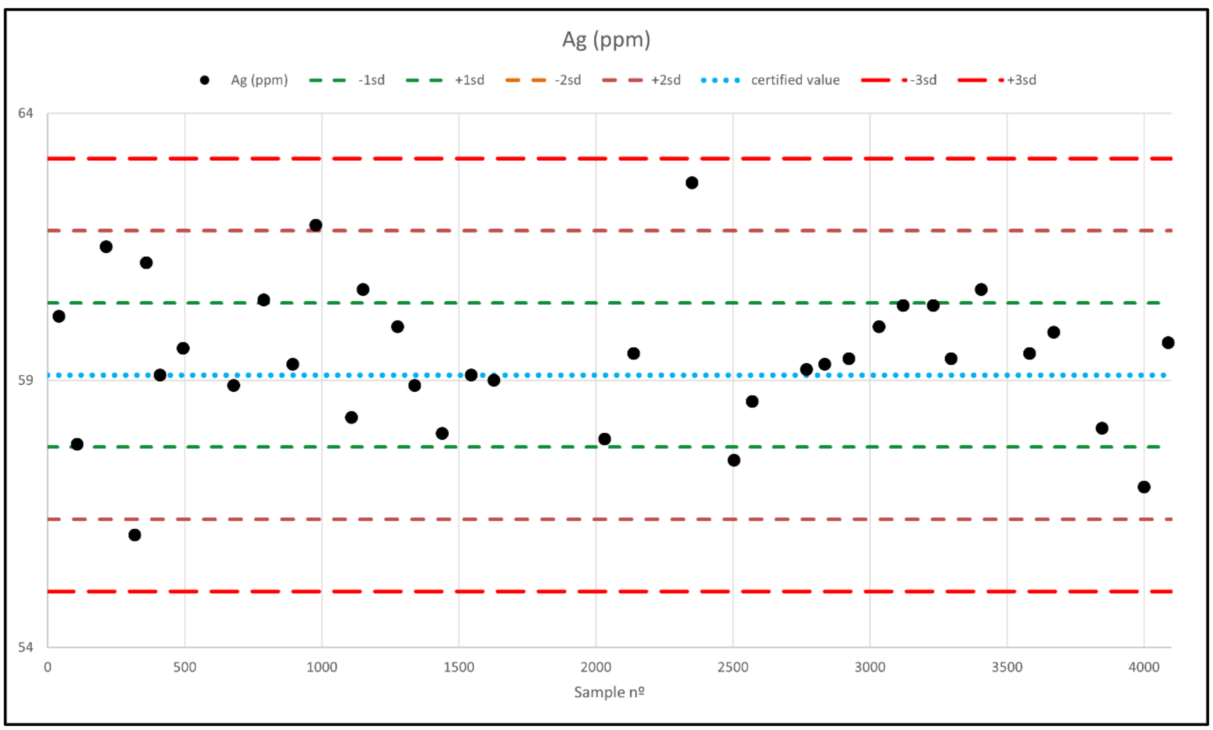


GW-03 Standard

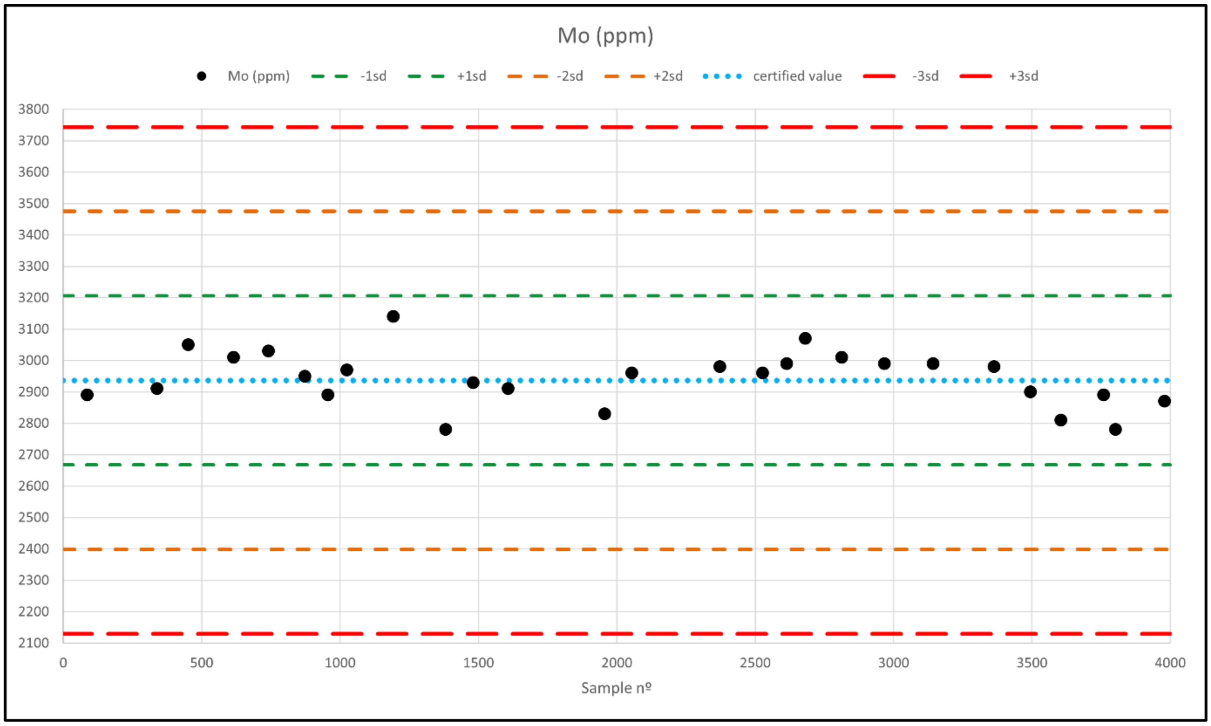


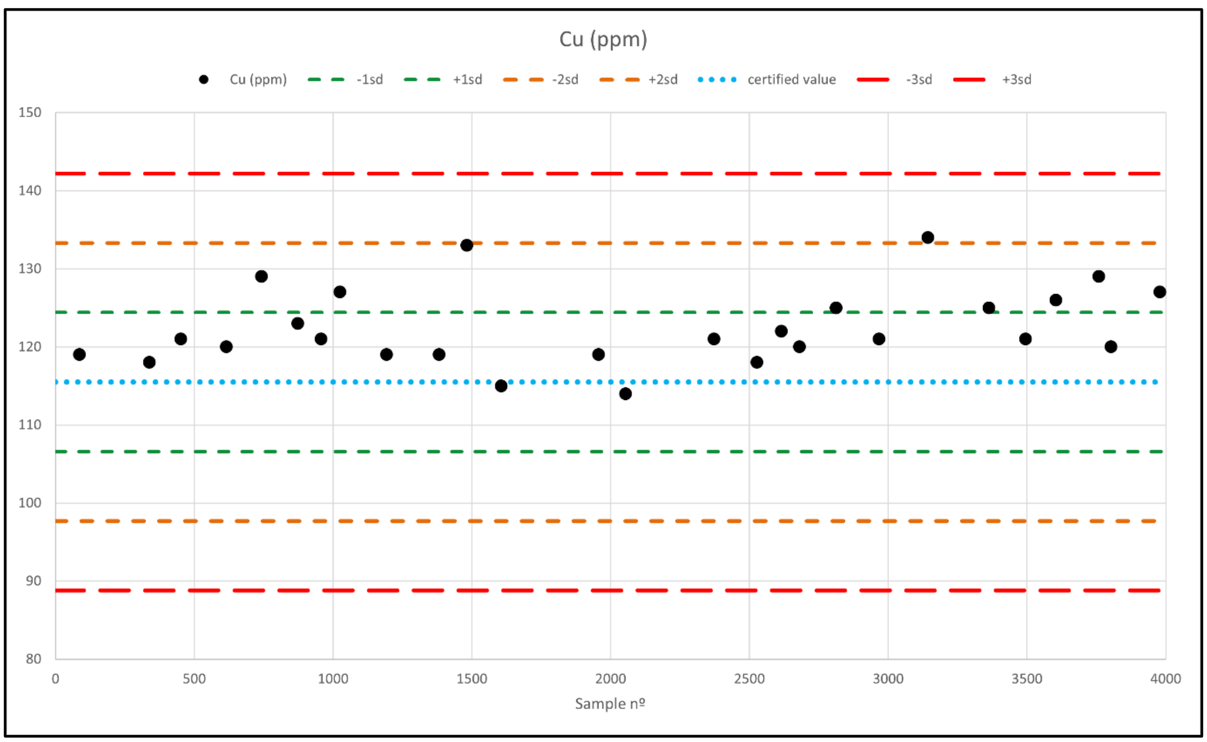
ME-1404 Standard



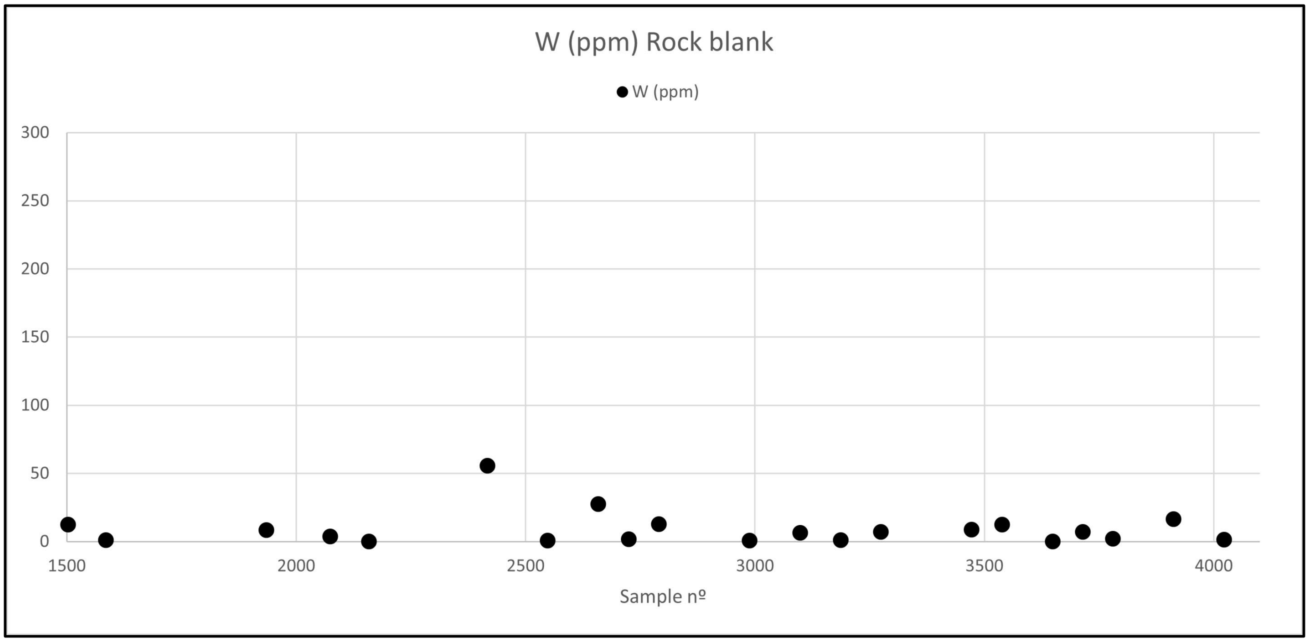


GM-11 Standard

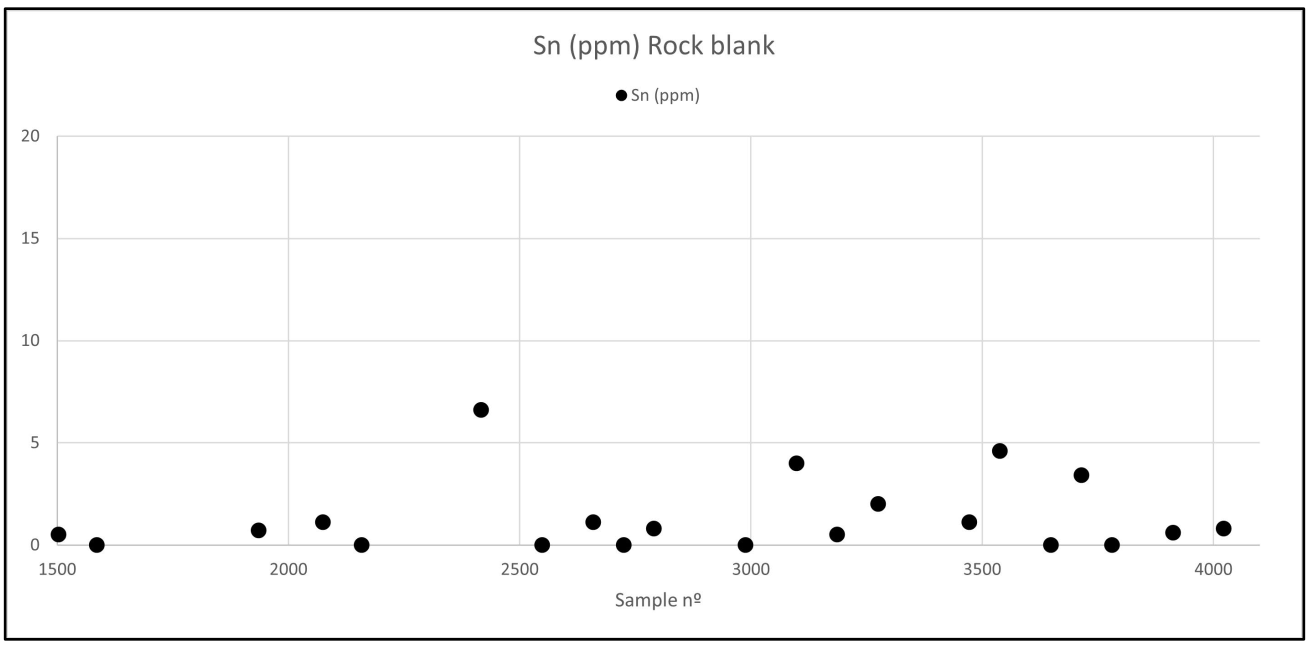




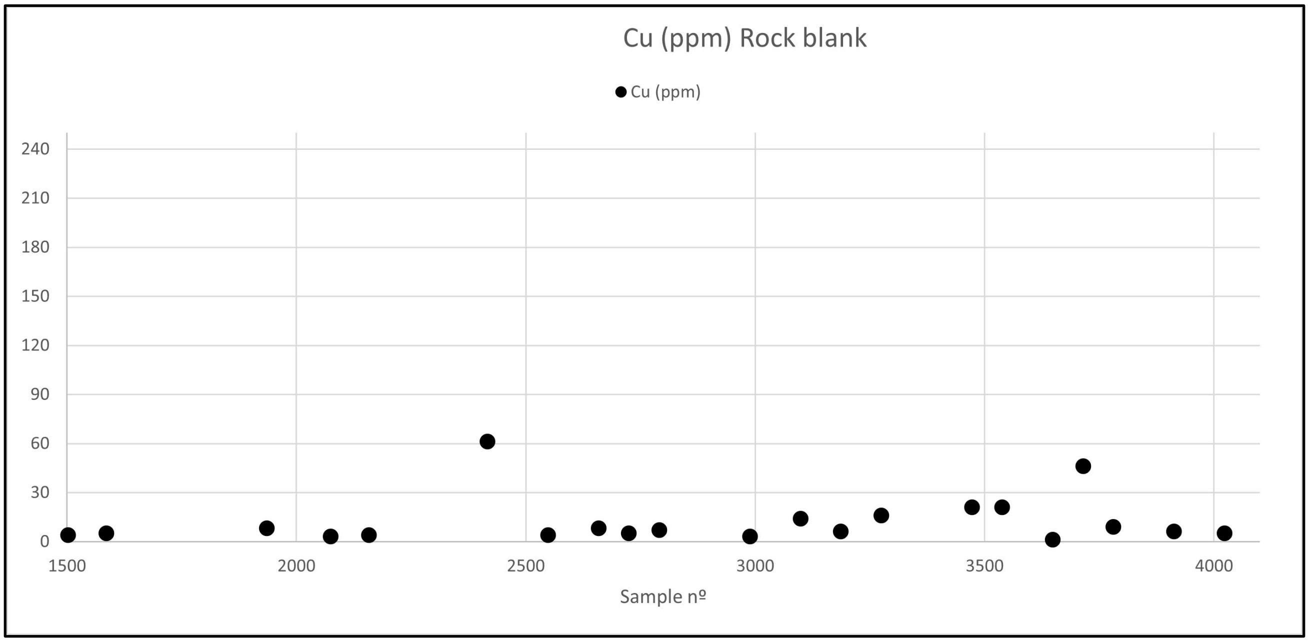
Rock Blank Standard and Tungsten



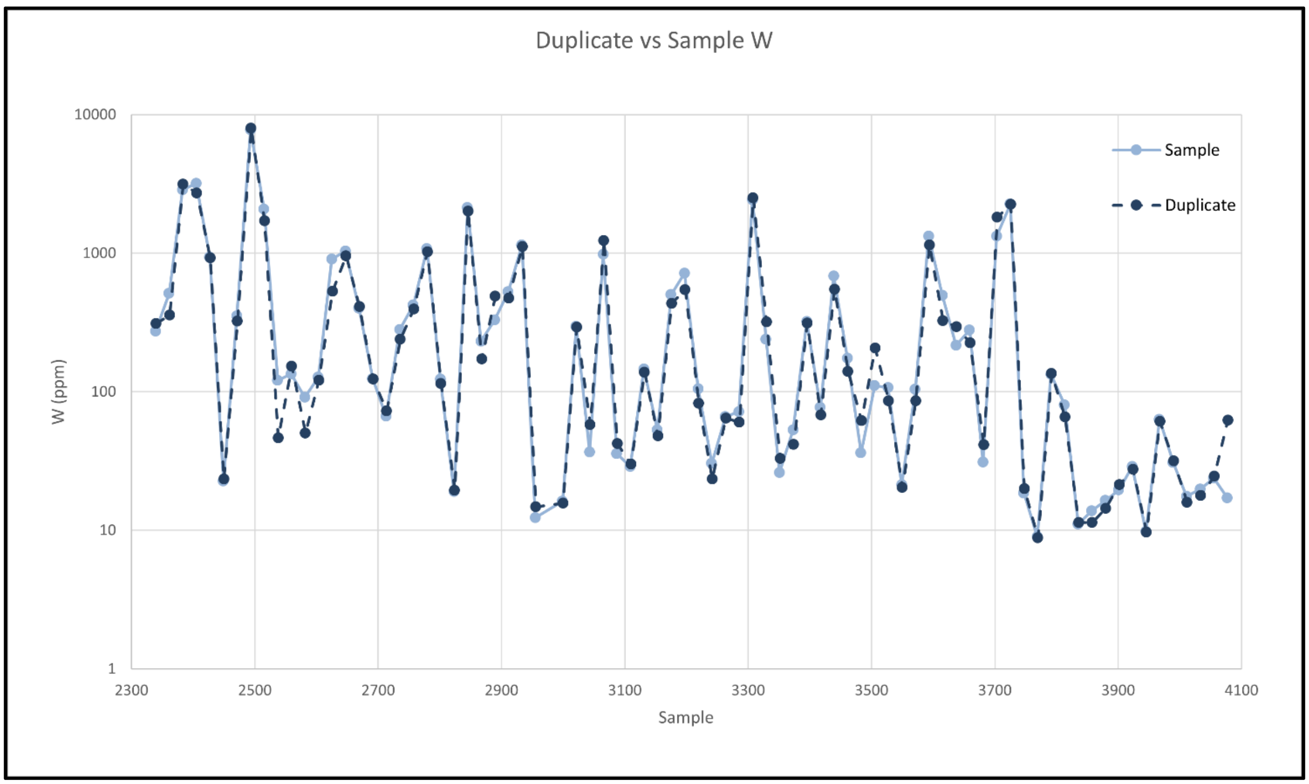
Rock Blank Standard and Tin



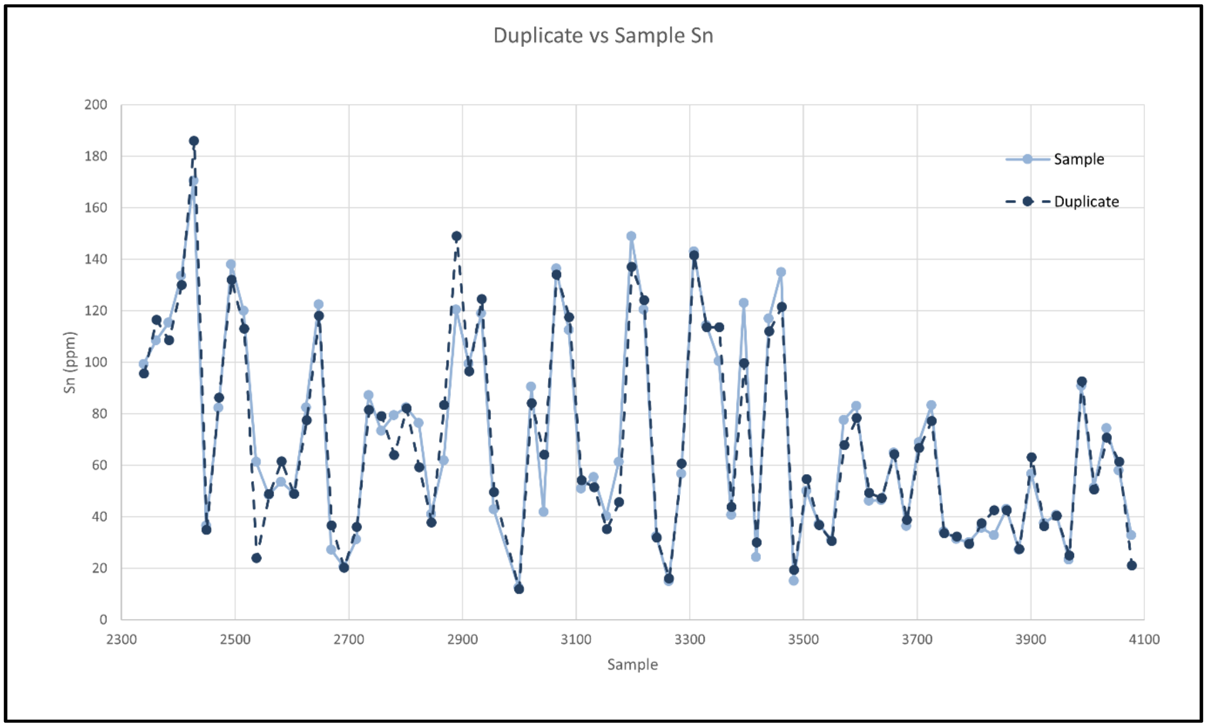
Rock Blank Standard and Copper



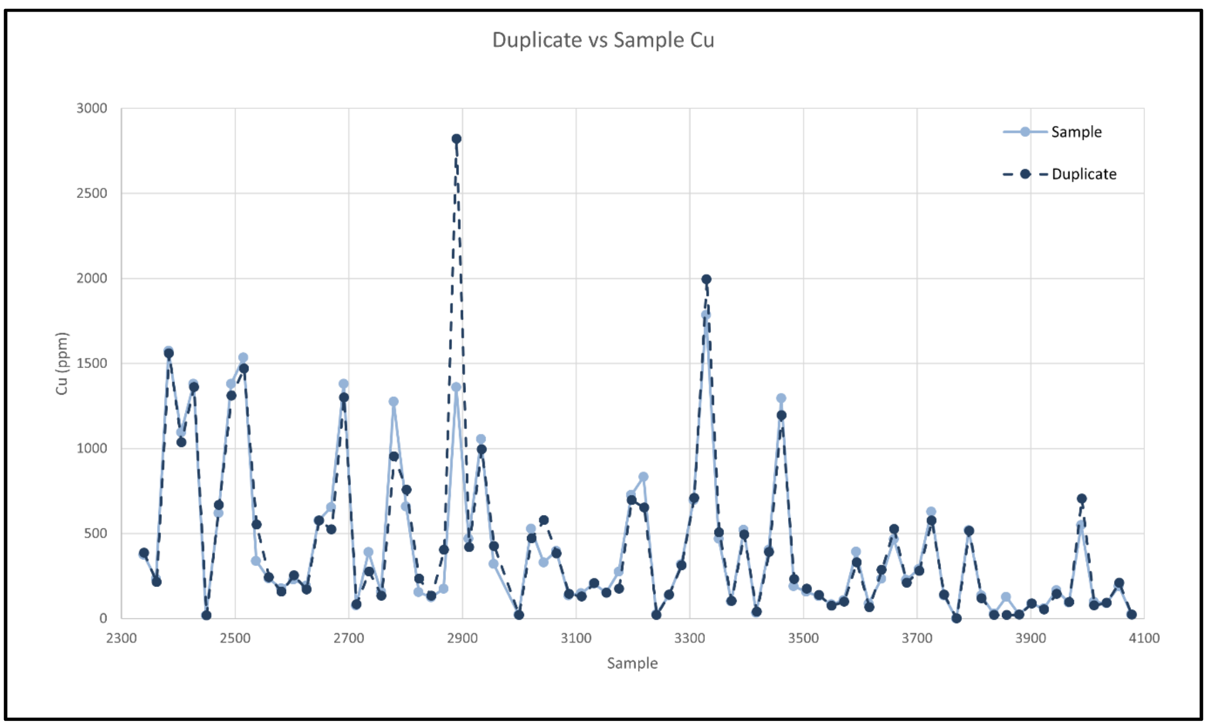
Duplicate vs Sample Tungsten



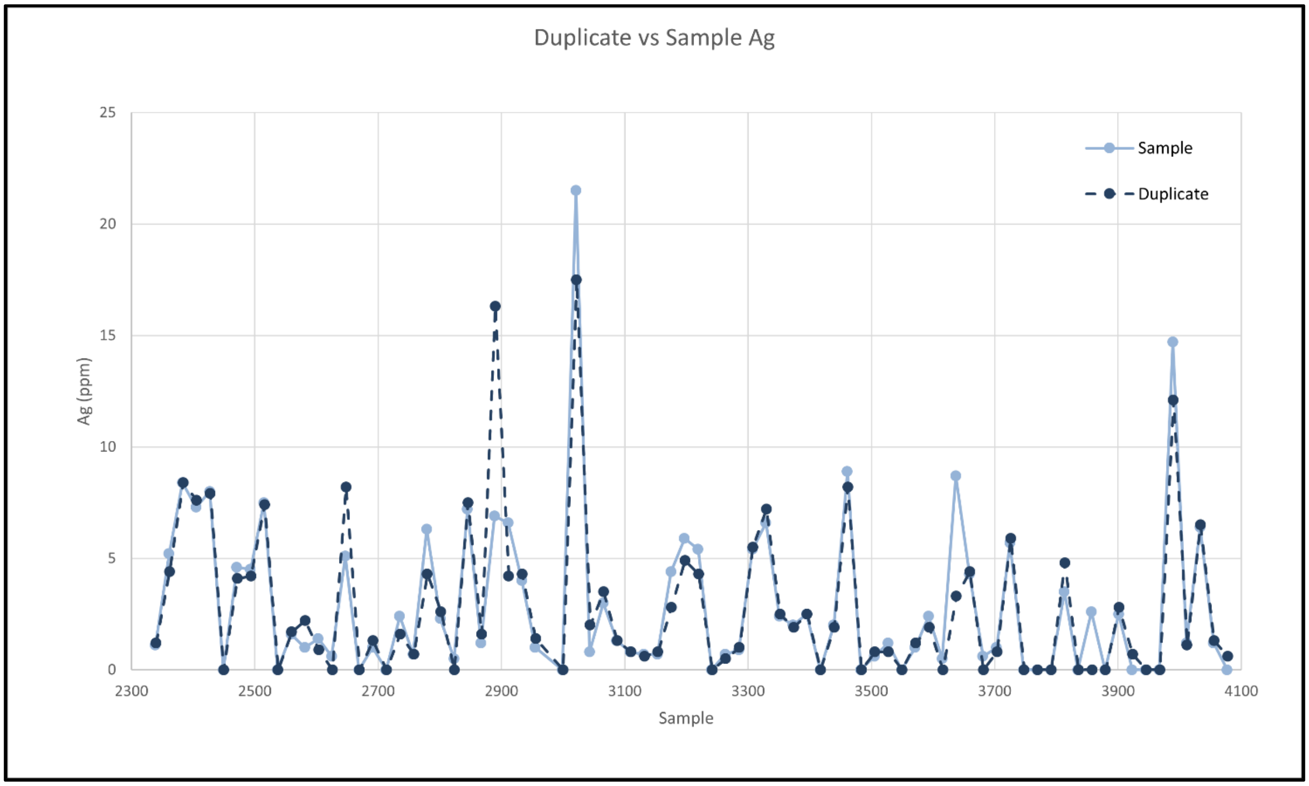
Duplicate vs Sample Tin



Duplicate vs Sample Copper



Duplicate vs Sample Silver



It is the opinion of the author based on his own verification procedures and those procedures reported by Minerália described above were carried out by qualified professionals according to industry best practise standards. Furthermore, the QA/QC verification procedures used during the 2023-24 drilling program are reasonably reliable and adequate for the purposes in this technical report.

13 MINERAL PROCESSING and METALLURGICAL TESTING

The SHB mineralization has received two series of metallurgical testing since 2019. Both series of metallurgical testing have been supervised and managed by Minerália.

13.1 2019 Metallurgical Testing by Grinding Solutions Ltd.

In 2019 a weathered bulk sample with visible mineralization, weighing approximately 150 kg, was collected from the surface in the southern part of the SHB. The sample was then shipped to Grinding Solutions Ltd ('GSL'), UK (2019) for metallurgical study. This sample was collected to study the liberalization characteristics of wolframite mineralization and to confirm that a wolframite concentrate could be produced.

According to Minerália (2020), the results of the GSL test work are summarized as follows:

- head grade was 1.49 % WO_3 and 0.02 % Sn;
- testing showed that the tungsten occurrence is 'nuggety';
- assay by size data demonstrated that the tungsten is concentrated more into the coarser fractions with tungsten grades varying between 2 to 3%. Fractions -1 mm varied between 1 and 2% WO_3;
- gravity release analysis showed that the material was well liberated in all fractions tested;
- jig testing on a number of fraction sizes between 31.5 mm and 2 mm showed that a jig concentrate containing 73.8% WO_3 reported to process of a mass pull of 39.1% with a grade of 3.0% WO_3;
- tailings from this process contained 5.5% of the WO_3 at a grade of 0.2% $WO_{3;}$
- although the recovery was high in the jig concentrate it was seen necessary to further process this within the fines circuit to further upgrade the tungsten content;
