# TECHNICAL REPORT ON THE PENEDELA EXPLORATION CONCESSION ASTURIAS REGION, SPAIN

FORM 43-101F1

FOR

**ORCUS RESOURCES** 

By

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November 16th, 2021

#### **CERTIFICATE OF QUALIFIED PERSON**

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I, Álvaro Merino Márquez, P. Geo. and P.Eng., do hereby certify that:

I am an independent Geologist and Mining Engineering Consultant, contracted by Orcus Resources Ltd.

This certificate applies to the technical report entitled "Technical report on the Penedela exploration concession. Asturias Region, Spain" that has an effective date of November 16, 2021.

I am graduate of University of Huelva, Spain, where, in 2001 and 2012, respectively, I obtained a Bachelor in Geological Sciences degree and a Bachelor in Mining Engineering.

I am a member of the European Federation Geologist (P. Geo. # 1764).

I have practiced my profession continuously since 2001. I have worked in different deposit types as stratabound copper, iron oxide copper gold, volcanogenic-massive sulfide and gold deposits in Chile, Bolivia, Mexico and Spain.

I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

I have visited the Property that is subject of this Technical Report on July 5<sup>th</sup> and most recently on November 3<sup>rd</sup> 2021.

I am responsible for authoring this Technical Report.

I am independent of the both the issuer, Orcus Resources Ltd. and the vendor, Western Metallica Corp. applying as that term is described in Section 1.5 of NI 43–101.I have had no prior involvement with the property that is the subject of the Technical Report.

I have read NI 43–101, and the Technical Report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

"signed and sealed"

Álvaro Merino Márquez, P.Geo, P.Eng.

Dated: November 16<sup>th</sup>, 2021.

# TABLE OF CONTENT

| 1. | SUN             | /IMARY  | 8    |  |  |  |  |  |  |
|----|-----------------|---|------|--|--|--|--|--|--|
| 2. | 2. INTRODUCTION |   |      |  |  |  |  |  |  |
|    | 2.1             | Scope of work   | 9    |  |  |  |  |  |  |
|    | 2.2             | Qualifications and Experience   | 10   |  |  |  |  |  |  |
|    | 2.3             | Independence  | 10   |  |  |  |  |  |  |
|    | 2.4             | Principal Sources of Information                                      | . 10 |  |  |  |  |  |  |
|    | 2.5             | Abbreviations   | 10   |  |  |  |  |  |  |
| 3. | RELI            | IANCE ON OTHER EXPERTS  | 11   |  |  |  |  |  |  |
| 4. | PRO             | OPERTY DESCRIPTION AND LOCATION                                       | 11   |  |  |  |  |  |  |
|    | 4.1             | Location  | 11   |  |  |  |  |  |  |
|    | 4.2             | Ownership   | 13   |  |  |  |  |  |  |
|    | 4.3             | Mining Law  | 15   |  |  |  |  |  |  |
|    | 4.4             | Tenure rights   | 16   |  |  |  |  |  |  |
|    | 4.5             | Royalties and related information                                     | 16   |  |  |  |  |  |  |
|    | 4.6             | EnvironmentaL liabilities   | 17   |  |  |  |  |  |  |
|    | 4.7             | Permits   | 17   |  |  |  |  |  |  |
|    | 4.8             | Other relevant factors  | . 18 |  |  |  |  |  |  |
| 5. | ACC             | ESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY | 18   |  |  |  |  |  |  |
|    | 5.1             | Physiography and vegetation   | 18   |  |  |  |  |  |  |
|    | 5.2             | Accessibility   | . 19 |  |  |  |  |  |  |
|    | 5.3             | Climate   | 21   |  |  |  |  |  |  |
|    | 5.4             | Local Resources and Infrastructure                                    | 22   |  |  |  |  |  |  |
| 6. | HIST            | TORY  | 23   |  |  |  |  |  |  |
|    | 6.1             | Prior Ownership   | 23   |  |  |  |  |  |  |
|    | 6.2             | Historical Exploration and Resource Estimates                         | 24   |  |  |  |  |  |  |
|    | 6.3             | Historical Production   | 29   |  |  |  |  |  |  |
| 7. | GEC             | DLOGICAL SETTING AND MINERALIZATION                                   | 30   |  |  |  |  |  |  |
|    | 7.1             | Regional Geology  | 30   |  |  |  |  |  |  |
|    | 7.2             | Property Geology  | 33   |  |  |  |  |  |  |

| 7   | .3    | Mineralization                              | 35 |
|-----|-------|---|----|
| 8.  | DEP   | OSIT TYPES                                  | 37 |
| 8   | 5.1   | Gold Deposits in Spain                      | 37 |
| 8   | .2    | Penedela Deposit Type                       | 38 |
| 9.  | EXP   | LORATION                                    | 39 |
| 9   | .1    | Satellite image study                       | 39 |
| 9   | .2    | Geophysical survey                          | 40 |
| 9   | .3    | Geological mapping.                         | 42 |
| 9   | .4    | Geochem sampling                            | 42 |
| 9   | .5    | Target Selection                            | 44 |
| 10. | D     | RILLING                                     | 46 |
| 1   | .0.1  | Drill Methods                               | 47 |
| 1   | .0.2  | Drill Hole Logging Procedure                | 51 |
| 1   | .0.3  | Core Recovery                               | 52 |
| 1   | 0.4   | Collar Survey                               | 52 |
| 1   | 0.5   | Downhole Survey                             | 52 |
| 1   | 0.6   | Geotechnical Drilling                       | 52 |
| 1   | .0.7  | Drill Core Interval Length/True Thickness   | 53 |
| 11. | Sa    | ampling preparation, analysis and security  | 53 |
| 1   | 1.1   | Sampling method                             | 53 |
| 1   | 1.2   | Density                                     | 53 |
| 1   | 1.3   | Laboratory                                  | 53 |
| 1   | 1.4   | Sample preparation                          | 54 |
| 1   | 1.5   | Analysis                                    | 54 |
| 1   | 1.6   | Quality Assurance and Quality Control       | 54 |
| 1   | 1.6.1 | Overview                                    | 54 |
| 1   | 1.6.1 | Database                                    | 55 |
| 1   | 1.7   | Sample Security                             | 56 |
| 12. | D     | ata Verification                            | 56 |
| 13. | N     | INERAL PROCESSING AND METALLURGICAL TESTING | 57 |
| 14. | N     | INERAL RESOURCE ESTIMATES                   | 57 |
| 15. | N     | INERAL RESERVE ESTIMATES                    | 57 |