- the jig concentrate was crushed to -2 mm to match the natural fines;
- fines circuit produced a number of size fraction concentrates when combined yield an overall tungsten recovery of 70.03% with a grade of 56.16% $WO_{3;}$
- fines circuit contained a deslime circuit operating at a cut point of 45 um;
- slime fraction from this deslime was passed through a multi-G concentrator (Falcon L40). The recovery from this was low at just 34.8% stage recovery, however poor recoveries using gravitational methods should be expected in this size range. Flotation could be looked at for recovery from this material, but this will likely require de-sliming the flotation feed which will lose tungsten to the tailings;
- magnetic testing performed on the gravity pre-concentrate proved successful recovering 99.9% of the tungsten reporting to the process at magnetic intensity of 1.5T. Tungsten grade in this product was 61.84% WO_3. Further important work on this para-magnetic wolframite property will be the main subject of the next phase of metallurgy testing;
- during the processing poor recovery of tin was observed throughout; and
- overall tungsten recovery using the gravity methods was 69.96% at a concentrate grade of 61.84% WO_3 in this processing route which was not optimized.

In their report that was documented by Minerália (2020) GSL made the following recommendations:

- conduct bulk jigging test work to ascertain if a high-grade coarse concentrate can be produced and can go straight to magnetic separation;
- when taking into account the coarse nature of the tungsten and the low recoveries of WO_3 at – 45 μm, it is recommended to reduce the generation of fine material where possible by conduction, a specific comminution study designed for fines minimisation;
- investigate jigging at coarser size fractions (40mm, 50mm and 60mm top size);
- investigate increased size fractions in the gravity circuit to improve the rejection of iron oxides;
- conduct a test work program on a larger sample to be able to simulate all recirculating loads and have enough sample mass to conduct production gravity test work (spirals);
- optimisation of falcon conditions on the -45 μm deslime of deslimed feed to remove 5 μm before falconing of sized feed – split into 2 feed sizes, +/- 20 μm sized concentrate prior to tabling at 20 μm;
- if magnetic separation as the primary preconcentration route is selected, conduct a test work program to produce final concentrate grade. This will be a major component of future work; and
- investigate flotation or other fine material recovery method for tungsten from the slime fraction.

GSL also mentioned in their report that a sample of the feed material was sent to Eriez for testing of head material ground to 1mm on a Wet High Intensity Magnetic Separator ('**WHIMS**') which provided a tungsten recovery of 95% to a mass pull of just 13%. This significant result is to be investigated as it could lead to a less expensive plant if magnetic separation is deployed at an early stage of the plant circuit (Minerália, 2020)

In their 2020 technical report Minerália had the following comments:

- re-think the jig product of approximately 60% tungsten being combined back with the natural fines at approximately 20% tungsten grade. The dilution of the upgraded jig product might cause problems later in the concentrating process;
- for the magnetic work GSL only used a WHIMS which will recover both wolframite as well as any iron-bearing minerals (i.e. magnetite). Minerália recommended a low intensity magnetic pass first to remove the highly magnetic iron minerals and use the WHIMS later to recover wolframite;
- the WHIMS work was carried out on very coarse grain sizes. The wolframite mineralization might appear coarse-grained, but these crystals would contain waste material internally. Thus, the larger grain size makes for upgrading by gravity easier but then there is the need for a finer grind to liberate the waste before the final upgrade process, either by gravity, magnetics or a combination of both. It would be useful to do a Qemscan / MLA on the concentrates to determine the optimal liberation size.

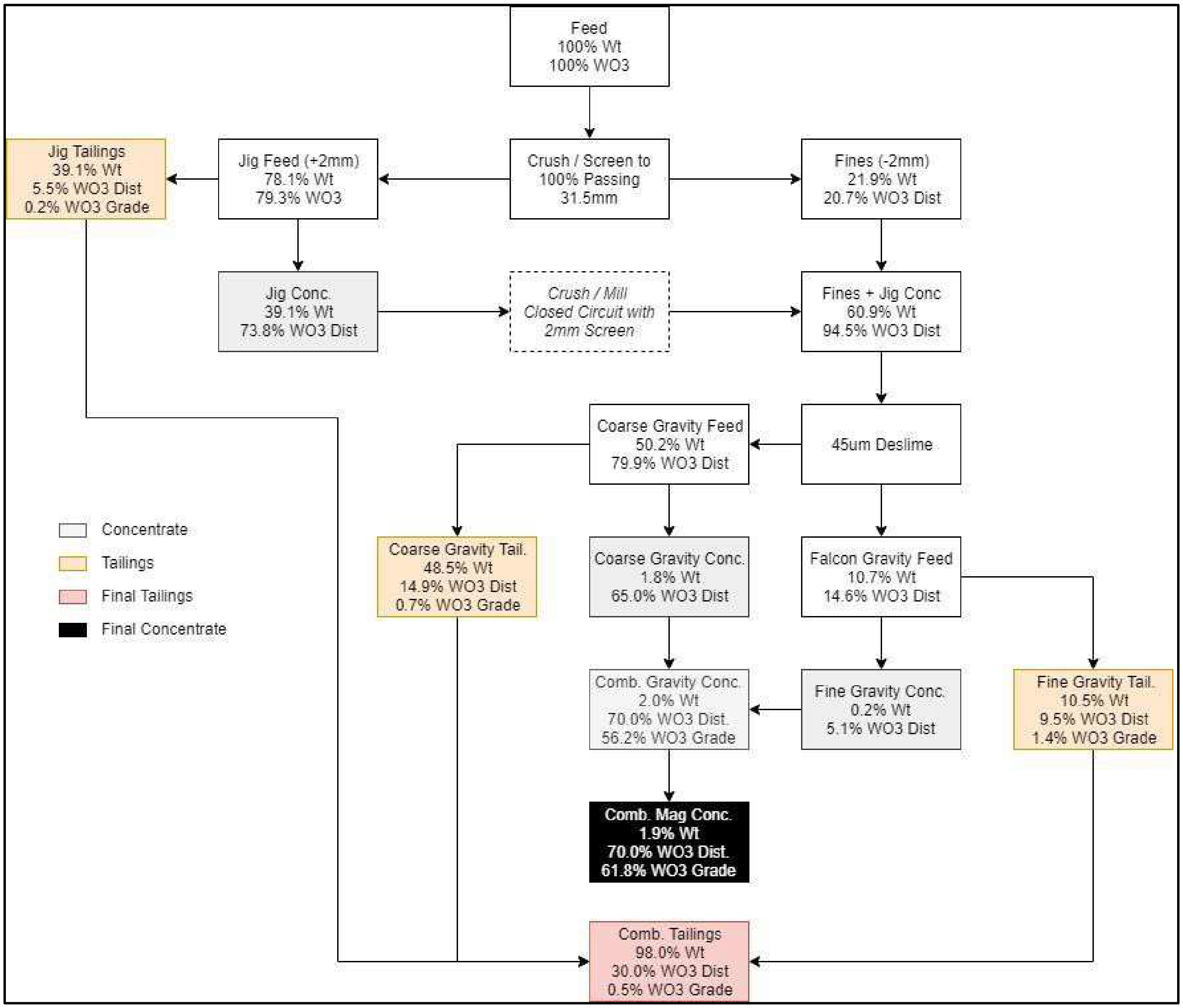


Figure 13.1: Mass Balance Block Flow Chart used in the Test Work (Minerália, 2022)

The 2019 metallurgical testing was conducted on weathered surface material which would conceivably represent a small component of any mine feed from any future operation.

13.2 2023-24 Metallurgical Testing by MinePro Solutions S.L. and Wardell Armstrong International Ltd.

In August 2023 the Company had Minerália retain MinePro Solutions S.L. and Wardell Armstrong International Ltd. for a second phase of metallurgical testing to study the recoveries of tungsten and associated minerals from mineralized Borralha SHB material, and to generate a sample of 'barren' tailings material for submission to an external laboratory for characterisation testing to support an application for a Mining Permit. Wardell Armstrong International Ltd. ('**WAI**') is part of Wardell

Armstrong LLP, an independent consultancy that provides specialised geological, mining, and processing expertise to the mineral industry from their offices in Truro, London at the old Wheal Jane mine site.

A 150 kg sample was collected from one-half of the core from the two 2023 diamond drill holes Bo_Met_01 and -02a and shipped to WAI, arriving on September 27th. After logging in the sample, WAI crushed the sample to 1 mm, homogenizing it and split it into representative sub-samples. One sub-sample was submitted for mineralogical analyses, and another was sent for head assay after which they completed the particle-size analysis. These steps were followed by the grind calibration test to select the right grinding time for getting a target product of d80 equal 250 microns. After that, they completed the sulphide flotation test work and the magnetic characterization on a separated subsample.

A flow sheet of the metallurgical testing is shown below as Figure 13.2

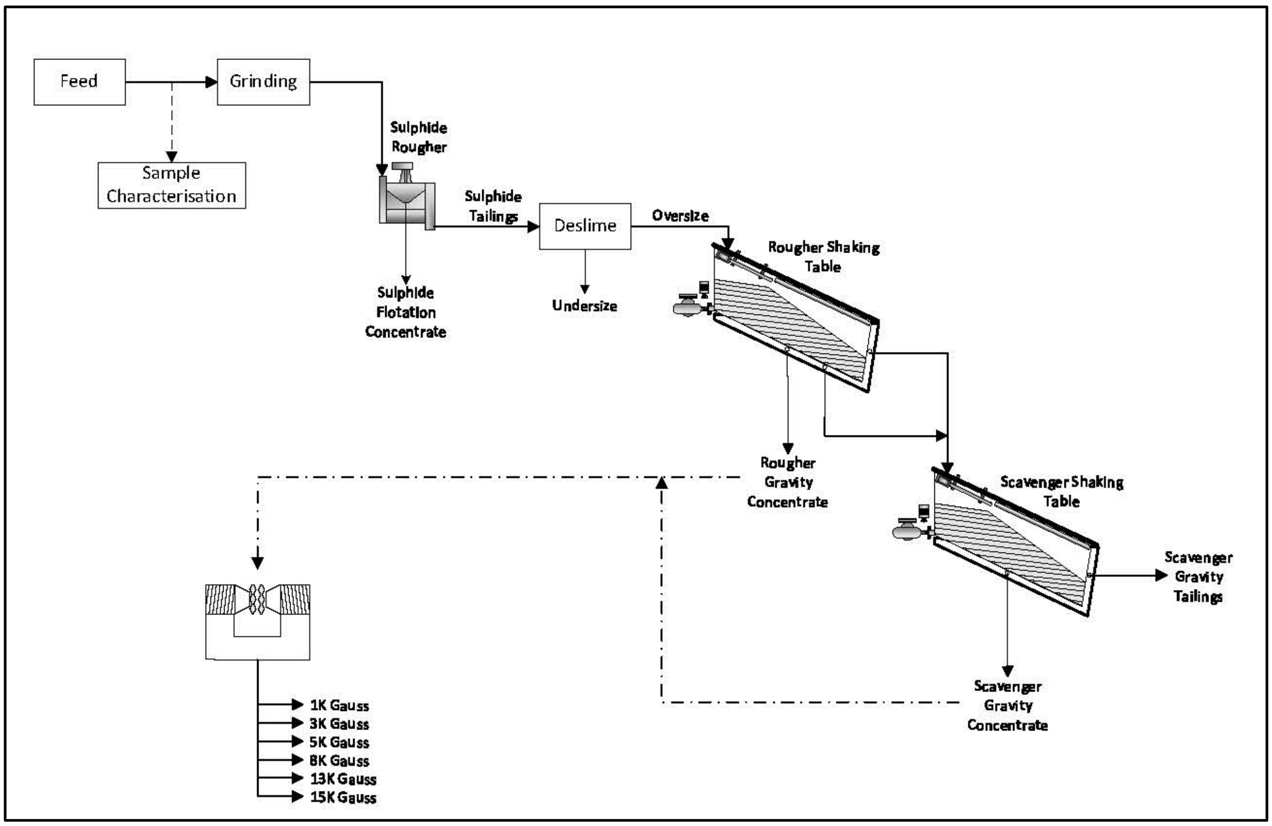


Figure 13.2: Flow Sheet of 2023 Metallurgical Test Work (Wardell Armstrong International, 2023)

The results of this metallurgical study were reported by Petrolab Ltd. on behalf of Wardell Armstrong International Ltd. (2023) as follows.

“1. The main target phases present are wolframite, ferberite, scheelite and cassiterite. Combined, W species provide 0.4 wt % in the reconstructed sample. Wolframite is the dominant species, usually followed by ferberite and scheelite. Cassiterite abundance reaches an elevated peak of 0.5 wt % in the +53 µm fraction. Chalcopyrite reaches a height of 0.6 wt % in the +100 µm fraction, falling to 0.2 wt % in the coarsest fraction.

2. Gangue mineralogy is dominated by quartz and mica and clay group, contributing 85-88 wt % across the size fractions. Plagioclase is reliably a minor component, at 6-8 wt % across the size fractions, while K-feldspar contributes 1.6-2.8 wt % across the size fractions.

3. Pyrite is the dominant sulphide, with pyrite and the other sulphides of sphalerite, bismuthinite and molybdenite showing a general trend of higher abundance in the finer fractions. Traces of heavy metal minerals are also seen in the finer fractions, namely uraninite and columbite (also containing tantalite). Phosphate also contains traces of Th hosting brockite.

4. Four elements were reported for deportment, Cu, Fe, S and W. No reliable Ag was recorded in the sample. Cu is exclusively hosted by chalcopyrite. Cu grade is low across the samples, at 0.1-0.2 % Cu.

5. Fe is principally hosted by the mica and clay group, at 57-67 % of available Fe across the size fractions. Pyrite also hosts major amounts of Fe, at 21-32 % of available Fe, while chalcopyrite hosted Fe remains at 5 % or below. Iron oxide hosted Fe generally increases from 2.8 % to 8.3 % of available Fe, between the coarsest and finest fraction respectively. Further traces are notably present in the Fe bearing W species. Total Fe grade is fairly consistent across the size fractions, at 3.1-4.4 % Fe, reaching a maximum in the finest fraction.

6. S is principally hosted in pyrite, with >82 % of available S in each fraction. The remainder is hosted by other sulphides, namely chalcopyrite, sphalerite, molybdenite and bismuthinite. Total S grade reaches a maximum in the finest fraction, at 1.6 % S, driven by pyrite abundance.

7. W is hosted by wolframite, ferberite and scheelite. Wolframite is marginally the dominant species, with >90 % of available W in the coarsest fraction and 50-60 % of available W in the +300 µm and +180 µm fractions. W hosted in scheelite generally increases with fining fraction, although it does show a peak of 65.5 % of available W in the +100 µm fraction. Ferberite hosts its highest proportion of W in the +300 µm fraction, at 37.8 % of available W. From the provided chemical assay the W grade increases slightly into the fines.

8. Wolframite is the coarsest target phase, with a Dx20 and Dx50 above the overall particle size distribution (PSD); however, the Dx80 is marginally below, at 846 µm and 885 µm respectively. The remaining phases of scheelite, ferberite and cassiterite are finer than the PSD. Cassiterite grain size is concentrated between 75-212 µm.

9. Wolframite displays variable liberation across the size fractions. Greatest liberation is seen in the 53 µm and +180 µm fractions, at 80-86 % free and liberated grains. The 600-900 µm particle size class hosts ~55 % of the mineral mass and displays 47 % free and liberated grains. Ferberite exhibits poor liberation throughout the size fractions. From the theoretical mineral recovery, just over 85 % of the mineral mass is present between 425-900 µm, where no free or liberated grains are recorded. Scheelite indicates moderate to good liberation, with the +180 µm and +53 µm fractions producing 99-100 % free and liberated grains. From the theoretical mineral-recovery, the 600-900 µm particle size class hosts ~65 % of the mineral mass and displays 66 % liberated grains, with the remainder locked. Cassiterite is completely locked in the coarsest three fractions. However, occurrences were generally more prominent in the finer three size fractions and in this liberation was excellent with 93-100 % free of liberated grains. The mineral mass of cassiterite is concentrated, with 70 % of the mineral mass between 75-300 µm.

10. The W species are strongly associated with each other and phosphate. Cassiterite shows a higher-than-expected association with the other heavy minerals, namely columbite and bismuthinite. Association with quartz is weak, given its high abundance. Notably, no association is observed between the W species, and cassiterite."

It is the opinion of the author and Minerália (2020) that the results of the 2019 and 2023-24 metallurgical studies have identified the possibilities of a marketable tungsten concentrate plus individual mineral concentrates containing tin, copper, silver and possibly molybdenum.

It is the author's opinion that the Minerália personnel exercised appropriate care and attention collecting, handling and securely shipping both 2019 and 2023 metallurgical samples, and that the appropriate care and attention were carried out with the two metallurgical studies according to industry's best practice standards. Further detailed metallurgical test work will be required to determine the contents and grades of future concentrates.

14.0 MINERAL RESOURCE ESTIMATE

14.1 Exploration Data Analysis

The Santa Helena Breccia body has now been tested with nine surface trenches, 23 diamond and RC drill holes. This work was carried out over a 300-metre strike length and to depths of over 300 metres. The analytical results from samples collected from 23 drill holes and nine trenches since 2013 were used in the mineral resource estimation. The two drillholes Bo8 and Bo11 were excluded as they intersected old artisanal workings at shallow depths resulting in poor core recovery, Bo_04 was excluded because is was drilled parallel to the southern SHB contact with very poor recovery (i.e. 70%). and diamond drill hole Bo_Met_02 was not completed to its proposed length since it unexpectedly intersected an old underground working resulting in the re-drilling of Bo_Met_02a. Sampling information varies from 20 to over 100 metres between the various trenches and drill holes. The estimation was conducted using the WGS84 coordinate reference system ('**CRS**') in UTM Zone 29N.

14.2 Mineral Resource Estimation Procedures

After the exploration database, including: collar locations, downhole surveys, geotechnical data, and certified assay results, have been thoroughly checked the mineral resources of the SHB were estimated in the following sequence.

- geological interpretation,
- determination and modelling of breccia domain,
- compositing and outlier restrictions,
- statistics within domain,
- variography,
- definition of resource parameters and block model,
- grade interpolation and resource definition, and
- mineral resource classification

14.3 Geological Interpretation and Modelling

The surface shape and dimensions of the SHB are based upon detailed surface geological mapping, diamond and RC drilling, and +12- to -60-level plans from the old mine where some cross-cut underground workings intersected the contact of the SHB with the country rocks. Drilling information and mapping of old mine workings have shown that the breccia body has a shape of a flattened ellipsoid with north-south strike and westward dip. The southern and northern contacts are inclined northward at -50° to near vertical. The eastern and western breccia contacts are generally inclined from -60° to -80° westward. In the northern part of the breccia body the eastern geological contact appears to be inclined -60° to -70° eastward. Approximately 50% or more of the SHB is open for exploration both along strike and to depth. Domain wireframes were designed by semi-implicit modelling and explicit constraining using geological mining software Leapfrog Edge.