| 16. | MINING METHODS   | 57 |
|-----|--|----|
| 17. | RECOVERY METHODS   | 57 |
| 18. | PROPERTY INFRASTRUCTURE  | 57 |
| 19. | MARKET STUDIES AND CONTRACTS                                     | 57 |
| 20. | ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT | 57 |
| 21. | CAPITAL AND OPERATING COSTS                                      | 58 |
| 22. | ECONOMIC ANALYSIS  | 58 |
| 23. | ADJACENT PROPERTIES  | 58 |
| 24. | OTHER RELEVANT DATA AND INFORMATION                              | 58 |
| 25. | CONCLUSIONS  | 58 |
| 26. | RECOMMENDATIONS  | 59 |
| 27. | REFERENCES   | 61 |

#### TABLE OF FIGURES

| Figure 1. Location Map of the Penedela Project  | 11 |
|---|----|
| Figure 2. Location of the Penedela Exploration Concessions  | 12 |
| Figure 3. Penedela Physiography and vegetation  | 19 |
| Figure 4. Access by Road to Penedela Project  | 20 |
| Figure 5. San Antolin de Ibias Village  | 21 |
| Figure 6. Penedela Climate  | 22 |
| Figure 7. Phelps Dodge Geological Map   | 25 |
| Figure 8. Local geology of the Penedela area by Exmine S.A  | 26 |
| Figure 9. Riodeporcos location map  | 29 |
| Figure 10. Geological map of the Iberian Peninsula  | 31 |
| Figure 11. West Asturian-Leonese Zone   | 32 |
| Figure 12. Regional map, Penedela project   | 33 |
| Figure 13. Geology of the Penedela exploration permit   | 34 |
| Figure 14. Los Cabos Quartzites and the Luarca Slates Section                                     | 35 |
| Figure 15. "Penedela" vein outcrop  | 36 |
| Figure 16. Map of target areas deduced by the remote sensing analysis                             | 40 |
| Figure 17. Resistivity and chargeability pseudo sections, profile TE-1                            | 41 |
| Figure 18. Resistivity and chargeability pseudo sections, profile TE-2                            | 41 |
| Figure 19. Western Metallica Geological Map   | 42 |
| Figure 20. Western Metallica Geochem Sampling   | 43 |
| Figure 21. Penedela Targets   | 45 |
| Figure 22. Historical drilling and Western Metallica drilling                                     | 46 |
| Figure 23. Geonor drill machine at Penedela Project August 2020                                   | 47 |
| Figure 24. Geological map. Penedela vein along the contact between quartzite and shales. Drilling |    |
| location  | 48 |
| Figure 25. Plan view geological map of the Penedela tectonic window. Section's location           | 49 |
| Figure 26. Geological interpretation of the Penedela vein Section #1                              | 49 |
| Figure 27. Geological interpretation of the Penedela vein Section #2                              | 50 |
| Figure 28. Geological interpretation of the Penedela vein Section #3                              | 50 |
| Figure 29. Example of a value graph of the jk-17 standard with respect to acceptable values       | 55 |

#### **INDEX OF TABLES**

| Table 1. Exploration concession coordinates (ED50 Coordinate System) | 16 |
|--|----|
| Table 2. Exmine S.A. drillholes results                              | 27 |
| Table 3. Rio Narcea Gold Mines drillholes results                    | 28 |
| Table 4. Gold deposit types found in Spain                           |    |
| Table 5. UTM location of geochemical soil sampling                   | 44 |

| Table 6. Western Metallica Drilling program                             | 48 |
|---|----|
| Table 7. Western Metallica drilling significant intercepts              | 51 |
| Table 8. Data Verification  | 56 |
| Table 9. Proposed budget for the next two phases of exploration program | 60 |

## 1. SUMMARY

Orcus Resources Ltd. (the "Company") has retained Alvaro Merino Marquez, B.Sc. (Hons.), C.Geo (the "Author") to prepare a report (the "Technical Report"), in compliance with National Instrument 43-101 ("NI 43-101"). The Technical Report is addressed to the Company and focuses on the mineral exploration potential at its 480 hectare Penedela gold exploration property, located in in the Council of Ibias, Asturias region, Spain (the "Property"). The Author visited the Property on July 5<sup>th</sup>, and most recently on November 3rd 2021.

Western Metallica Corp. ("Western Metallica"), through its wholly owned subsidiary, Western Metallica S.L., has acquired Asminarq S.L. ("Asminarq"), a private company registered in Spain that has carried out certain exploration activities on the Property and intends to carry out the exploration programs recommended in this Technical Report in furtherance of defining the gold mineralization potential at the Property. As of the effective date of this Technical Report, the Exploration licenses are owned by Asminarq. In September 2019, Asminarq and Western Metallica S.L. entered into an option agreement pursuant to which Western Metallica S.L. had the right to acquire Asminarq and its assets. In February 2022, Western Metallica S.L. acquired 100% of Asminarq pursuant to a social shares purchase agreement between Western Metallica S.L. and Asminarq (the "Purchase Agreement").

There is excellent access and infrastructure into and on the Property, and though the region has a history of mining, it has seen little in the way of modern exploration. The inland part of Asturias is one of the least economically developed areas in Spain. Representatives of Western Metallica and the Company have held meetings with local Authorities who have indicated that they are supportive of proposed exploration activities. Additionally, Spain offers a stable political regime and a competitive taxation system.

The Property is located within the so-called Iberian Massif. The Iberian Massif represents the westernmost extent of the Variscan chain in Europe and its geology is dominated by metamorphic and igneous rocks of Proterozoic age. The Penedela permit area geologically belongs to the West Asturian-Leonese Zone (WALZ), a part of the Iberian Hercynian Massif. The WALZ represents the transition from the external to the internal zones of the Hercynian Orogen thus recording an increase in the metamorphic degree from East to West as well as in the importance of the granitic rocks. The West Asturian-Leonese Zone is known for hosting gold deposits (i.e. Salave, Corcoesto, Carles).

The presence of gold mineralization in the area has been known since ancient times. It is not until the mid-19th century when very limited semi-artisanal mining activity occurred in the Penedela, Fornaza and Rio de Porcos mines. Since the mid 1970s some companies have carried out intermittent exploration work in the area for the first time, with the two main companies being Exmine S.A. and Rio Narcea Gold Mines. Western Metallica has compiled most of the historical exploration work, consisting of geological maps, geochem surveys and a Data Base of 18 diamond drill holes.

The mineralization is hosted by Cambrian-Ordovician quartzite, sandstone and black shale, belonging to the Cabos and Luarca Formations. The sulphide mineralization is found associated to a tectonic breccias

parallel to the direction of the San Martin anticline (a dominant north-northwest-trending belt) and dipping 45°-55° W, at the contact between *Los Cabos* quartzites and the *Luarca* slates. The morphology of the breccias is tabular and the thickness varies from 0.5m to 5.0 m and can be followed by several kilometres along strike. The best example is the Penedela vein which is embedded in the west flank of the anticline.

Most of the exploration activities in the Penedela project, are centered around the San Matin Anticline and in the Penedela Tectonic window where exposures of gold-arsenic breccia veins were found. Outside of this area, the rest of the concession was explored to some extent by geochem, geophysical surveys and satellite photo analysis.

A recent drilling campaign at Penedela vein consisting of 5 diamond HQ drill holes has provided samples of the mineralization. Gold occurs encapsulated in primary sulfide minerals, mainly arsenopyrite and pyrite and along grain boundaries coating the Aspy and Py crystals and in microfractures of the sulfides or in associated quartz veins. The width of the significant intercepts varies from 1.0 to 4.6 m running grades from 2.0 g/t Au to 8.7 g/t Au, with significant Ag and occasionally Zn and Pb.

The most important exploration strategy at Penedela has been the detailed mapping of structures followed by geochem sampling and drilling. The Penedela vein exploration potential remains open in both directions and at depth. Opportunities to intercept the projection of the Penedela breccia vein and find other veins are considered good, particularly in the eastern flank and at the hinge of the anticline and at a larger scale all along the San Martin anticline.

Penedela project is of sufficient geological potential to recommend exploration programs focused on exploration targeting. The exploration programs should consist of drilling aimed to identify new areas to look for new discoveries. The total program consists of 6,000m of diamond drilling. In addition, an annual prospect generation program consisting of prospecting, soil and rock geochemical surveys, mapping, and geophysical surveys is recommended. Total budget for two years of exploration is \$1.5M.

# 2. INTRODUCTION

## 2.1 SCOPE OF WORK

The Author was requested by the Company to summarize the available information relating to the potential of the Property to host economic gold mineralization and to review the work that was carried out by previous companies and Western Metallica on the Property.

The purpose of this Technical Report is to provide independent advice on the exploration potential of the Penedela project. This Technical Report provides a technical summary of the exploration activities carried out to date by different companies, based on the information available, and their results.

This Technical Report has been prepared for the Company. The Company is a public company listed on the TSX Venture Exchange (TSXV) that has entered into an amalgamation agreement (the "Amalgamation

Agreement") dated December 23, 2021 with Western Metallica and 1000055944 Ontario Inc. ("Subco"), a wholly-owned subsidiary of the Company, incorporated for the purpose of completing the amalgamation. Following the completion of the amalgamation, the Company (the "Resulting Issuer") will continue on the business of Western Metallica under the name "Western Metallica Resources Corp.". Asminarq is a private company registered in Spain that has carried out some exploration work on the Property including drilling. Asminarq is 100% owned by Western Metallica S.L., a private company registered in Spain. Western Metallica S.L. is 100% owned by Western Metallica, an Ontario registered corporation. The Company intends to continue with drilling campaigns in the near future.

## 2.2 QUALIFICATIONS AND EXPERIENCE

The Author is the Qualified Person responsible for the preparation of this Technical Report as defined by NI 43-101. The Author is a professional geologist with over 16 years of experience in exploration and mining geology. He obtained a Bachelor of Science (Honours) from the University of Huelva 2001. He is a Member of the Association of European Federation of Geologist #1764 and has the appropriate relevant qualifications, experience and independence as defined by NI 43-101. The Author visited the Property on July 5<sup>th</sup> and most recently on November 3<sup>rd</sup> 2021.

### 2.3 INDEPENDENCE

Neither the Author nor his associates have any type of interest in either the Company or Western Metallica. The Author's relationship with the Company and Western Metallica is solely one of professional association between client and independent consultant. This report is prepared in return for fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this Technical Report.

### 2.4 PRINCIPAL SOURCES OF INFORMATION

In addition to the site visit undertaken by the Author to the Property on July 5<sup>th</sup> and November 3<sup>rd</sup> 2021, this Technical Report has relied extensively on public information from the ITGE (Spanish Geological Survey), the Archives of the General Directorate of Mines of Asturias, and at the Historical Archive of Asturias. The Author has also had access to the exploration data gathered by the company during 2019.

## 2.5 ABBREVIATIONS

A full listing of abbreviations used in this report is provided below:

- AA: Atomic Absorption
- Ag: silver
- Author: autor, P.Geo.
- **CM**: Cuadrícula Minera minimum unit for acquiring a mining concession
- **cm**: centimeter

- **Fm**: formation (geological)
- Ha: Hectare
- **ITGE:** Instituto Tecnológico y Geominero de España. Spanish Geological Service.
- Km: Kilometer
- **m:** meter
- M<sup>3</sup>: Cubic Meter
- **mg:** milligram
- NI 43-101: National Instrument 43-101 which lays out the regulations and required standards for public disclosure related to mineral properties held by companies listed on the TSX Venture Exchange, Canada. For details refer to <u>http://www.ccpg.ca/profprac/index.php?lang=en&subpg=natguidelines</u>.
- Oz: Troy Ounce
- Pb: lead
- **ppb**: Parts per billion
- ppm: Parts per million
- Sb: antimony
- Yr: Year
- WM: Western Metallica
- \$: Canadian Dollars
- €: Euros

## **3. RELIANCE ON OTHER EXPERTS**

The Author did not carry out a legal review of the mining titles as he is not qualified to provide comment on legal issues associated with the Property. For title opinions, the Author relied on information provided by the Company. The Author has reviewed the mineral titles published in the official gazette of Principado de Asturias" province, and has relied on the opinion, dated October 23rd 2019 and signed by legal cousel Ramon Escudero Espin (partner of Trajano XXV legal firm), for determining the current validity of said titles. Trajano XXV is a reputable legal firm based in Spain, with significant experience representing private companies in the mining industry.