The Venise Breccia body, situated north of the Borralha River, has been excluded from this mineral resource estimation since it has not yet been explored in any detail.

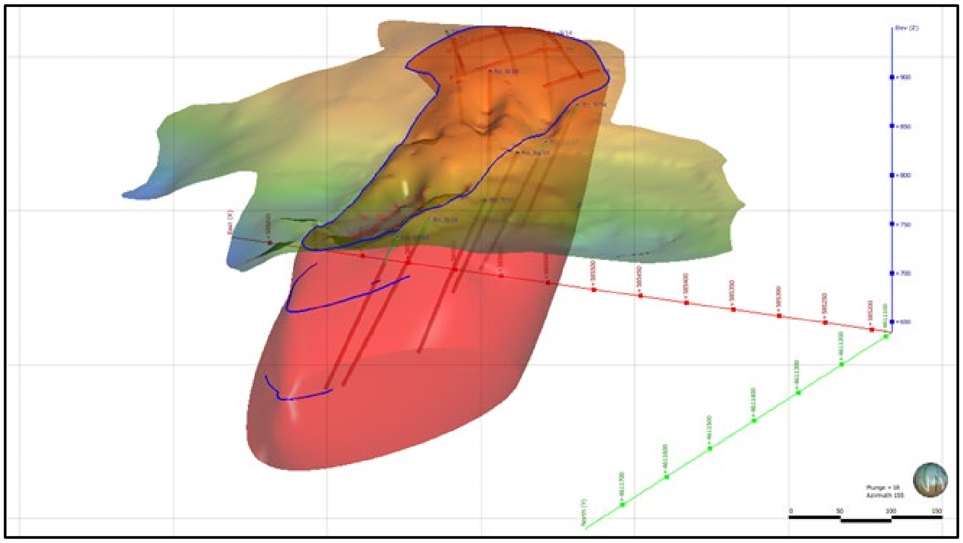


Figure 14.1: 2017 Three-Dimensional View of the SHB Body Looking South-Southeastwardly (after Mineralia, 2020)

Note: 2017 Drill Holes shown in dark Red
Breccia body shown in Red
Indicated contact of Breecia Body shown in Blue

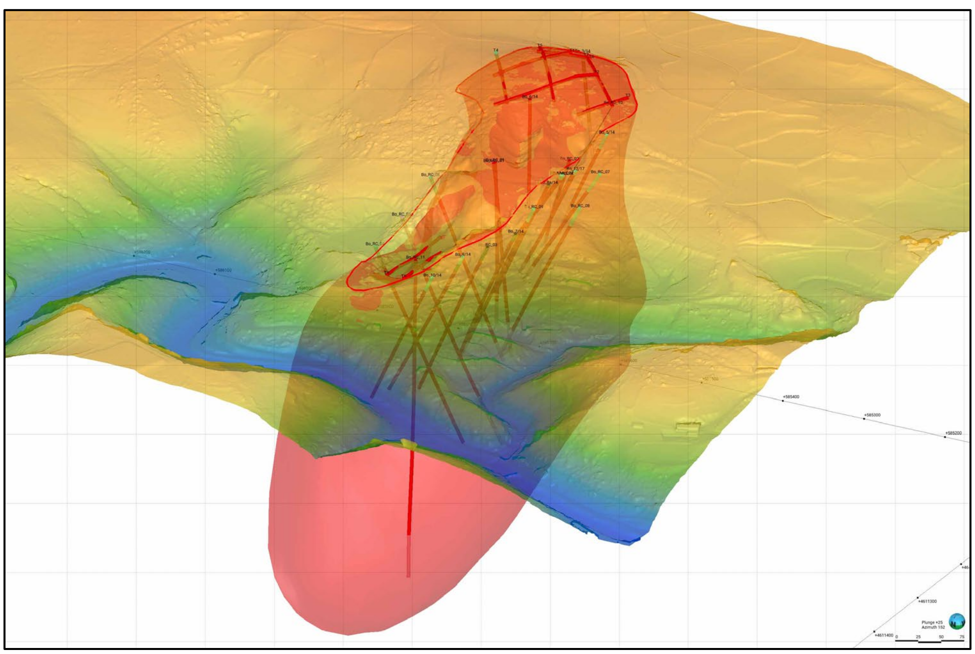


Figure 14.2: 2024 Three-Dimensional View of the SHB Body Looking South-Southeastwardly (after Mineralia, 2024)

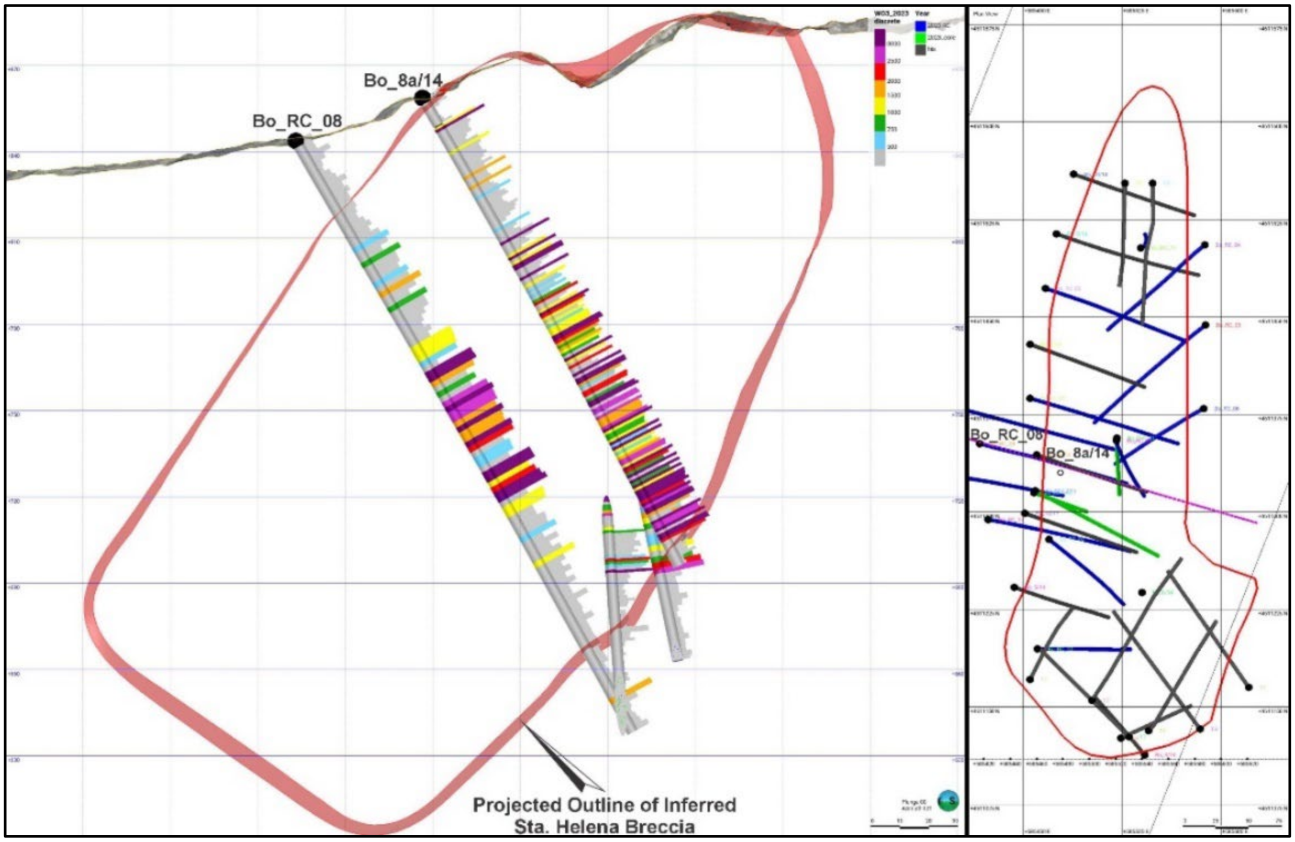


Figure 14.3: Cross-Section of Drill Holes Bo_8a/14 and Bo_RC_08 Looking Southwest (after Mineralia, 2024)

14.4 Grade Restrictions, Compositing, Statistics and Variography

Past exploration results have shown that the distribution of tungsten mineralization is quite 'nuggety' requiring detailed sampling, although combining recent 1-metre samples into 2-metre composite samples tends to reduce the grade variance. The mineralization occurs as very fine-grained crystals to coarse-grained patches that appear to be randomly distributed within the SHB.

Earlier surface trench samples were collected at 5-metre intervals while drill core samples were sampled at 1-metre intervals, always respecting lithologic boundaries. The mean sample length from trenches and early borehole cores was reported by Mineralia (2020) to be 1.43 m. Recent 2023-24 diamond drill metallurgical samples were shipped directly to Wardell Armstrong International Ltd. for the test work but the RC sampling was carried out at 2-metre intervals while respecting all geological boundaries. For the purposes of this mineral resource estimation, until the means of possible extraction by an open pit, underground operation, or a combination of both, the sample assay intervals have been composited into 2-metre intervals.

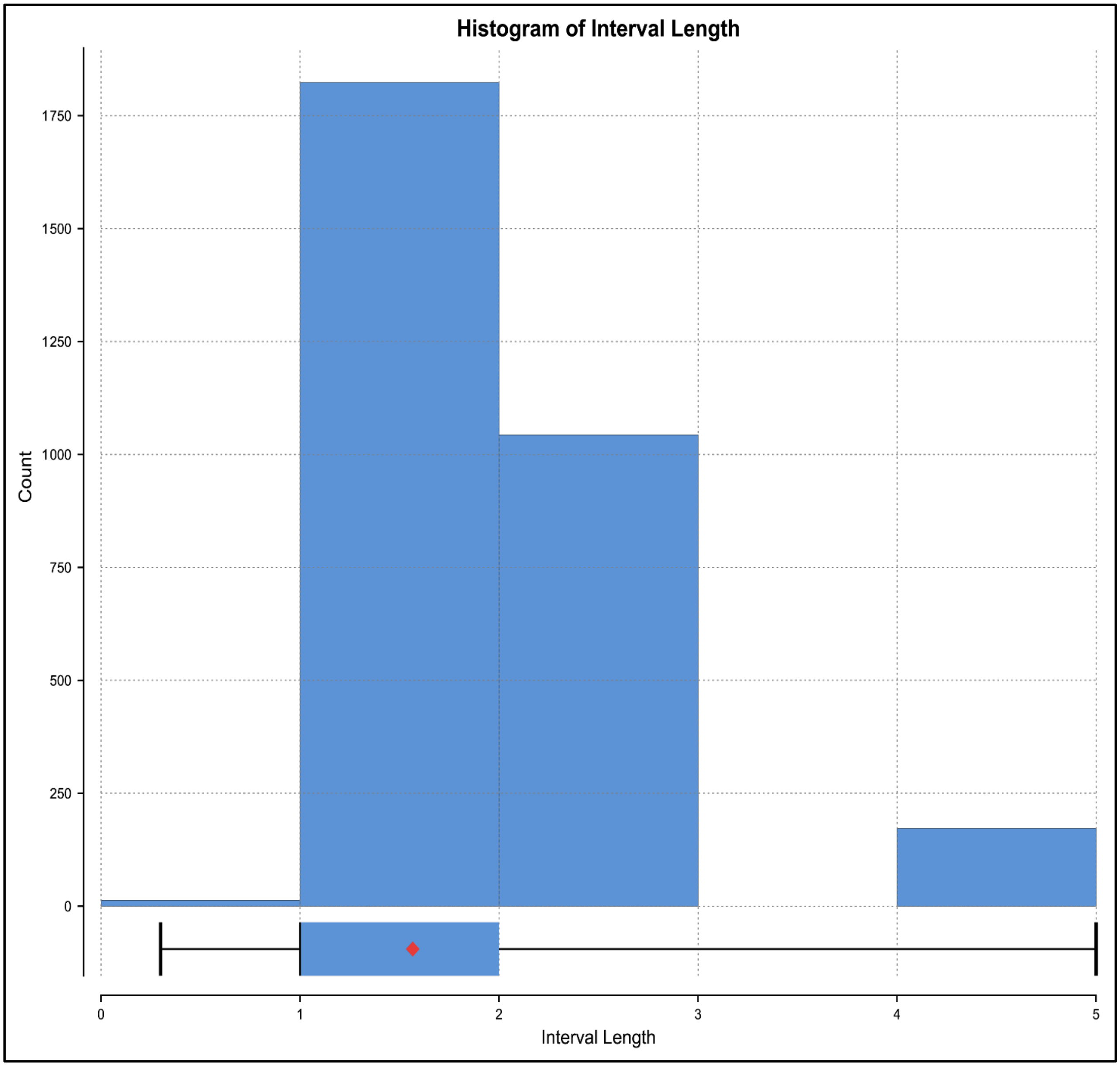


Figure 14.4: Histogram of Sample Interval Lengths

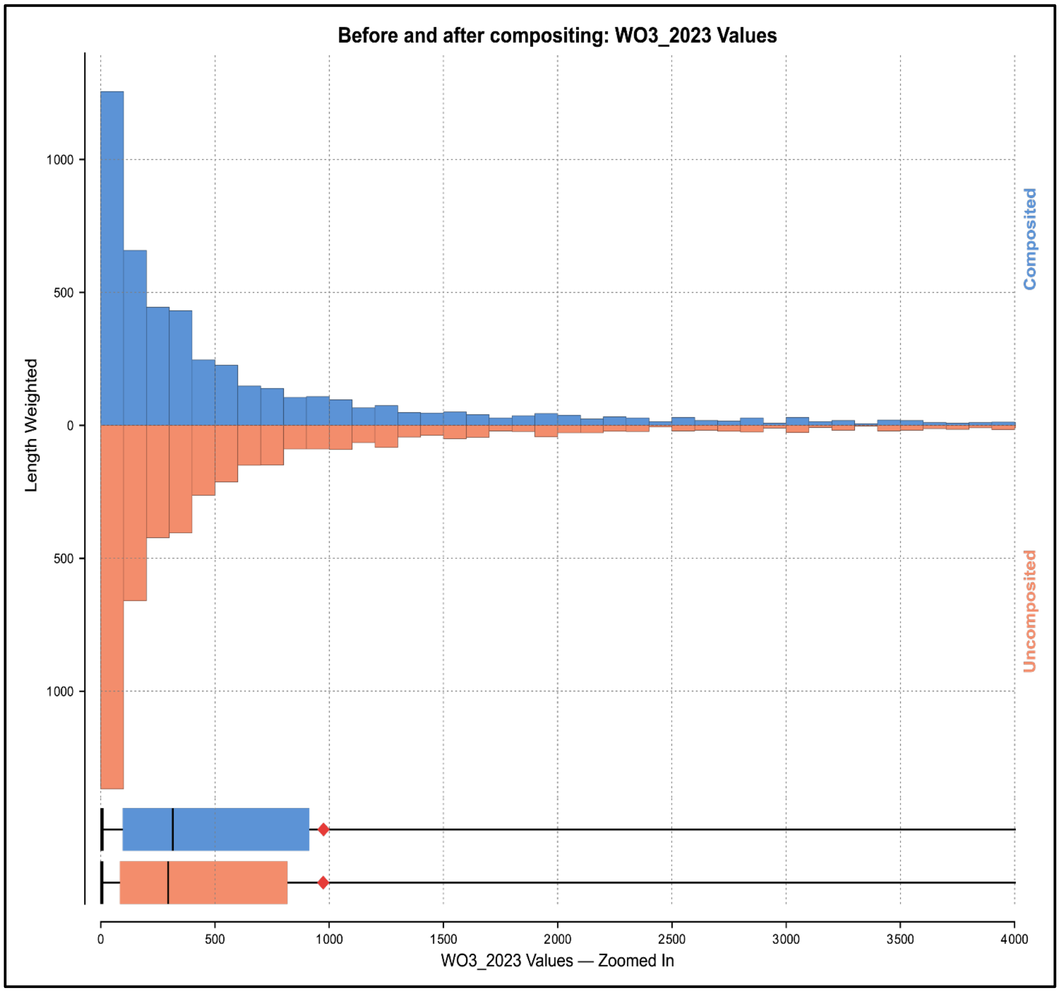


Figure 14.5: Histogram of Tungsten Values Before and After Compositing

	Composited	Uncomposited
Count	2,444.00	2,969.00
Length	4,894.80	4,876.30
Mean	974.99	973.75
SD	2,579.57	2,832.67
CV	2.65	2.91
Variance	6,654,160.19	8,024,016.51
Minimum	5.30	4.79
Q1	95.84	83.86
Q2	315.25	295.07
Q3	912.96	817.13
Maximum	57,879.90	66,580.80

Table 14.1 – Composited vs Uncomposited Tungsten Values

It was decided to restrict the very high grade tungsten values, due to their nuggety distirbution, by doing an 'outlier restriction' capping instead of a classic grade capping procedure. This restriction was made on the values larger than 1.8% or 18,000 ppm WO_3 where the original value was applied for a search radius up to 30% between the distance from the outlier and another composite assay value. Above 30% of the distance of the search radius the 18,000 ppm cap is applied. Thus, the values greater than 18,000 ppm were capped to 18,000 ppm (1.8% WO3).