This disclaimer applies to section 4.4 of this Technical Report, and the reliance on other experts extends only to determining the validity and good-standing of the existing mineral concessions held by the Company.

## 4. PROPERTY DESCRIPTION AND LOCATION

### 4.1 LOCATION

The Property is located in the Principality of Asturias. Asturias is one of the seventeen semi-autonomous regions of Spain. The Property is situated in the northern-central part of Spain, and it is bordered to the west by Galicia, to the east by Cantabria, and to the south by Castilla-León. Specifically, the Property is located in the Ibias municipality, in the west-southern corner of the Asturias region as shown in

Figure 1.



Figure 1. Location Map of the Penedela Project

The Property is comprised of one exploration permit which encloses 16 claims totaling 480 hectares, located on the Municipality of San Antolin de Ibias, on the southern part of Asturias region.

The Property is located approximately 150 km south-west of Oviedo, 500 km north-west of Madrid and 200 km east of A Coruña. The village of San Antolin de Ibias is the nearest population center and lies close to the southeastern border of the concession. The central coordinates are 668,560mE and 4,768,243mN using UTM coordinates (ETRS89, Zone 29S), as shown in

Figure 2

Figure 2. Location of the Penedela Exploration Concessions



The topography of the area is generally hilly, with an average elevation of 550 metres above sea level. The Sierra de Busto valley crosscuts the Property from West to East with hills of 770 m elevation on both sides. The Company has applied to increase the area under license and these new applications are pending.

### 4.2 OWNERSHIP

The Property (Identifying number Penedela N° 30.819) was acquired by Congeo, a geological consulting firm which was created by former geologists of Rio Narcea Gold Mines Corp. The Property was part of a Public Tender organized by the Ministry of Economy and Employment of the Principality of Asturias. The final resolution was dated May 14th, 2012. About a year later, on June 17th, 2013 the Regional Ministry of Economy and Employment authorized the transfer of the mining rights of the company Congeo to the consulting company, Asminarq, which was formed by the Spanish Mining Law the renewal of the permit was valid for a three-year period, and according to the Spanish Mining Law the renewal of the permit is possible. The last time Asminarq requested an extension of the exploration permit was on May 28, 2021. The extension was granted by Asturias government on June 30, 2021. The exploration permit is valid until August 17th, 2023 and 100% owned by Asminarq.

On August 19, 2019, Western Metallica S.L. and Asminarq entered into an option agreement pursuant to which Western Metallica was granted an option to acquire Asminarq under the following terms and conditions:

- Payment from Western Metallica to Asminarq in the amount of €100,000 upon signature of the agreement, which was signed on August 19, 2019.
- Within 18 months, Western Metallica would undertake to invest €600,000 in the exploration of the mining right.
- 18 months later, Western Metallica would make a second payment of €150,000 to Asminarq. Once this payment had been made, the partners of Asminarq would transfer 45% of their shares to the partners of Western Metallica.
- Within a maximum period of 36 months from the signing of the call option, Western Metallica would undertake to invest an additional €1,500,000 in exploration.
- Within a maximum period of 36 months from the signing of the contract, Western Metallica must have paid Asminarq the amount of €200,000. Once Western Metallica made this payment, it would acquire the remaining shares in Asminarq.
- If Western Metallica were to obtain 1 M Oz of gold in the Property, it shall pay Asminarq €500,000 plus the sum of €0.5 per additional ounce, over and above those one million ounces of gold.
- If mining took place, the contract retains 2% of NSR (Net Smelter Return) from the start of mining to its end for the partners of Asminarq.
- In Spain, Investigation Permits (IP) are granted by the Spanish government or by the autonomous regional governments if such powers are transferred to them. These give the holder of the permit the right to investigate the resources in the permit area, subject to the approval of the "Investigation Plan" by the mining authorities.

The aforementioned agreement has effectively become obsolete as a result of a purchase agreement (the "Purchase Agreement") signed by the same parties on February 14<sup>th</sup>, 2022 in which Western Metallica S.L. acquired 100% of Asminarq under the following terms and conditions:

- Payment from Western Metallica S.L. to Asminarq in the amount of €100,000 upon signature of the agreement, which was signed on February 14<sup>th</sup> 2022.
- The issuance of 2,000,000 Western Metallica common shares to Asminarq shareholders.
- If Western Metallica S.L. were to obtain 1 M Oz of gold in the Property, it shall pay Asminarq €500,000 plus the sum of €0.5 per additional ounce, over and above those one million ounces of gold up to two million ounces.
- If mining took place, the contract retains 2% of NSR (Net Smelter Return) from the start of mining to its end for the partners of Asminarq. However, Western Metallica can buy half of this 2%, being 1% of NSR, through payment in the amount of €400,000.

According to Purchase Agreement, 100% of Asminarq is owned by Western Metallica S.L. since the signing date and thus Western Metallica is the current indirect titleholder of the Property.

The titleholder has the right to carry out all types of exploration activities including geological studies, soil geochemistry, geophysics and drilling. If the mining authorities consider that any activity taking place on the surface might affect the environment, the company can seek permission from the environmental authorities and may have to conduct an Environmental Study and draw up the corresponding Restoration Plan.

On December 23, 2021, the Company entered into the Amalgamation Agreement with Western Metallica and Subco. Following the completion of the amalgamation, the Resulting Issuer will continue the business of Western Metallica under the name "Western Metallica Resources Corp."

## 4.3 MINING LAW

The Spanish mining law dates back to 1973. It states that "[a]ll mineral deposits and any other geological resources are public property. The exploration of these resources may be conducted directly by the State or may be transferred to private parties through mining rights".

Mining rights are applied to mining claims (Mining Grids, or "MG"). A mining claim is around 30 hectares in size.

According to the mining law, there are three categories of "mining rights":

"Exploration permits". These are equivalent to prospection leases that allow exploration to be carried out as long as the applied technique does not affect or alter the land. A permit lasts for one year and is renewable for an additional year. The maximum size for an exploration lease is 3,000 MGs.

"Investigation permits". These are equivalent to exploration concessions and are valid for three years, commencing the day they are announced in the regional Gazette. This period may be extended, subject to the exploration results being approved by the Asturias Mining Directorate. Each investigation may have a maximum size of 300 MGs. A bond, equivalent to 10% of the planned investment for the first year, is requested by the local Authorities. The Property is currently held under an "Investigation Permit" license.

The titleholder has the right to carry out all types of exploration activities including geological studies, soil geochemistry, geophysics and drilling. If the mining authorities consider that any activity taking place on the surface may affect the environment, the company can seek permission from the environmental authorities and may have to conduct a Preliminary Environmental Impact Study (EPIA).

This permit must be requested if activities are planned that will affect the environment, such as drilling. A Cultural Heritage Impact Report must also be presented.

"Mining Concession". Any investigation permit may be turned into a mining concession. The mining concession allows for the extraction of mineral resources and is granted for a period of 30 years which is renewable for two further 30-year periods. The maximum size of a mining concession is 100 MGs.

### 4.4 TENURE RIGHTS

The designation of the Penedela investigation permit is defined by the following vertices expressed in geographical coordinates (

Figure **2**, Table 1).

| N.º vértice | Longitud (W)<br>(Geográficas) | Latitud (N)<br>(Geográficas) |
|-------------|-------------------------------|------------------------------|
| 1           | 6º 56' 20"                    | 43º 04' 00"                  |
| 2           | 6º 55' 20"                    | 43º 04' 00"                  |
| 3           | 6º 55' 20"                    | 43º 02' 00"                  |
| 4           | 6º 56' 00"                    | 43º 02' 00"                  |
| 5           | 6º 56' 00"                    | 43º 02' 40"                  |
| 6           | 6º 56' 20"                    | 43º 02' 40"                  |

 Table 1. Exploration concession coordinates (ED50 Coordinate System)

| Research Permit Name | PENEDELA                               |
|----------------------|--|
| Municipality         | Ibias                                  |
| Mineral substances   | Section C) : Gold, Silver, Lead, Zinc. |
| Area covered         | 16 mining grids (+/- 480 Ha)           |
|                      |  |

To keep the exploration concessions in good standing, the company must comply with annual concession fees (fees are determined by the size of the permit) and fulfil the exploration investment requirements.

The annual concession fees for "Penedela" are approximately €25 per mining unit per year (mining grid).

The Penedela investigation permit is in good standing. There is no litigation related to the Property.

### 4.5 ROYALTIES AND RELATED INFORMATION

There are no royalties, taxes or administrative liabilities associated with the investigation permits, other than the annual fee and the exploration commitments.

Spain does not levy mining royalties on minerals produced in the country. The corporate rate of income tax is 30%, and value added tax 21%.

There are tax write-offs available for exploration and capital investments in Spain.

Despite a long and prolific mining history, mining has not been a key producing sector in Spain in the last few decades. Nonetheless, mining is still considered a critical sector which is regulated by the Ministry of Industry under a specific Mining Law and Royal Decree. A brief description of these is as follows:

- 6/1977 Law of Development of Mining (Ley 6/1977, Fomento de la Minería). This law contemplates a Capital grant of up to 20% of investment which is non-refundable if the results are negative for the company. It also allows for other credit lines at low interest rates for companies investing in mining exploration. Other benefits covered by the 6/1977 law are the accelerated depreciation for ten years and a reduction of up to 95% for certain taxes that are applicable to other industries.
- 647/2002 Royal Decree (Real Decreto 647/2002). All the commodities related to mining such as
  precious metals, base metals, phosphates, quartz, iron, clays, etc. are considered of crucial
  importance for the country and therefore all the activities related to the extraction of such
  commodities (i.e. exploration, development and production) are subject to special beneficial
  treatments.
- Ley 43/1995 Corporate tax Law (Ley 43/1995, *Impuesto Sobre Sociedades*), Chapter IX contains special taxation for the mining industry, which contemplates, for instance, the deduction for tax purposes of the exploration and development expenses.

Furthermore, there is no "Special Royalties" or any other mining-specific tax applicable to the mining industry in Spain.

# 4.6 ENVIRONMENTAL LIABILITIES

There are no environmental liabilities attached to the Property.

The only liabilities are those set out in the Restoration Plan of the drilling project, which only includes the requirement to leave any possible accesses and platforms constructed during the drilling campaign in their original condition.

# 4.7 PERMITS

The Company has the necessary permits to carry out exploration campaigns, including drilling. To that end, it has the following authorizations:

- Authorization from the competent mining authority including the approval of the environmental study (EPIA) and the study of any impact on Cultural Heritage.
- The authorization of the owners of the land where the Property is located. The land is declared open access forests/mountains and is managed by the Forestry Administration of the Principality of Asturias. The authorization has been recently extended up to August 17<sup>th</sup>, 2023.
- The obligation to retain the Property is to perform exploration works.

- The Urban License from the San Antolin de Ibias Council to carry out the work in the area.
- The authorization to take water from the streams that pass through the centre of the permit and to use it for exploration purposes, including drilling.

Only in the case of aggressive advanced exploration programs that would result in major ground disturbance, would an environmental authorization be required. The authorization is issued by the regional environmental agency, and usually requires a restoration plan. This process typically requires a few days after the application.

Mineral rights and surface land rights are separate under Spanish law. In case of a conflict between the owner of surface land rights and the owner of mining rights, Spanish law applies a "temporal surface occupation" (expropiación temporal de territorio) allowing the mineral rights owner access to land in order to carry out its exploration work.

No additional permits will be required to access the exploration area.

## 4.8 OTHER RELEVANT FACTORS

To the Author's knowledge, there are no additional factors that could affect access, title, or the right to conduct work on the Property.

# 5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

### 5.1 PHYSIOGRAPHY AND VEGETATION

The Property is located in the Council of Ibias in the area of the Cantabrian mountains. The region is characterised by a very abrupt relief that is predominantly covered by forests due to the steep slopes. The altitude ranges from 208 metres at the Navia river to 1,969 metres at the Mirabales Peak.