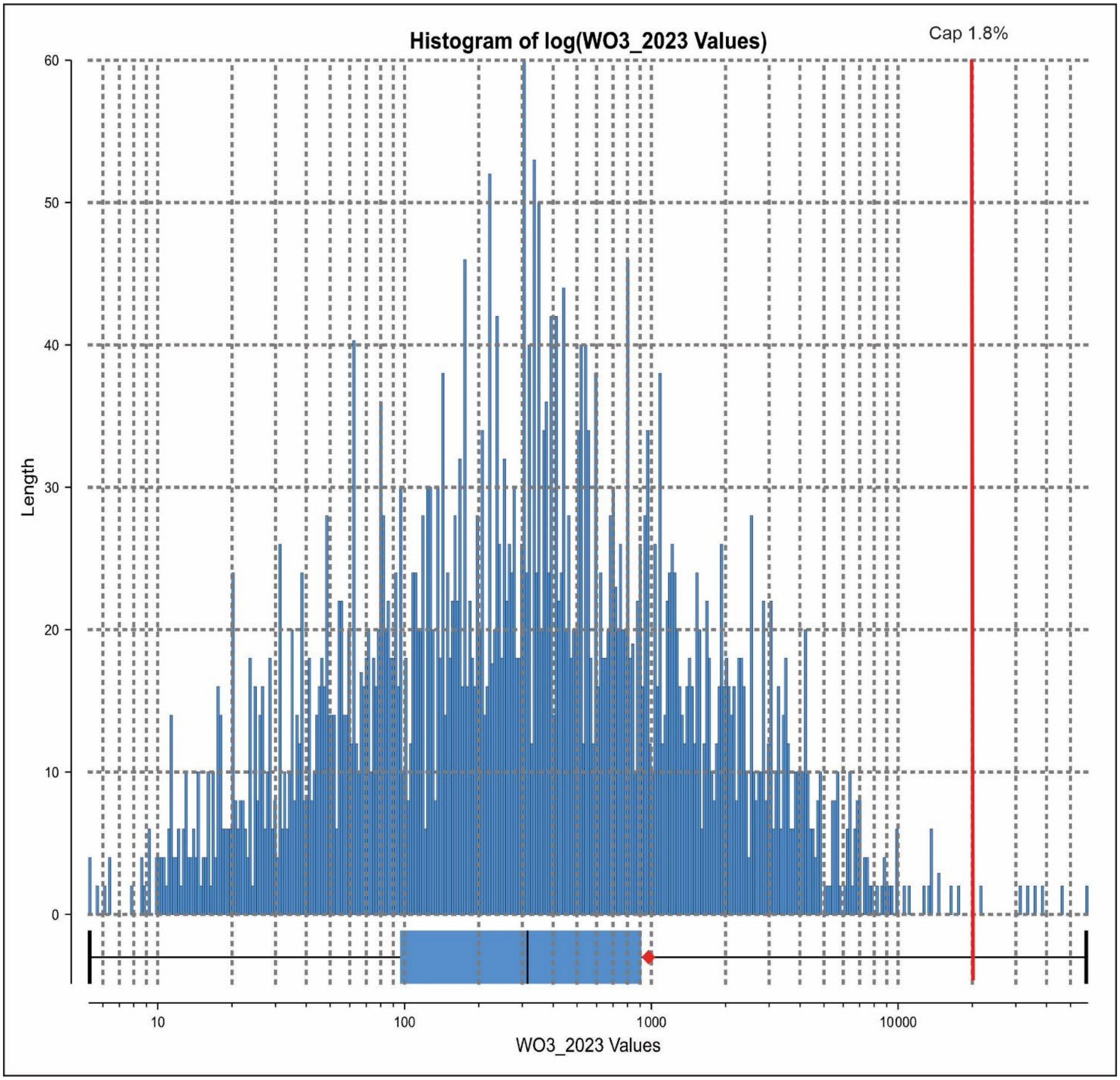


Figure 14.6: Histogram Log Plot of Length vs WO_3 ppm Values

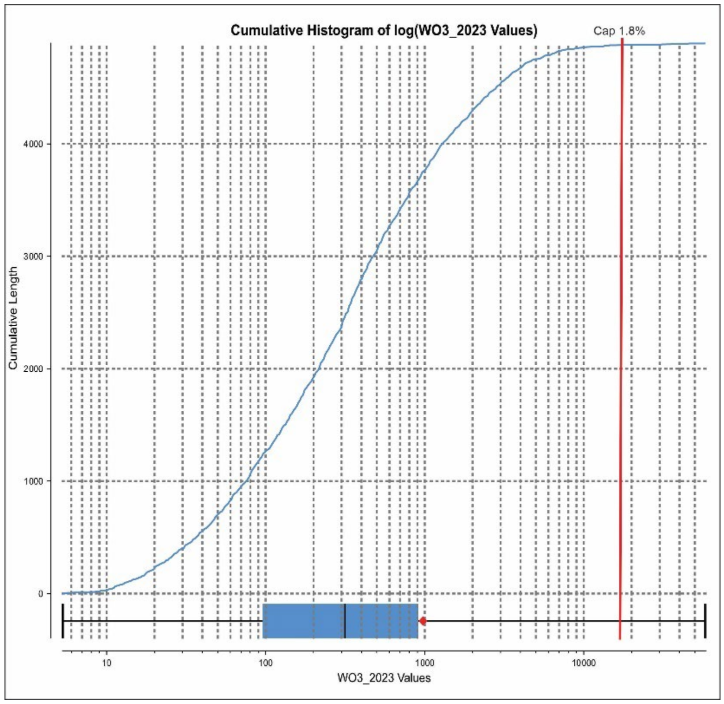


Figure 14.7: Cumulative Histogram Plot of Cumulative Length vs WO_3 ppm Values

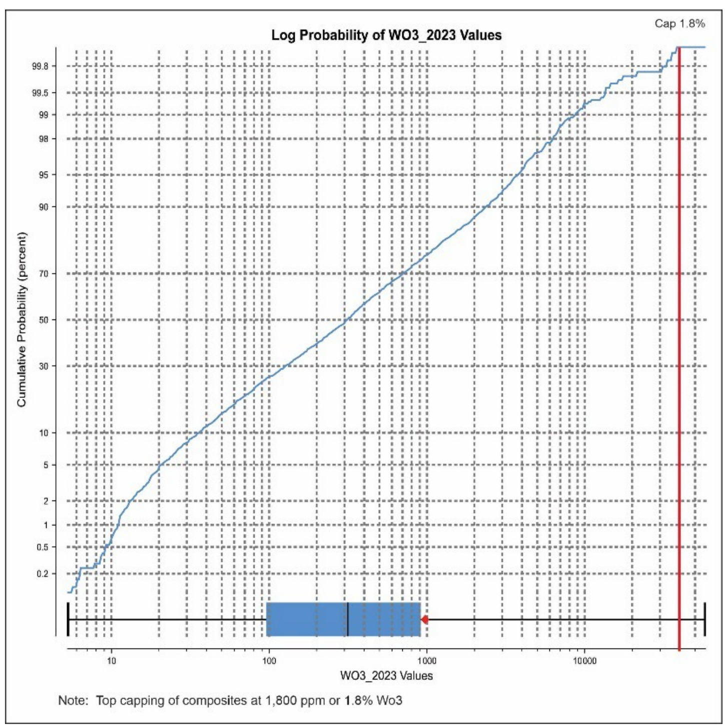


Figure 14.8: Log Probability Plot of Cumulative Probability % vs WO_3 ppm

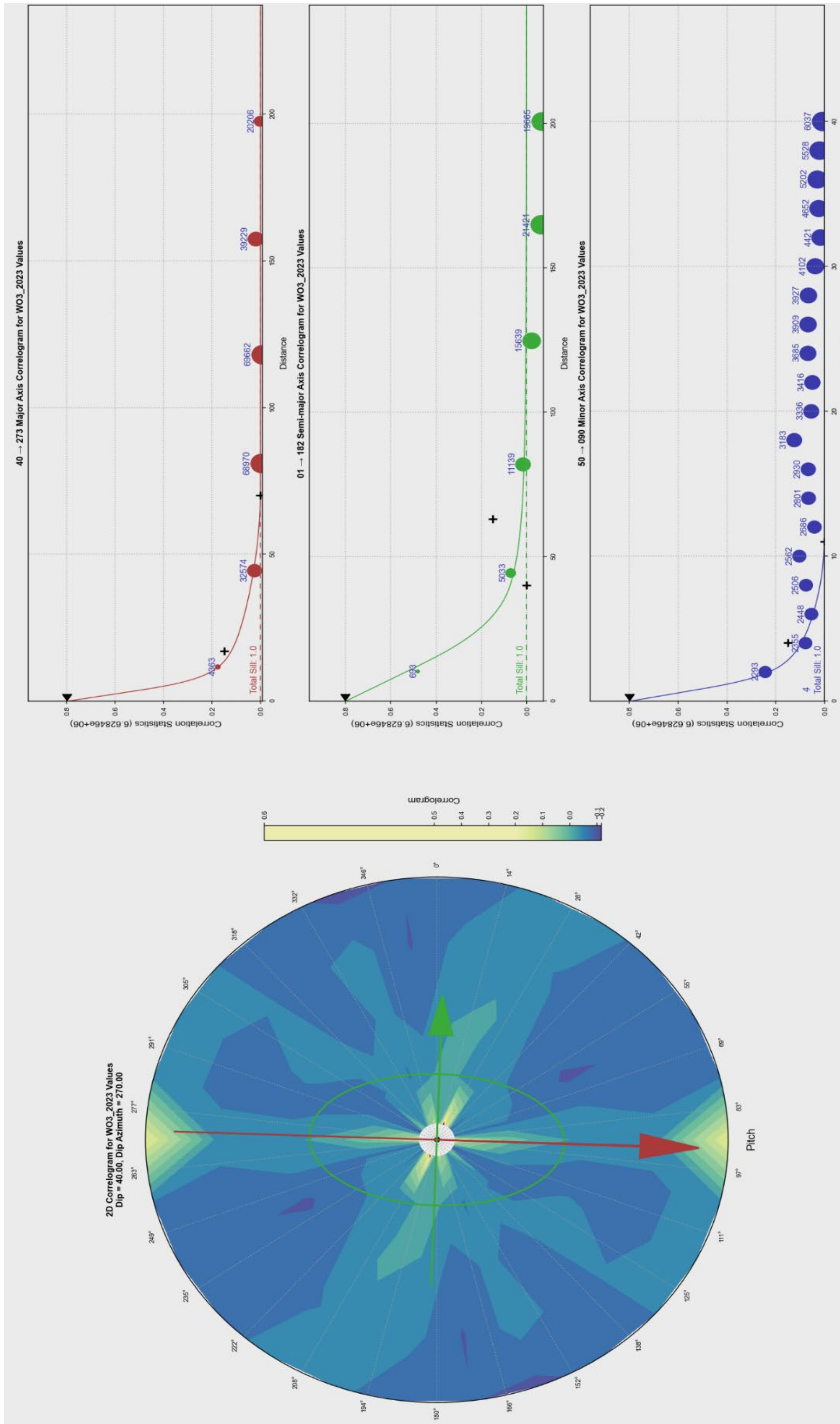


Figure 14.9: 2D Variogram Plot for WO_3 ppm Values

The SHB is a large subvertical-dipping body that is currently not fully tested laterally and vertically. The quality of the sampling configuration refers to the accuracy of the spatial analysis. The variography results on the minor axis are reasonable due to the lack of current lateral, on-section drilling information. However, variography results for the major and semi-major axes are considered by the author to be reliable for the purpose of this technical report (see Figures 14.8).

14.5 Definition of Block Size

The block size was based upon drilling spacing. In conjunction with the mining team reviewing the project, it was decided for the purposes of this initial mineral resource estimation that a 5- x 10- x 5-metre block size would be used with sub-blocking after 2 passes measuring 2.5- x 5- x 2.5-metres sub-blocks) at the limits of the geological information and topography. All blocks strike north-south, and, given the sub-vertical morphlogy of the deposit, used a N-S / 90º block distribution (see Table 14.2).

Number of parent blocks:	74 × 78 × 93 = 536,796
Sub-blocks per parent:	2 × 2 × 2 = 8
Base point:	585330, 4611000, 940
Parent block size:	5, 10, 5
Minimum sub-block size:	2.5, 5, 2.5
Leapfrog Rotation:	
Azimuth:	0°
Dip:	0°
Pitch:	0°
Boundary size:	370, 780, 465

Table 14.2 – Mineral Resource Block Model Definition

14.6 Bulk Density

Certified specific gravity measurements were collected by ALS Global Laboratories during their analytical work. An ID3 interpolation was used to populate most of the blocks with known density measurements. The unpopulated blocks used the average calculated density value for the Breccia domain of 2.783 ton/m^3.

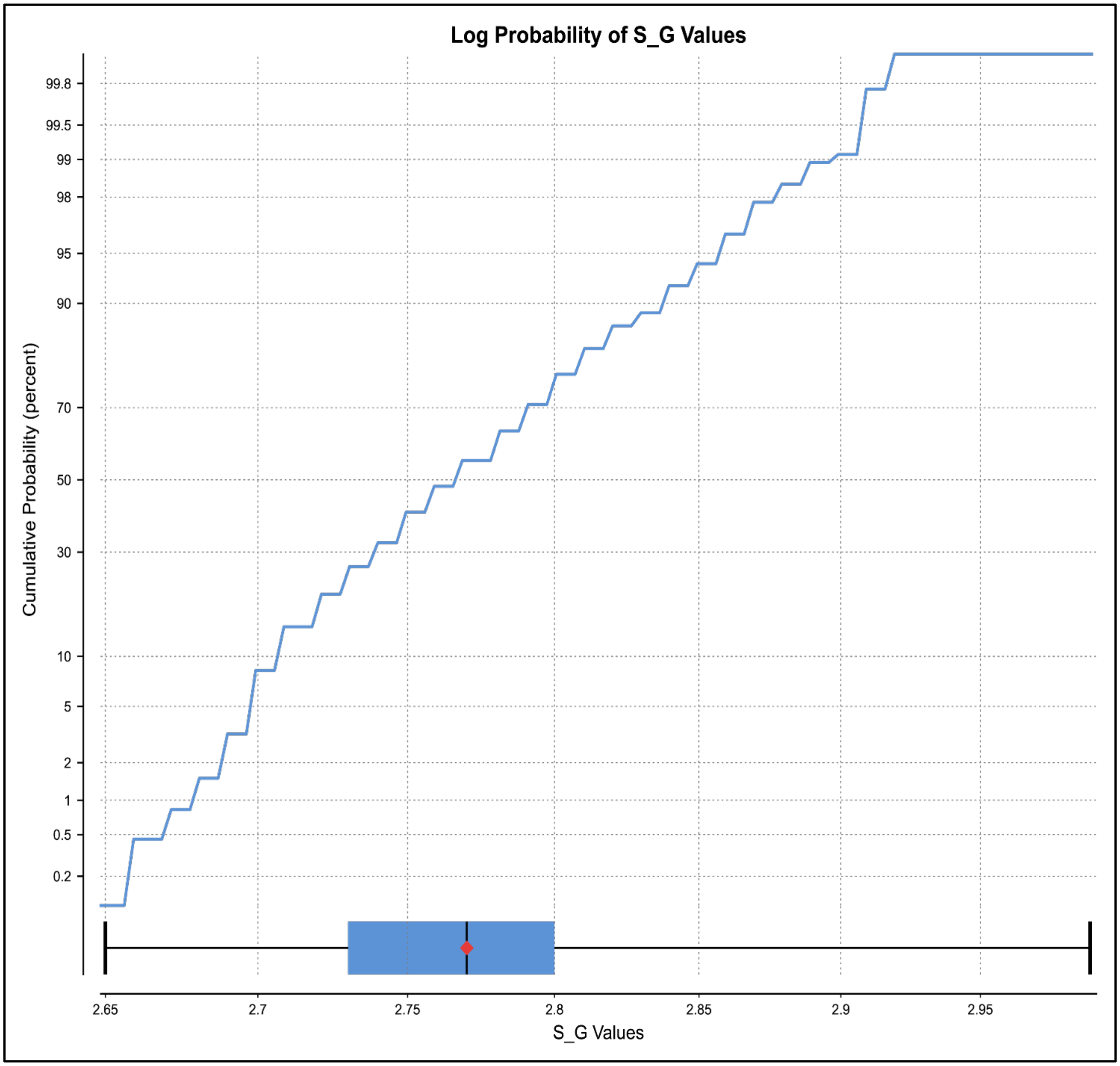


Figure 14.10: Log Probability Plot of Specific Gravity Values

	Weighted Value
Count	818.000
Length	1,321.700
Mean	2.770
SD	0.049
CV	0.018
Variance	0.002

	Weighted Value
Minimum	2.650
Q1	2.730
Q2	2.770
Q3	2.800
Maximum	2.990

14.7 Search and Range Parameters

The search ellipse configurations were defined using using variable radial plots interpretations and variography adjustments. A three-pass estimation procedure was used with two passes for possible indicated resources and one pass for possible inferred resources. For all passes the maximum number of samples per drill hole was set to control the number of drill holes in the interpolation. The search parameters adopted for the grade interpolation are summarized in Table 14.3.