The morphology of the area is influenced by the valley of the Navia river which runs from southwest to north amidst a mountainous relief of medium-sized altitudes and moderate to steep slopes, depending on the type of materials that make up the subsoil. The orography determined by the river network is indented by valleys of this nature, transverse to the main one, excavated by streams or tributary torrents, often favoured by the existence of fractures or faults.

The alluvial valley originally used to have a small platform, no more than 100m wide, made up of its own alluvial plain, with a slight longitudinal and transverse slope, laid out at the foot of the relief of the enclosing slopes. The south-western part, which corresponds to the upper course of the River Navia, has a certain transverse disposition to the structures. In this area, the riverbed crosses them, while the rest is noticeably parallel to them, adapting itself to the sections of materials which are more easily eroded (slate,

schist), while the more resistant levels (sandstone, quartzite) constitute the upper parts of the relief, which is formed into successive elevations and depressions influenced by the existing lithology (Figure 3).

If there is one thing that defines the mountains in the Ibias area, it is their gentle orography which is predominantly rounded and not very steep due to erosion. They create deep, shady valleys with steep slopes and generally horizontal peaks with small contrasting outcrops.

The dominant siliceous rocks are responsible for the forms carved out by the action of geomorphological agents.

The vegetation is that of native species of the Atlantic rainforest (oak, beech and birch), scrubland (heather tree,

gorse, blueberries and small trees like rowan trees) and river-bed vegetation (poplars, alders and willows).



Figure 3. Penedela Physiography and vegetation

## 5.2 ACCESSIBILITY

The area of the "Penedela" Investigation Permit can be reached by car from the provincial city of Oviedo through a good road network, including dual carriageway highways and paved federal and provincial roads. Oviedo is linked to Madrid, Spain's capital city, by a four-lane highway and travel time is approximately 4.5 hours.

Oviedo, the second largest city in this region, with over 220,000 inhabitants, provides all the basic services, good accommodation, and lies approximately 150 kilometres east of the Property. Oviedo is also the political and administrative center of the Region, hosting all the regional ministries and agencies, including the Energy, Industry and Mines Bureau.

Access to the Property from Oviedo is available by vehicle by going west for 32 km towards Grado using A-66 Highway and then by taking the regional road AS-29 towards Cangas del Narcea for another 58 km. From there, take the deviation of the AS210 road towards the southwest passing through Pozo de las Mujeres Muertas to San Antolin the Ibias. Stay in AS210 regional road for another 5 km until reaching the end of the road in the Penedela Village. Travel time from Oviedo is approximately 2 hours and 30 minutes (Figure 4).





Accommodation, good restaurants, and communications (internet, phone) are available in the village of San Antolin de Ibias, which is 5 km south of the Property and connected by a paved local road. Most cell phones have a signal while on the Property. Once on the Property, there are several trails and footpaths that circle the hills and descend to the valley (Figure 5).



#### Figure 5. San Antolin de Ibias Village

### 5.3 CLIMATE

In Asturias as in other regions in northern Spain, the climate is cool and damp, being strongly influenced by the Atlantic Ocean. Winters are relatively mild and rainy, while summers are cool and cloudy. Atlantic frontal systems can affect this area all year round, although they are rarer in summer, when, however, drizzle and short showers may occur.

The weather station in San Antolin de Ibias, indicates a yearly temperature average is 10.6°C, and fluctuates between an average minimum of 4°C in January and an average maximum of 23°C in August.

During the summer, the temperatures are cool with little rain. The winters are mild with the lowest temperatures occurring in the mountainous regions which can reach temperature below 10-15°C occasionally during the season. The average annual snowfall in the area is 40 centimetres mainly occurring in January and February and mostly on higher elevations, which last a few days only. When it comes to exploration activities, the weather is not an impediment in Penedela and the work can be conducted year round (Figure 6).



#### Figure 6. Penedela Climate

#### 5.4 LOCAL RESOURCES AND INFRASTRUCTURE

Asturias has motorway communications longitudinally to the coast and transversally to the south from the centre of the province.

The region is connected to the rest of the peninsula by rail and it has a seaport for the transport of goods in Avilés (150 km). There is also an international airport at a distance of 140 km from the Property.

In the area where the Property is located, the anthropic occupation is concentrated in small entities of rural nuclei scattered across the council area, some of which have been abandoned. There is a tendency to larger concentrations in the capital of the council area, San Antolín, and around the industrial hub located in the central part of Asturias. The total population of the council area (National Statistics Institute 2010) does not exceed 2000 inhabitants and a progressive loss of population over time is evidenced.

The socio-economic activity involves a minor amount of agro-livestock, mainly in small family farms with cattle for meat and milk. A coal mine, known as Miura mine, existed in the town of Tormaleo (25 km east of San Antolín). The mine was closed for more than a decade, dealing a severe blow to the council area in terms of employment, living standards and family retention. Fortunately, a local company has currently reopened the mine which extracts premium coal with excellent calorific value. It currently employs around

40 people. There is also limited forestry activity. Due to the mild weather, local tourism has grown in the area. Second residences, restaurants and hotels have become more popular in recent years, which has brought a significant improvement in general services like housing, medical care, water, communications and energy.

## 6. HISTORY

Spain has been producing precious metals since approximately 750 BC, when the ancient Phoenicians traded in the Mediterranean. Most of the mines were at the heart of two large mineralized zones, one in the south known as the Iberian Pyritic Belt (IPB), and one to the northwest of the peninsula known as the Iberian Massif. It is in this last one where the Property is located.

The mines provided silver, copper and gold which contributed to the economic prosperity and culture of the Greek and, later, to the Roman Empires. Historical records indicate that the Romans produced more than 200 tonnes of gold from more than 600 mines of different types, including the large Las Médulas mine which yielded up to 1.6 tonnes of gold (Lewis and Jones, 1970).

Following the collapse of the Roman empire, the mines were rediscovered in the 16th century and were operated occasionally until the 1780s. During the Napoleonic Wars, the mines were left largely idle, but by the mid-1850s, they were put up for tender to provide funds to the government, and were acquired by British and German companies operating in the country. Probably the best-known case is the Rio Tinto Company, which bought the Rio Tinto mine (Rio Tinto mine was the world's leading copper producer between 1877 and 1891).

In the 20th century, the gold mines in Spain waned considerably until the 1980's when increasing prices stimulated several companies such as RTZ, Consolidated Gold Fields and Rio Narcea Gold Mines, to initiate exploration work that resulted in the discovery of deposits such as Salave, Carles and El Valle in Asturias. In Extremadura, Rio Narcea Gold Mines (now Lundin) developed the Cu-Ni-PGE Agua Blanca mine.

### 6.1 **PRIOR OWNERSHIP**

The first owners of the area where the current mining concessions are were British and German companies in the mid-19<sup>th</sup> century interested in exploiting lead and zinc known to exist in the area. It was most developed in the Fornaza and Rio de Porcos areas, north of Penedela and hosted in the same geological formation. Later, during the middle of the 20th century, two local companies operated in the area. More specifically, "Explotaciones Industriales y Marítimas" developed a few shallow levels along the Penedela structure, exploited on surface by the Romans.

After this period, different companies have had the exploration rights in the area. These companies include:

- Cemin S.A (mid 1970s)
- Inmin S.A. (late 1970s)

- Phelps Dodge (1980s)
- Exmine S.A. (early 1990s)
- Rio Narcea Gold Mines (late 1990 early 2010)
- Congeo (Asminarq) (since 2012)

In September 2019, Asminarq signed an option agreement with Western Metallica to explore the Penedela Exploration permit. More recently, in February 2022, Western Metallica and Asminarq signed a Purchase Agreement and consequently, Western Metallica owns 100% of Property.

#### 6.2 HISTORICAL EXPLORATION AND RESOURCE ESTIMATES

The presence of gold mineralization in the area has been known since ancient times. It was not until the mid-19th century when some mine activity occurred in the Fornaza and Rio de Porcos mines. Since the mid 1970s, some companies have carried out intermittent exploration work in the area for the first time.

In the historical archives at the University of Cantabria, exploration reports relative to a mineral exploration campaign carried out in the 1970s by Cemin S.A, a subsidiary of "Real Compañía Asturiana de Minas", were found. These reports mentioned Penedela as one of the main targets for gold in the region. In the same decade, Inmin S.A. conducted a magnetic survey and geochemical program in the area of the Penedela mine, at the southern end of the San Martin anticline.

At some point in the 1980s, the subsidiary company of Phelps Dodge in Spain had the exploration rights. The most compiled geological map in the area corresponds to this period (Figure 7). Phelp Dodge also carried out systematic rock chip sampling and trenching program along the Penedela vein.



Figure 7. Phelps Dodge Geological Map

Exmine S.A. explored the Ibias sector in the early 1990s, which included Penedela. For this purpose, they had a series of investigation permits totalling 325 claims, covering an area of approximately 9750 hectares. In the area of Penedela, along with prospecting and mapping, Exmine S.A. collected 246 samples across the main outcropping breccia zone know as the "Penedela vein" located in the west flank of the anticline (Figure 8). The assays returned anomalous values for Au (50-1850 ppb) and As (300-531 ppm).



Figure 8. Local geology of the Penedela area by Exmine S.A.

Exmine S.A. defined a favourable structure for mineralisation over a distance of 1km, which was checked by 8 drillholes (IB-01 to IB-08) totaling 851 m. They all intercepted gold mineralization. Drillholes 1 and 2, located in the same section, defined a mineralized zone, located between 20 and 45m below the surface; with grades of 1.7 g/t Au and 5 g/t Ag.

The company has had access to the data base but not to the half core. The recoveries were usually over 90%. The assay results show a good correlation between gold and arsenic, while the Au/Ag ratio is approximately 7.

The main intercepts of the 8 drillholes drilled by Exmine S.A., with an approximate cut-off grade of 2 grams per ton, can be seen in Table 2.

|               | FROM   | то      | WIDTH     | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---------------|--------|---------|-----------|----------|----------|--------|--------|--------|
| IB-1          | 28.8   | 57      | 28.2      | 1.7      | 5.1      | 0.03   | 0.58   | 0.01   |
| Including 1   | 50.8   | 57      | 6.2       | 5.63     | 18.2     | 0.03   | 2.4    | 0.01   |
| Including 1.1 | 50.8   | 54.1    | 3.3       | 9.18     | 32.9     | 0.05   | 4.36   | 0.01   |
| IB-2          | 20.1   | 34.2    | 14.1      | 2.55     | 7.7      | 0.05   | 0.08   | 0.66   |
| Including 1   | 20.1   | 23.1    | 3         | 6.53     | 24       | 0.05   | 0.35   | 3.05   |
| Including 2   | 28.4   | 30.3    | 1.9       | 4.68     | 16.2     | 0.25   | 0.04   | 0      |
| IB-2          | 42.85  | 44.85   | 2         | 2.28     | 7.4      | 0.17   | 0.04   | 0.09   |
| IB-3          | 29.05  | 29.7    | 0.65      | 2.72     | 1        | 0.01   | 0.01   | 0.01   |
| IB-4          |        | No inte | ercepts > | 2 g/t Au |          |        |        |        |
| IB-5          |        | No inte | ercepts > | 2 g/t Au |          |        |        |        |
| IB-6          | 9.4    | 10.3    | 0.9       | 3.06     | 37       | NA     | 0.64   | 0.13   |
| IB-7          |        | No inte | ercepts > | 2 g/t Au |          |        |        |        |
| IB-8          | 81.3   | 82.3    | 1         | 3.53     | 31.5     | NA     | 6.54   | 0.05   |
| IB-8          | 150    | 151.9   | 1.9       | 2.89     | 2.7      | NA     | 0.4    | 0.02   |
| Including     | 150.55 | 151.1   | 0.55      | 5.8      | 5        | NA     | 0.6    | 0.01   |

| Table 2. | Exmine | S.A. | drillholes | results |
|----------|--------|------|------------|---------|
| 10010 21 | EXTINC | 0.7  | arminores  | 1000100 |

It is in the mid-1990s when Rio Narcea Gold Mines acquired the exploration rights, and after extensive field work and systematic trenching across the Penedela vein, drilled 1530 m in 10 dholes (drillholes IB-9 to IB-18). Drill results are presented in Table 3.