General							P0.5 (Indicated)						
							50%	50%	50%				
Variogram Name	Major	Semi-major	Minor	Dip	Dip Az.	Pitch	Major	Semi	Minor	MinS	MaxS	S DH	minDH
Kr, WO3 Breccia V4	70	40	11	40	270	92	35	20	5.5	8	10	2	4
Kr, Sn Breccia V2	110	68	12	40	270	100	55	34	6	8	10	2	4
Kr, Cu Breccia V2	100	60	16	40	270	132	50	30	8	8	10	2	4

General	P1 (Indicated)						
	100%	100%	100%				
Variogram Name	Major	Semi	Minor	MinS	MaxS	S DH	minDH
Kr, WO3 Breccia V4	70	40	11	6	8	2	3
Kr, Sn Breccia V2	110	68	12	6	8	2	3
Kr, Cu Breccia V2	100	60	16	6	8	2	3

General	P2 (inferred)						
	200%	200%	200%				
Variogram Name	Major	Semi	Minor	MinS	MaxS	S DH	minDH
Kr, WO3 Breccia V4	140	80	22	4	6	2	2
Kr, Sn Breccia V2	220	136	24	4	6	2	2
Kr, Cu Breccia V2	200	120	32	4	6	2	2

General	P3 (inferred)						
	300%	300%	300%				
Variogram Name	Major	Semi	Minor	MinS	MaxS	S DH	minDH
Kr, WO3 Breccia V4							
Kr, Sn Breccia V2	330	36	36	4	6	2	2
Kr, Cu Breccia V2	300	48	48	4	6	2	2

Table 14.3 – Summary of Search Parameters

14.8 Grade Interpolation and Validation

Grade interpolation of the domains was conducted using Ordinary Kriging ('**OK**'). The generated OK results were then compared to those obtained with ID3 and Nearest Neighbour ('**NN**') methods of interpolation using the same parameters (see Table 14.4).

	ID3	OK	NN
Block Count	92,776.000	92,776.000	111,530.000
Volume (m3)	16,216,531.250	16,216,531.250	19,669,312.500
Mean (WO3 ppm)	834.818	859.365	858.223
SD	1,327.767	1,035.075	2,841.690
CV	1.590	1.204	3.311
Variance	1,762,963.981	1,071,379.855	8,075,203.365
Minimum	7.760	13.775	5.296
Q1	193.992	245.240	67.085
Q2	428.004	512.433	259.136
Q3	1,019.697	1,125.423	769.210
Maximum	48,977.921	25,656.831	57,879.900

Table 14.4: Statistical Comparison Between the ID3, OK and NN Interpolations

The block models and the drill hole intercepts were then reviewed interactively in three-dimensions to ensure that the grade blocks were honouring the drill hole data. The result was a satisfactory agreement between the block grades and drill intercepts of the domains. This agreement is shown on the following Figures 14.10 and 14.11.

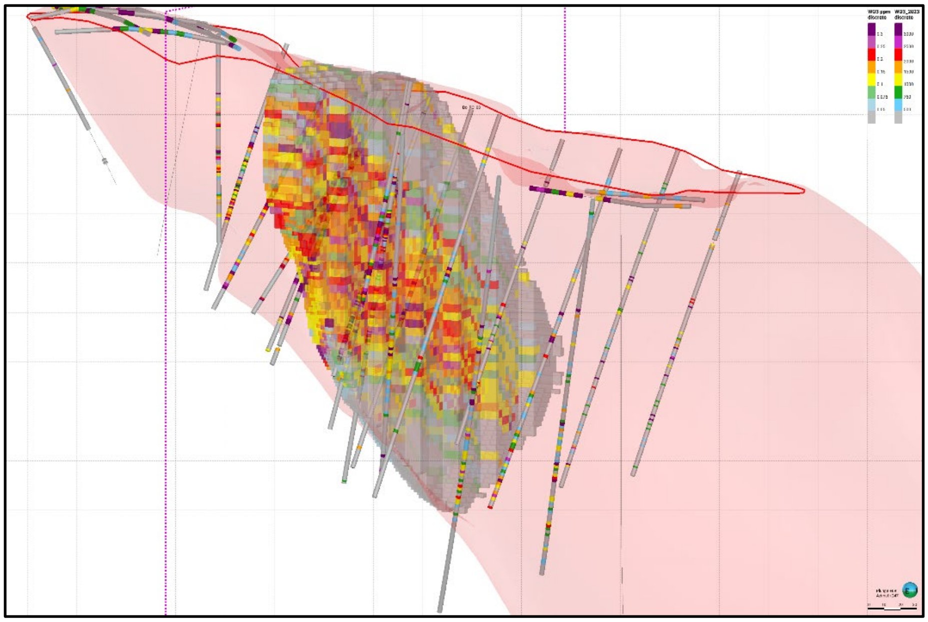


Figure 14.11: Long-Section of Breccia Domain Comparison of Blocks and Composites Grade Looking Eastward

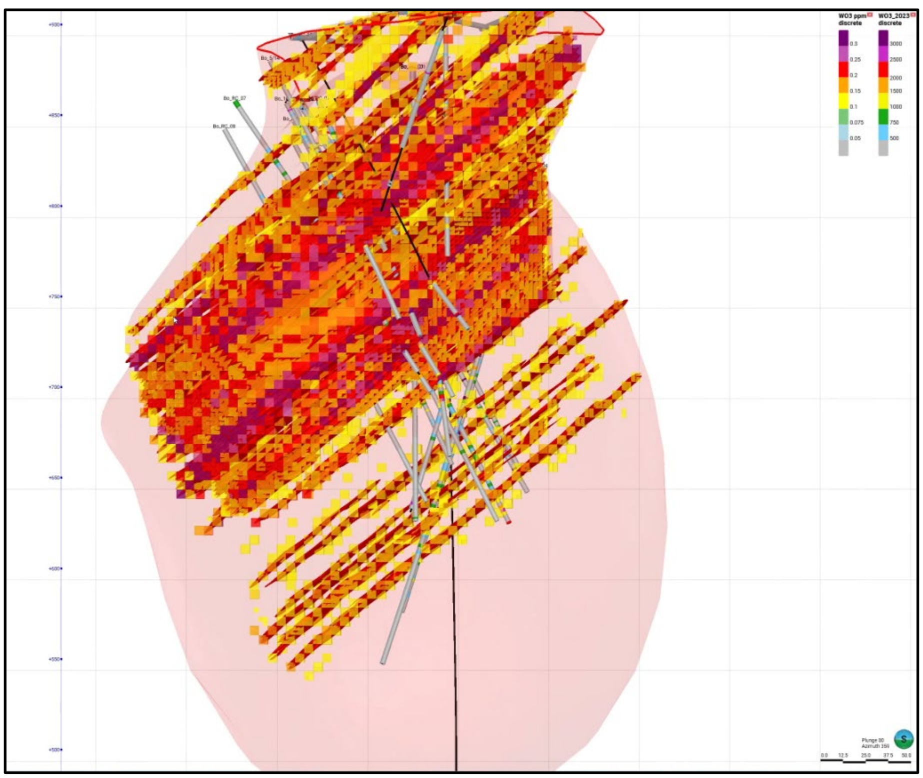
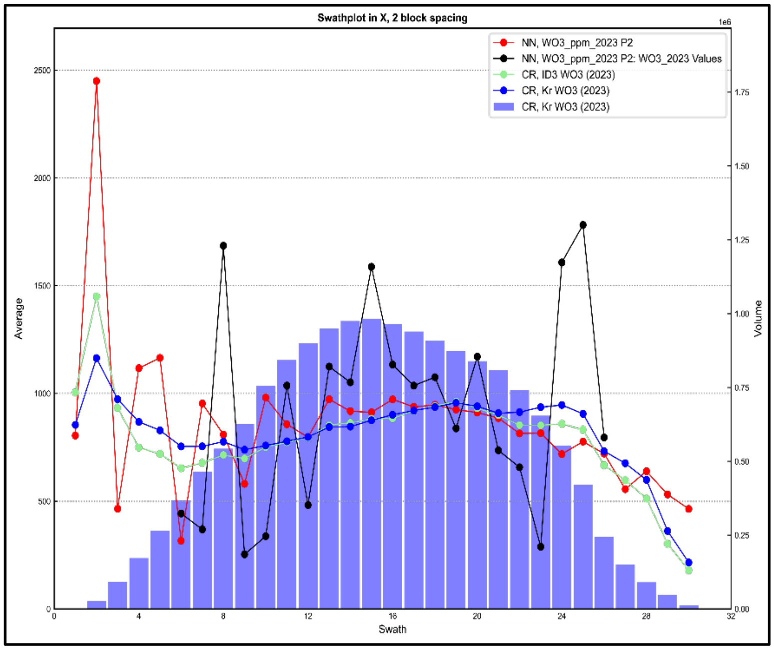


Figure 14.12: Cross-Section Looking Northward Comparing Blocks and the Volume-Grade Shells (>0.1% WO_3)

Swath plots were also used in the validation process. They showed the nuggety grade distribution of the tungsten mineralization being smoothed in the grade blocks.



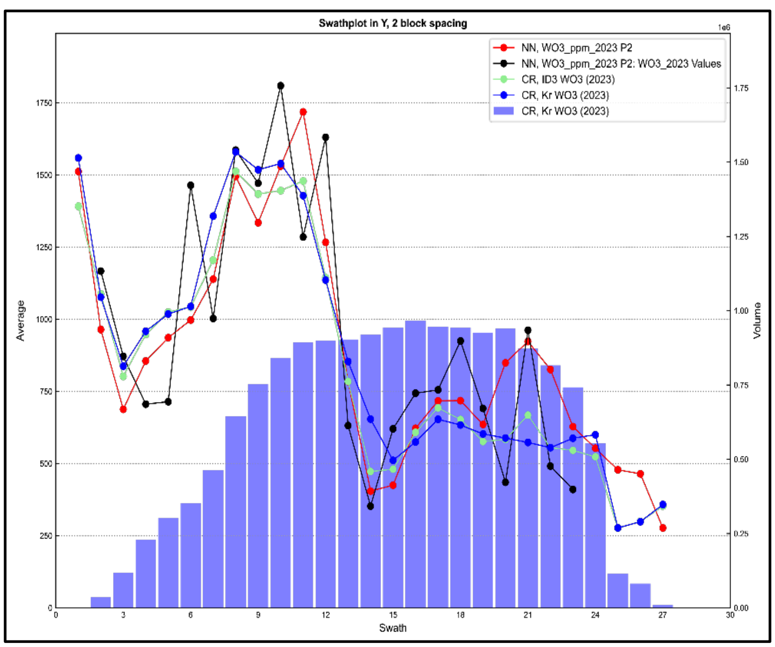


Figure 14.13: X-Axis and Y-Axis WO_3 Swath Plots

14.9 Mineral Resource Estimate

The following tables comprising Table 14.5 provide detailed resource estimates at various cut-off grades for WO_3%, effective March 25, 2024. The Reasonable Prospects for Eventual Economic Extraction (‘**RPEEE**’) is defined by a 0.1% WO_3 Grade-Volume shell with less than 5,000 m^3 volumes excluded.

Cut-off: WO3 % ≥ 0.00%
Volume filter: None

Domain	Category	Density	Mass	WO3 %	*Average Value* Sn ppm	Cu ppm	Ag ppm
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.76**	**3.4**	**0.07**	**66**	**324**	**2.7**
	Inferred	2.76	4.9	0.07	64	317	2.4
Fresh	**Indicated**	**2.78**	**10.9**	**0.12**	**86**	**612**	**4.1**
	Inferred	2.77	25.6	0.08	72	481	3.3

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.05%
Filter: None

Domain	Category	Density	Mass	WO3 %	*Average Value* Sn ppm	Cu ppm	Ag ppm
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.76**	**1.4**	**0.12**	**73**	**372**	**2.7**
	Inferred	2.76	2.0	0.15	77	382	2.9
Fresh	**Indicated**	**2.79**	**7.1**	**0.16**	**94**	**718**	**4.6**
	Inferred	2.77	12.4	0.14	79	586	3.9

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.075%
Filter: None

Domain	Category	Density	Mass	WO3 %	*Average Value* Sn ppm	Cu ppm	Ag ppm
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.76**	**0.9**	**0.15**	**74**	**378**	**2.6**
	Inferred	2.76	1.5	0.18	79	399	2.9
Fresh	**Indicated**	**2.79**	**5.7**	**0.19**	**97**	**764**	**4.9**
	Inferred	2.77	9.0	0.16	81	635	4.3

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.10%
Volume filter: Inside (0.1%WO3 COG) (Entire block)

Domain	Category	Density	Mass	*Average Value*			
				WO3 %	**Sn ppm**	**Cu ppm**	**Ag ppm**
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.77**	**0.5**	**0.19**	**75**	**387**	**2.4**
	Inferred	2.77	1.0	0.21	81	415	3.0
Fresh	**Indicated**	**2.80**	**4.4**	**0.22**	**99**	**809**	**5.1**
	Inferred	2.77	6.0	0.20	83	681	4.7

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.11%
Volume filter: Inside (0.1%WO3 COG) (Entire block)

Domain	Category	Density	Mass	*Average Value*			
				WO3 %	**Sn ppm**	**Cu ppm**	**Ag ppm**
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.77**	**0.5**	**0.20**	**76**	**388**	**2.5**
	Inferred	2.76	1.0	0.22	81	419	3.0
Fresh	**Indicated**	**2.80**	**4.1**	**0.22**	**100**	**817**	**5.2**
	Inferred	2.77	5.4	0.21	83	679	4.7

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.12%
Volume filter: Inside (0.1%WO3 COG) (Entire block)

Domain	Category	Density	Mass	*Average Value*			
				WO3 %	**Sn ppm**	**Cu ppm**	**Ag ppm**
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.77**	**0.4**	**0.21**	**77**	**398**	**2.6**
	Inferred	2.77	0.9	0.23	82	434	3.1
Fresh	**Indicated**	**2.80**	**3.8**	**0.23**	**100**	**826**	**5.2**
	Inferred	**2.77**	4.8	0.22	83	681	4.8

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.13%
Volume filter: Inside (0.1%WO3 COG) (Entire block)

Domain	Category	Density	Mass	WO3 %	*Average Value* Sn ppm	Cu ppm	Ag ppm
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.77**	**0.4**	**0.23**	**77**	**405**	**2.6**
	Inferred	2.77	0.8	0.25	84	443	3.3
Fresh	**Indicated**	**2.80**	**3.5**	**0.24**	**101**	**835**	**5.3**
	Inferred	2.77	4.3	0.23	83	691	5.0

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.14%
Volume filter: Inside (0.1%WO3 COG) (Entire block)

Domain	Category	Density	Mass	WO3 %	*Average Value* Sn ppm	Cu ppm	Ag ppm
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.77**	**0.3**	**0.24**	**77**	**411**	**2.7**
	Inferred	2.77	0.7	0.26	84	456	3.4
Fresh	**Indicated**	**2.80**	**3.2**	**0.25**	**101**	**845**	**5.3**
	Inferred	2.77	3.8	0.25	83	694	5.1

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.15%
Volume filter: Inside (0.1%WO3 COG) (Entire block)

Domain	Category	Density	Mass	WO3 %	*Average Value* Sn ppm	Cu ppm	Ag ppm
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.77**	**0.3**	**0.25**	**78**	**413**	**2.7**
	Inferred	2.77	0.6	0.27	84	453	3.4
Fresh	**Indicated**	**2.80**	**2.9**	**0.26**	**101**	**852**	**5.4**
	Inferred	2.77	3.3	0.26	84	693	5.2

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.175%
Volume filter: Inside (0.1%WO3 COG) (Entire block)

Domain	Category	Density	Mass	*Average Value*			
				WO3 %	Sn ppm	Cu ppm	Ag ppm
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.77**	**0.2**	**0.29**	**80**	**431**	**2.9**
	Inferred	2.77	0.5	0.31	86	462	3.5
Fresh	**Indicated**	**2.80**	**2.3**	**0.29**	**103**	**879**	**5.5**
	Inferred	2.77	2.4	0.30	84	712	5.4

Differences may occur in totals due to rounding.

Cut-off: WO3 % ≥ 0.20%
Volume filter: Inside (0.1%WO3 COG) (Entire block)

Domain	Category	Density	Mass	*Average Value*			
				WO3 %	Sn ppm	Cu ppm	Ag ppm
		g/cm³	Mt	%	ppm	ppm	ppm
Oxide	**Indicated**	**2.77**	**0.2**	**0.32**	**81**	**456**	**3.0**
	Inferred	2.77	0.4	0.35	88	473	3.8
Fresh	**Indicated**	**2.80**	**1.8**	**0.32**	**104**	**897**	**5.6**
	Inferred	2.77	1.8	0.34	85	704	5.6

Differences may occur in totals due to rounding.

***** RPEEE (Reasonable Prospects for Eventual Economic Extraction) defined with a 0.1% WO_3 Grade-Volume shell (<5000 m3 volumes excluded)***

Table 14.5: Detailed Resource Estimates at Various Cut-off WO_3% Grades (Effective March 25, 2024)

The following Tables 14.6 and 14.7 are summaries of the estimated mineral resources for Fresh Material in the separated Indicated and Inferred Classes illustrating their sensitivity at different WO_3 cut-off grades.

Cut-off Grade WO3 %	Mass Mt	Average Grade WO3 %	Sn ppm	Cu ppm	Ag ppm
0.000	**10.90**	**0.12**	86	612	4.1
0.050	**7.10**	**0.16**	94	718	4.6
0.075	**5.70**	**0.19**	97	764	4.9
0.100	**4.40**	**0.22**	99	809	5.1
0.110	**4.10**	**0.22**	100	817	5.2
0.120	**3.80**	**0.23**	100	826	5.2
0.130	**3.50**	**0.24**	101	835	5.3
0.140	**3.20**	**0.25**	101	845	5.3
0.150	**2.90**	**0.26**	101	852	5.4
0.175	**2.30**	**0.29**	103	879	5.5
0.200	**1.80**	**0.32**	104	897	5.6

Table 14.6: Summary of Cut-Off Grade Sensitivity to Fresh Domain Estimated Indicated Mineral Resources

Cut-off Grade WO3 %	Mass Mt	Average Grade WO3 %	Sn ppm	Cu ppm	Ag ppm
0.000	**25.6**	**0.08**	72	481	3.3
0.050	**12.4**	**0.14**	79	586	3.9
0.075	**9.0**	**0.16**	81	635	4.3
0.100	**6.0**	**0.20**	83	681	4.7
0.110	**5.4**	**0.21**	83	679	4.7
0.120	**4.8**	**0.22**	83	681	4.8
0.130	**4.3**	**0.23**	83	691	5.0
0.140	**3.8**	**0.25**	83	664	5.1
0.150	**3.3**	**0.26**	84	693	5.2
0.175	**2.4**	**0.30**	84	712	5.4
0.200	**2.1**	**0.33**	93	761	5.3

Differences may occur in totals due to rounding.

Table 14.7: Summary of Cut-Off Grade Sensitivity to Fresh Domain Estimated Inferred Mineral Resources

14.10 Underground Conceptual Economic Assumptions

The preliminary results show tungsten recoveries range from 80 to 85% and the Ammonium Para Tungstate ('APT') prices has varied from USD $200 to $360 per metric tonne unit ('MTU') WO_3 between August 2018 and August 2023. Thus, it has been assumed that the cut-off grade for a potential underground operation may vary from 0.10 to 0.15 % WO_3. For the purposes of this resource estimate, given recent lower tungsten prices, a potential underground operating cut-off grade of 0.12% WO_3. The underground conceptual economic assumptions shown in Table 14.6 are based on similar tungsten projects in Europe.

Mining Cost	$ 21.50
Processing Cost ($/ton)	$ 11.50
General and Adminatration ($/ton)	$ 3.00
Total Estimated Costs ($/t)	$ 36.00

Table 14.8: Summary of Economic Assumptions of a Conceptual Underground Mine

The Mineral Resource Estimate for the Santa Helena Breccia is presented in the following Table 14.7. It is the opinion of the author that the mineral resource estimation is reliable, adequate for the purposes in this technical report, and prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects and guidelines for technical reporting by CIM's 'Best Practices and Reporting Guidelines for disclosing mineral exploration.

Using a cut-off grade of 0.10% WO_3 the following mineral resources have been estimated, effective March 25, 2024.

Indicated Class	**Oxidized Material** – 0.5 t grading 0.19 WO_3%, 75 ppm tin, 387 ppm copper and 2.4 ppm silver
	Fresh Material – 4.4 Mt grading 0.22 WO_3%, 99 ppm tin, 809 ppm copper and 5.1 ppm silver
Inferred Class	**Oxidized Material** – 1.0 Mt grading 0.21 WO_3%, 81 ppm tin, 415 ppm copper and 3.0 ppm silver
	Fresh Material – 6.0 Mt grading 0.20 WO_3%, 83 ppm tin, 681 ppm copper and 4.7 ppm silver

* *Differences may occur in totals due to rounding.*

** RPEEE (Reasonable Prospects for Eventual Economic Extraction) defined with a 0.1% WO_3 Grade-Volume shell (<5000 m3 volumes excluded)*

Table 14.9: Sta. Helena Breccia Mineral Resource Estimate

15 MINERAL RESERVE ESTIMATES

The Project has no defined mineral reserves which have been proven to have potential economic viability supported by a preliminary economic assessment (‘PEA’), prefeasibility study, or feasibility study. As a result, the Project is not classified as an ‘Advanced Project’ and this chapter therefore does not fall within the scope of this Technical Report.

16 MINING METHODS

The Project has no defined mineral reserves which have been proven to have potential economic viability supported by a PEA, prefeasibility study, or feasibility study. As a result, the Project is not classified as an ‘Advanced Project’ and this chapter therefore does not fall within the scope of this Technical Report.

17 RECOVERY METHODS

The Project has no defined mineral reserves which have been proven to have potential economic viability supported by a PEA, prefeasibility study, or feasibility study. As a result, the Project is not classified as an ‘Advanced Project’ and this chapter therefore does not fall within the scope of this Technical Report.

18 PROJECT INFRASTRUCTURE

The Project has no defined mineral reserves which have been proven to have potential economic viability supported by a PEA, prefeasibility study, or feasibility study. As a result, the Project is not classified as an ‘Advanced Project’ and this chapter therefore does not fall within the scope of this Technical Report.

19 MARKET STUDIES and CONTRACTS

The Project has no defined mineral reserves which have been proven to have potential economic viability supported by a PEA, prefeasibility study, or feasibility study. As a result, the Project is not classified as an ‘Advanced Project’ and this chapter therefore does not fall within the scope of this Technical Report.

20 ENVIRONMENTAL STUDIES, PERMITTING and SOCIAL or COMMUNITY IMPACT

The Project has no defined mineral reserves which have been proven to have potential economic viability supported by a PEA, prefeasibility study, or feasibility study. As a result, the Project is not classified as an ‘Advanced Project’ and this chapter therefore does not fall within the scope of this Technical Report.

21 CAPITAL and OPERATING COSTS

The Project has no defined mineral reserves which have been proven to have potential economic viability supported by a PEA, prefeasibility study, or feasibility study. As a result, the Project is not classified as an 'Advanced Project' and this chapter therefore does not fall within the scope of this Technical Report.

22 ECONOMIC ANALYSIS

The Project has no defined mineral reserves which have been proven to have potential economic viability supported by a PEA, prefeasibility study, or feasibility study. As a result, the Project is not classified as an 'Advanced Project' and this chapter therefore does not fall within the scope of this Technical Report.

23 ADJACENT PROPERTIES

There are no adjacent properties in respect of the Project within the meaning of NI 43-101.

24 OTHER RELEVANT DATA and INFORMATION

There is no other additional information necessary to make this Technical Report understandable and not misleading.

25 INTERPRETATION and CONCLUSIONS

The Borralha mine was ranked as the second largest tungsten producer in Portugal. This is a ‘brownfields’ project exploring for and confirming significant tungsten mineralization that was not explored for and only partially mined during past operations.

The tungsten deposits are situated in a contact zone between Precambrian-age metasedimentary formations and two-mica, porphyritic, coarse-grained, syn-tectonic granite. The hosts for the mineralization are almost exclusively mica schist and granite that are locally intruded by aplite to pegmatite dykes and two known pipe-like breccia bodies.

The Borralha tungsten deposits are characterized by the presence of large siliceous, intrusive breccia bodies that are probably the source of fault- and fracture-controlled sub-vertical and sub-horizontal vein systems. There are three distinct hosts for the Borralha mineralization: quartz veins with wolframite, scheelite and sulphide mineralization; aplite-pegmatite veins with cassiterite mineralization; and intrusive breccia bodies as pipe-like bodies and/or collapse breccias. Local low grade tin mineralization occurs within the quartz veins within the historical mine area and west of the project area while aplite-pegmatite veins are only present in the eastern part of the property. The main mineralization is comprised of iron-rich wolframite (possibly ferberite) and scheelite plus minor associated chalcopyrite, pyrite, pyrrhotite, sphalerite, and/or molybdenite. Both the intrusions and veins are mineralized but only the latter were extensively mined.

The most productive and rich underground mines are located approximately in the centre of the historic Borralha mining area, covering approximately 2,000 m long in an east-west direction, about 1,000 m wide, and to a depth of 210 meters below the -60-metre mine level (aka Borralha River level) which was considered the zero level of the underground workings. Most of the historical mining was conducted underground with some limited small and shallow open pit mining. Prior to 1956 open pit mining only focused on surface veins, alluvial and eluvial material, and near-surface parts of the Santa Helena Breccia.

In 2013 two diamond drill holes, namely BO_1/13 and BO_2/13, targeted an unmined section of the historic underground workings within the central Borralha zone north of the Borralha River. Those two drill holes intersected multiple wolframite-bearing quartz veins, identifying this area as a future exploration target.

The Santa Helena Breccia has been the main exploration target for recent geological mapping, trenching, channel sampling and drilling carried out since 2013. Nine trenches and twenty-two widely-spaced diamond drill, mostly H-size, and nine RC bore holes have tested the breccia body locally to a depth more than 250 m. The results of this exploration work on the SHB indicate that the breccia body has a profile like an ‘inverted squashed cone’ striking north-south, measuring at least 575 m long, over 150 m wide and, at least, 300 m in depth. Based upon recent drilling results it appears that the SHB body is an intrusion that has collapsed, brecciated, and been later silicified and mineralized with fine- to coarse-grained, iron-rich wolframite (possibly ferberite) with minor cassiterite and base metal sulphides. Based upon drilling results, the mineralization is quite 'nuggety' as scattered disseminations and fracture infillings, often associated with local quartz veining and silicification within the breccia host.

The Venise Breccia occurs north of the Borralha River, approximately 500 m north-northwest of the SHB, and it appears to be oriented north-south and open to depth. At the -60-metre mine level, the water level in the old workings, the breccia body has a reported strike length of 80 m with a width of 30 m. This breccia body was never mined, although there are verbal reports from retired miners that it hosts significant tungsten and molybdenum mineralization.

It is the opinion of the author that Minerália's verification of historic data and their later collection, preparation, security and analytical procedures ensured the credibility of their reported results. Their QA/QC procedures with the early trench channel and later drilling samples meet or exceed industry-standard and CIM guidelines.

There are tungsten grade differences between those XRF-analysed samples reported by Minerália and those of the author's verification samples. These differences may be due to the XRF analyses of the original sample pulps did not fully detect the tungsten contents that the mass spectrometry analyses did. There is also a significant difference between the two tungsten analyses of the Certified W Reference Standard GW-03. One explanation of the difference might be that the GW-03 standard that was inserted into the verification batch may not have been properly re-homogenized at the laboratory prior to its analysis resulting in a lower tungsten analysis. Nevertheless, based upon the ALS internal QC procedures, it is the opinion of the author that the results of the ten verification samples are credible and reliable.

A very important result of the author's verification sampling was the detection of significant values for copper and silver, plus minor tin. Since all the historical 2013 to 2017 drill cores from the SHB had only been XRF-analysed for tungsten, the grades of accessory minerals were only suspected from observations of chalcopyrite and cassiterite in the drill core. There are grades ranging from 0.083 to 0.576 % copper and 6.7 to 18.5 gpt silver associated with the higher tungsten grades in the verification samples from drill holes BO5 and BO8A that tested the central and southern portions of the SHB.

The recognition of precious and base-metal mineralization in addition to that of tungsten were very important results that may affect the economic potential of the SHB. The writer recommended at the time that all past drill core samples should be fully re-analysed. During his property examination the writer also recommended that considerably more drilling must be undertaken to fully understand the distribution of the SHB mineralization, and that detailed metallurgical test work must be carried out to determine the recoveries of both the tungsten and associated elements.

Following the author's property examination, the Company has since retained Minerália to manage and supervise an aggressive exploration program that includes re-analysing all available channel and drill hole pulps from the 2011 to 2017 exploration campaigns; supervising, logging and compiling the results from 3 diamond drill holes and 9 reverse circulation boreholes; and deliver a fresh 150 kg sample of the mineralized SHB for metallurgical test work. The re-analysis of available historical samples proved very worthy since the operation identified reportable values for tungsten, tin plus a whole suite of elements including copper, molybdenum, silver, and rare earth elements. The results of this work have been utilized while estimating the mineral resources.

The latest fourth phase of drilling focused on testing the southern portion of the SHB during mid-September 2023 to late January 2024. The drilling campaign included three P-size diamond drill holes, namely Bo_Met_01, _02 and _ 02a, totalling 490.4 metres of drilling and eleven reverse circulation drill holes, namely Bo_RC_01 to _11 that totalled 2,619.0 metres of drilling. Diamond drill hole Bo_Met_02 intersected old underground workings and the hole had to be abandoned and re-drilled nearby as Bo_Met_02a. As of the effective date of this report, the Company has drill tested the SHB with 3,109.4 metres of drilling, infilling historical drill holes and extending exploration towards the southern part of the SHB. The reverse circulation drilling is continuing.

Metallurgical test works have been carried out in 2019 and more recently in 2023 and 2024. In 2019, a bulk sample of the weathered SHB material underwent preliminary metallurgical testing. It was understood that the sample was not fully representative of the intrusive body but studied for the liberalization characteristics to confirm that a wolframite concentrate could be produced. The results of this test work returned a head grade of 1.49% WO_3 and 0.02% Sn, and using simple, unoptimized jig/ gravity concentration methods had an over-all recovery of 70.03% with a grade of 56.16% WO_3. Recently, a 150-kg sample collected from two 2023 diamond drill holes Bo_Met_01 and -02a which were shipped for metallurgical testing by Wardell Armstrong International Ltd. and Petrolab. This test work is ongoing but preliminary results show the possibilities of a marketable tungsten concentrate plus possible associated mineral concentrates. Further testing will also include various flotation stages to recover a marketable copper concentrate.

The Santa Helena Breccia body has now been tested with nine surface trenches and 23 drill holes over a 300-metre strike length and to a depth of over 250 metres. The analytical results from samples collected from 20 drill holes and nine trenches were used in the mineral resource estimation. Past exploration results have shown that the distribution of tungsten mineralization is quite ‘nuggety’ requiring detailed sampling, although combining recent 1-metre drilling samples into 2-metre composite samples tends to reduce the grade variance. The mineralization occurs as very fine-grained crystals to coarse-grained patches that appear to be randomly distributed within the SHB.

It was decided to restrict the very high grade tungsten values, due to their nuggety distirbution, by doing an ‘outlier restriction’ capping instead of a classic grade capping procedure. This restriction was made on the values larger than 1.8% or 18,000 ppm WO_3 where the original value was applied for a search radius up to 30% between the distance from the outlier and another composite assay value. Above 30% of the distance of the search radius the 18,000 ppm cap is applied. Thus, the values greater than 18,000 ppm were capped to 18,000 ppm (1.8% WO3).

It was decided that a 5- x 10- x 5-metre block size would be used with sub-blocking at 3 passes (2.5- x 5- x 2.5-metre sub-blocks) at the limits of the geological information and topography. All blocks strike north-south with a N-S / 90º block distribution. The certified specific gravity measurements that were collected by ALS Global Laboratories during their anlytical work provide the average density value of the Breccia domain at 2.783 ton/m^3.

A three-pass grade block interpolation was conducted using Ordinary Kriging. The generated Ordinary Kriging results were then compared to those obtained from Inverse Distance ('ID3') and Nearest Neighbour ('NN') methods of interpolation using the same parameters. The block models and the drill hole intercepts were then reviewed by swath plots and visually in three-dimensions to ensure that the grade blocks were honouring the drill hole data. The result was a satisfactory agreement between the block grades and drill intercepts.

The following tables summarize the estimated mineral resources for Fresh Material in the separated Indicated and Inferred Classes illustrating their sensitivity at different WO_3 cut-off grades.

Summary of Estimated Indicated Mineral Resources

Cut-off Grade WO3 %	Mass Mt	*Average Grade* WO3 %	Sn ppm	Cu ppm	Ag ppm
0.000	**10.90**	**0.12**	86	612	4.1
0.050	**7.10**	**0.16**	94	718	4.6
0.075	**5.70**	**0.19**	97	764	4.9
0.100	**4.40**	**0.22**	99	809	5.1
0.110	**4.10**	**0.22**	100	817	5.2
0.120	**3.80**	**0.23**	100	826	5.2
0.130	**3.50**	**0.24**	101	835	5.3
0.140	**3.20**	**0.25**	101	845	5.3
0.150	**2.90**	**0.26**	101	852	5.4
0.175	**2.30**	**0.29**	103	879	5.5
0.200	**1.80**	**0.32**	104	897	5.6

Summary of Estimated Inferred Mineral Resources

Cut-off Grade WO3 %	Mass Mt	*Average Grade* WO3 %	Sn ppm	Cu ppm	Ag ppm
0.000	**25.6**	**0.08**	72	481	3.3
0.050	**12.4**	**0.14**	79	586	3.9
0.075	**9.0**	**0.16**	81	635	4.3
0.100	**6.0**	**0.20**	83	681	4.7
0.110	**5.4**	**0.21**	83	679	4.7

0.120	**4.8**	**0.22**	83	681	4.8
0.130	**4.3**	**0.23**	83	691	5.0
0.140	**3.8**	**0.25**	83	664	5.1
0.150	**3.3**	**0.26**	84	693	5.2
0.175	**2.4**	**0.30**	84	712	5.4
0.200	**2.1**	**0.33**	93	761	5.3

Differences may occur in totals due to rounding.

Note: Reasonable Prospects for Eventual Economic Extraction ('RPEEE') is defined by a 0.1% WO_3 Grade-Volume shell with less than 5,000 m^3 volumes excluded.

At a cut-off grade of 0.10% WO_3 and at an effective date of March 25, 2024, the following mineral resources have been estimated.

Indicated Class **Oxidized Material** – 0.5 Mt grading 0.19 WO_3%, 75 ppm tin, 387 ppm copper and 2.4 ppm silver
Fresh Material – 4.4 Mt grading 0.22 WO_3%, 99 ppm tin, 809 ppm copper and 5.1 ppm silver

Inferred Class **Oxidized Material** – 1.0 Mt grading 0.21 WO_3%, 81 ppm tin, 415 ppm copper and 3.0 ppm silver
Fresh Material – 6.0 Mt grading 0.20 WO_3%, 83 ppm tin, 681 ppm copper and 4.7 ppm silver

It is the author's opinion that the SHB within the Borralha property has excellent exploration potential and may have good economic potential pending advanced exploration. Approximately 50% of the inferred SHB dimensions have been partially tested with excavator trenching plus diamond and RC drilling.

Further advanced exploration of the SHB should include continued RC drilling to delineate its dimensions and define its mineralization, bulk sampling using strategic diamond drilling, continued advance metallurgical testing, estimation of mineral resources/reserves, site and mine planning, environmental studies, and interactions with community and public-interest groups.

25.1 Project Risks and Opportunities

As with most mineral exploration and development projects, there are risks. Many of these risks are based on a lack of detailed knowledge and can be mitigated with more sampling, testing, design, and engineering.

The most significant potential risk associated with possible delays in the advanced exploration work is the current governmental review of the submitted Environmental Impact Assessment (aka 'EIS' or Environmental Impact Study) that was completed and submitted for review and comments on June 13, 2024. These risks have been tabulated in the following Table 25.1.

External risks are, to a certain extent, beyond the control of the project proponents and are much more difficult to anticipate and mitigate; although, in many instances, some risk reduction can be achieved. External risks include: the political situation in the project region, metal prices, exchange rates, community and special interest groups' opposition, and government legislation. These external risks are generally applicable to all mineral development projects. Negative variance to these items from the assumptions may affect the future economic potential of the project.

There are also significant opportunities that could improve the economics, timing, and/or permitting approval potential of the project. The major opportunities that have been identified at this time are summarized in Table 25.2, excluding those typical to all such projects such as positive changes in metal prices, exchange rates, etc. Further information and assessments are needed before these opportunities can be included in the future project economics.

Area	Risk Description and Potential Impact	Mitigation Approach
Geology and Mineral Resource	Tungsten grades estimated inside the SHB could vary due to the presence of the nugget effect in the tungsten distribution of the deposit.	Closely-spaced fill-in drilling will increase the definition of the tungsten grade distribution.
	The geometry of the mineralized shoots could be off slightly due to local faulting and too widely-spaced drilling data.	Collect structural data from infill drilling and continue updating the structural ad mineralization models.
Geotechnical and Hydrology	Geotechical characteristics of the host and country rocks vary from those used in the conceptual models	Conduct further investigations into the rock mechanics and geotechnical features, and complete a study of groundwater inflows.
Site Infrastructure	Current core handling/logging and storage facilities are inadequate for the proposed EIS work.	Construct/rent appropriate facilities to handle the resultant core/RC chip study
	Lack of sufficient infrastructure data for mine planning	Investigate mine and waste sites early in the study and prepare alternate mine, power plant, waste plans should they be required.
Waste and Water Management	Higher concentrations of non-regulated and untreated contaiminants that may require treatment.	Finalize water quality model and review continuously for EIS.
	The soils at the conceptual waste and tailings sites are do not meet the pre-established specifications.	Conduct field and laboratory studies to better understand the foundations' requirements and compatible sites.
Environmental Permitting and Social License	Opposition to project due to lack of communications with impacted parties	Keep regular communications and consultations with stakeholders.

Table 25.1: Potential Risks to the Environmental Impact Study

Area	Opportunity Explained	Benefit
Geology and Mineral Resource	SHB remains open at depth and its contacts with the country rocks are largely inferred.	Potential to increase resources and upgrade resource classification.
	Reducing the drill hole spacing with infill drilling.	Will increase confidence in the distribution of the mineralization and better understand the geometry of the deposit.
Rock Mechanics	May provide data for a revision of mine planning and optimizing mining process.	Increased productivity and cost benefits. Reduced dilution estimate.
Geotechnical and Hydrology	Contractant behavior of some layers of natural soil leads to large retention berms.	Positive natural soil characteristics lead to smaller retention infrastructures.
Geochemistry	If actual geochemical properties of excavated materials differ from materials tested as a part of geochemistry study.	The treatment system is needed less than expected; revision to water management plan, or release to environment
Processing	Additional metallurgical studies required to optimize gravity, magnetic and/or colorimetric processing.	Higher tungsten recovery and operational cost optimization.
Infrastructure	Process plant and Infrastructure design further optimized.	Potential to simplify and optimize process and infrastructure layout which could result in lower costs and operational efficiency improvements.
Waste and Water Management	Waste rock can be sold for road bed material.	Reduce infrastructure costs.
	Optimize site water management by continual water monitoring and sampling.	Reduced infrastructure costs and water treatment operating costs.

Table 25.2: Potential Opportunities for the Environmental Impact Study

26 RECOMMENDATIONS

The following advanced exploration and development work will be required to continue developing the SHB for a future Feasibility Study.

- Infill and exploratory RC drilling at appropriate spacings to confirm the limits and dimensions of the SHB-hosted mineralization, and provide geotechnical information;
- Begin preliminary mine design to determine the optimal extraction method, whether via a variety of underground workings or by combining underground and open pit operations, and the mineral processing, waste management and infrastructure required for such a mining operation;
- Estimate the mineral resources of the SHB after integrating the continuing drilling, metallurgical, and mine planning results;
- Hydrogeologic studies for modelling both annual surface groundwaters and subsurface cognate water, plus flora and fauna studies;
- Meetings with community, governmental and special interest groups to discuss the impact of the proposed mining operation and gain approval for the project.

26.1 Proposed Exploration Budget

Two phases of the proposed exploration budget are estimated to be sufficient to expand the mineral resource estimate, complete the costs of the Environmental Impact Assessment and fulfill future expected expenses for a mine development study of a possible Feasibility Study.

Item Description	Units	Cost/Unit (€)	Total (€)
Reverse Circulation Drilling (incl. 15% contingency)			
Continue RC drilling to define limits of mineralization	1,000 m	160.50/m 'all in'	160,500
Metallurgical Studies			
Complete additional metallurgical processing test work			10,000
Preliminary Mine Planning			50,000
- determine initial mine design			
Updated Mineral Resource Estimate			

Update mineral resource estimate with drilling, metallurgical and mine planning results		20,000
Hydrological & Flora/Fauna Studies		
Monthly water sampling for organic and inorganic contents		15,000
Community and Government Meetings and Communications		5,000
Minerália Fees and expenses		
Project, management and administration fees and expenses		40,000
Contingency (~7%)		21,035
Currency Conversion (EUR 1 = CAD $1.532)	**EUR (€)**	**321,535**
Estimated Cost of Exploration Work (rounded)	**CAD $**	**492,600**

Table 26.1: Proposed Phase I Exploration Budget for Exploration

If the results of phase 1 of the exploration are positive, the Company should be prepared to continue advanced exploration and development work in preparation for a definitive feasibility study on the Project.

Item Description	Units	Cost/Unit (€)	Total (€)
Detailed In-fill Reverse Circulation Drilling			
Complete detailed in-fill drilling, sampling and assaying	4,000	160.50/m 'all in'	642,000
QA/QC Validation and Mineral Resources Estimate			
Validation of drilling results			15,000
Updated mineral resources of Santa Helena Breccia			20,000
Feasibility Study Preparation and Submission			
Preparation and submission of FS report			125,000
Minerália Fees and Expenses			
Project, management, and administration fees			115,000
Contingency (~7%)			64,190

Estimated Cost of Feasibility Study (€ 1 = CAD 1.532)	**EUR (€)**	**981,190**
Estimated Cost of Exploration Work (rounded)	**CAD**	**1,503,200**

Table 26.2: Proposed Phase II Exploration Budget for Feasibility Study

Thus, the combined total cost of the recommended Phase I and II exploration work is **EUR 1,222,725** or **CAD $1,995,800**.

27 REFERENCES

Bobos, I., Noronha, F., 2017: Temperature – composition relationships of chlorite diversity in the W – (Cu, Mo) ore deposits of Borralha, Northern Portugal. XVI International Clay Conference, ICC 2017, Granada, Spain, 7: 88. ISSN 2464-9147.

Ferreira, N., Iglesias, M., Noronha, F., Pereira, E., Ribeiro, A., Ribeiro, M.L., 1987: Granitóides da Zona Centro Ibérica e seu enquadramento geodinâmico. In: Bea, F., Carnicero, A., Gonzalo, J., Lopez Plaza, M., Rodriguez Alonso, M. (Eds). Libro de Homenage a García De Figuerola, L.C., Editorial Rueda. Madrid. Geologia de los granitoides y rocas sociadas del Macizo Hesperico, 37-51.

Gonçalves, A., Lima, L., Mota, A., Ramos, V., Barros, J., Noronha, F., 2016: The Santa Helena Breccia Pipe (Borralha – N Portugal): a new mineralization type in the Iberian Tin-Tungsten Province. Comunicações Geológicas (2017) 104, 1, ISSN: 0873-948X; e-ISSN: 1647-581X.

Gonçalves, A., Noronha, F., 2017: Rare Earth Elements mobility during hydrothermal alteration: Evidence from Santa Helena breccia, Borralha area (North Portugal). XII Cong. Nac. de Geoq., XI Cong. Ibérico de Geoq., Livro de atas, 16-21. Liñares (Espanha).

Hart, C., 2006: Intrusion-related Gold, Tombstone Gold Belt, Yukon, Yukon Geological Survey, Broch 2006-6.

Lage, M., 2001: Wolfram - Volfrâmio: Terra Revolvida, Memória Revolta. Para Um Análise Transversal da Sociedade Portuguesa (1930-1960). PhD, Instituto de Ciências Sociais - Universidade do Minho.

Lima, L., 2015: Contribuição para o estudo da mineralogia da brecha de Sta. Helena - Minas da Borralha. Tese de Mestrado, Faculdade de Ciências da Universidade do Porto,184 pp.

Lima, L., Gonçalves, A., Marques Sá, C., Ramos, V., Bobos, I., Noronha, F., 2019: A new vision for the genesis of Santa Helena breccia, Borralha W deposit NW of Portugal, 3rd International Critical Metals Conference, Mineralogical Society, Edinburg.

Martins, Luis Placido, 2012: Mineral Resources of Portugal, Report prepared for the Ministerio Da Economia E Do Emprego, Governo De Portugal, pp. 74.

Mateus, A. and Noronha, F., 2010: Sistemas mineralizantes epigenéticos na Zona Centro-Ibérica; expressão da estruturação orogénica meso- a tardivarisca. In: Cotelo Neiva, J.M., Ribeiro, A., Mendes Victor, L., Noronha, F., Magalhães Ramalho, M. (Eds). Ciências Geológicas: Ensino, Investigação e sua História. Geologia Aplicada, 2: 47-61. ISBN:978-989-96669-1-7.

Mateus, A., Barriga, F.J.A.S., Noronha, F., 1986: Hydrothermal activity and ore genesis at the Borralha tungsten lode (western Trás-os-Montes). Maleo, vol. 2, pp. 28.

Mendes, F., 1968: Contribution à l'étude géochronologique, par la méthode au strontium, des formations cristallines du Portugal. Bol. Mus. Labor, miner. geoLFacCiêic., 11, 1: 3-155. (Tese).

Minerália – Minas, Geotecnia e Construções Lda, 2024: Numerous weekly Zoom meetings discussing: sample re-analysis, diamond and RC drilling, and metallurgical testing.

Minerália – Minas, Geotecnia e Construções Lda, 2018: Borralha W Project. Technical Information prepared for Blackheath Resources Inc. pp. 11.

Minerália – Minas, Geotecnia e Construções Lda, 2020: Technical Report on the Borralha Tungsten Deposit, Vila Real District, Portugal dated August 19, 2020.

Minerália – Minas, Geotecnia e Construções Lda, 2024: Personal Discussions, Data, Plans and Plots for the Borralha Tungsten Deposit, Vila Real District, Portugal dated July, 2024.

Noronha, F., 1983: Estudo metalogénico da área tungstífera da Borralha. PhD, Faculdade de Ciências da Universidade do Porto. Porto.

Nunes, P., 2010: Proposta de Reabilitação de Locais de Armazenamento de Resíduos Mineiros da Antiga Mina da Borralha. MSc, Faculdade de Engenharia da Universidade do Porto. Porto.

PanEx Resources (Pty) Limited, 2019: Presentation of the Borralha Tungsten Project, Portugal.

Petrolab, 2023: W Liberation Borralha, Minerological Report AM7879, private report prepared for Mineralia, pp. 22.

Price, B., 2013: Draft Technical (43-101) Report, Borralha Tungsten Deposit, Salto Area, Republic of Portugal. Report prepared for Blackheath Resources Inc., pp. 68.

Staff, 1979: Tungsten/Minas Da Borralha, Mining Journal, Vol. 292, No. 7491, March 16, 1979, p. 202.

Wardell Armstrong International Ltd., 2024: Proposal for Initial Metallurgical Testing on a Sample from the Borralha Tungsten Project, Portugal, pp. 22.

Internet References

Meteorological Institute of Portugal; Instituto Português do Mar e da Atmosfera,

IPMA Setúbal, Portugal. - http://www.meteo.pt/

Portugal Online Public Register; Diário da Repbúlica Electrónico; DRE - https://dre.pt