| HOLE ID#                       | FROM   | то    | Width   | Au (g/t)    | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|--------------------------------|--------|-------|---------|-------------|----------|--------|--------|--------|
| IB-9                           | 28.65  | 47.75 | 19.1    | 1.41        | 0.9      | 0.02   | 0.01   | 0.01   |
| Including 1                    | 42.7   | 47.75 | 5.05    | 3.66        | 1.1      | 0.02   | 0.01   | 0      |
| Including 1.1                  | 42.7   | 43.5  | 0.8     | 16.13       | 3.6      | 0.01   | 0.02   | 0      |
| Including 1.2                  | 47.25  | 47.75 | 0.5     | 10.24       | 4.6      | 0.08   | 0.03   | 0      |
| IB-10                          | 54.7   | 72.29 | 17.59   | 1.75        | 3.9      | 0.06   | 0.02   | 0      |
| Including 1                    | 54.7   | 55.57 | 0.87    | 10.96       | 11.4     | 0.31   | 0.01   | 0.01   |
| Including 2                    | 71.32  | 72.29 | 0.97    | 13.23       | 11.8     | 0.06   | 0.1    | 0.03   |
| IB-11                          | 4      | 35.75 | 31.75   | 1.28        | 0.9      | 0.01   | 0.02   | 0      |
| Including 1                    | 4      | 8.8   | 4.8     | 2.75        | 1.1      | 0      | 0.05   | 0      |
| Including 1.1                  | 4      | 5.26  | 1.26    | 7.02        | 2.8      | 0.01   | 0.13   | 0      |
| Including 2                    | 12.73  | 16.89 | 4.16    | 1.86        | 2.9      | 0.03   | 0.12   | 0      |
| Including 3                    | 18.73  | 19.65 | 0.92    | 3.36        | 2.3      | 0.01   | 0      | 0      |
| Including 4                    | 31.4   | 35.75 | 4.35    | 2.46        | 4.3      | 0.05   | 0.5    | 0      |
| IB-12                          | 127.25 | 128.2 | 0.98    | 1.99        | 2.2      | 0.01   | 0.1    | 0.02   |
| IB-13                          | 29.95  | 30.5  | 0.55    | 1.92        | 1.6      | 0.04   | 0      | 0.02   |
| IB-14                          | 22.05  | 22.85 | 0.8     | 6.03        | 40.4     | 0.1    | 0.22   | 0      |
| IB-14                          | 133.85 | 137.9 | 4       | 2.57        | 0.5      | 0      | 0.01   | 0      |
| IB-15                          |        |       | No inte | ercepts > 2 | 2 g/t Au |        |        |        |
| IB-16                          | 18.65  | 21.45 | 2.8     | 2.93        | 18       | 0.02   | 0.17   | 0.02   |
| Including                      | 20.45  | 21.45 | 1       | 7.36        | 49.3     | 0.03   | 0.47   | 0.03   |
| IB-16                          | 31.65  | 34.6  | 2.95    | 2.73        | 2.1      | 0.1    | 0.01   | 0.01   |
| IB-17                          | 62.4   | 72.03 | 9.63    | 3.24        | 4.5      | 0.01   | 0.02   | 0.02   |
| Including                      | 62.4   | 66.16 | 3.76    | 5.14        | 3.5      | 0.07   | 0.01   | 0.01   |
| IB-18 No intercepts > 2 g/t Au |        |       |         |             |          |        |        |        |

Table 3. Rio Narcea Gold Mines drillholes results

After the construction of the Carles gold-copper mine, in the same region of Asturias, Rio Narcea changes its strategy and stops the exploration activities in this region. Most of the concession the company had in Asturias expired and soon after were cancelled by the authorities.

In early 2012, Congeo (a private group formed by former geologist of Rio Narcea, later on Asminarq), obtained the exploration permits on Penedela through a public tender. The most relevant exploration work carried out by Asminarq has consisted of a rock chip sampling campaign beyond the area previously explored by Rio Narcea and Exsime S.A. and the extension of the geological mapping to the south.

In September 2019, an option agreement was signed between Asminarq and Western Metallica which initiated the exploration work in early 2020.

On December 23, 2021, the Company entered into the Amalgamation Agreement with Western Metallica and Subco. Following the completion of the amalgamation, the Resulting Issuer will continue the business of Western Metallica under the name "Western Metallica Corp." The project never has had enough technical information to complete a Mineral Resources Estimation.

## 6.3 HISTORICAL PRODUCTION

The first references to mining in the project area are to the work carried out by the Romans to extract silver from the Fornaza and Penedela mines (Schulz 1834).

After a very long period of inactivity, in the middle of the 19th century, mining was resumed to extract lead, silver and iron not only in Fornaza and Penedela but also in Riodeporcos area (Figure 9). A foundry was built on the banks of the River Navia (Schulz 1834). Two companies, "Explotaciones Industriales y Marítimas" in Penedela and "Minera Lezama-Leguizamón" in Rio de Porcos, developed a small scale, semi artisanal mine along the outcropping veins until the mid-1950s.



#### Figure 9. Riodeporcos location map.

From the mid-1950s until present days, several companies have owned the tenements with the sole intention to explore the area with no production recorded from that period of time.

# 7. GEOLOGICAL SETTING AND MINERALIZATION

## 7.1 REGIONAL GEOLOGY

Geologically, Spain can be subdivided into two broad geological terrains:

- 1. A siliceous terrain dominated by hard and therefore durable crystalline rocks (granite, schist and gneiss) with little or no carbonate rocks underlying the North and the West of the Iberian Peninsula, and forming typically acidic soils; and
- 2. A limestone-rich terrain dominated by sedimentary rocks deposited in basins underlying the heavily weathered Meseta region in the Central and Eastern parts of the Iberian Peninsula.

The Iberian Peninsula contains rocks ranging in age from the upper Neo-Proterozoic Ediacaran Period (635-542 Ma) to Recent, and almost every lithology is represented. The core of the Iberian Peninsula consists of a Hercynian cratonic block known as the Iberian Massif. The northeastern boundary of this block is marked by the Pyrenean Fold Belt, and the southeastern boundary is represented by the Betic Fold belt. These two fold belts are part of the Alpine thrust and fold belt. The northern part of the Iberian peninsula is dominated by rocks deformed and exposed as a result of the Late Paleozoic Hercynian (or Variscan) orogeny. This Hercynian fold belt is mostly buried by Mesozoic and Tertiary cover rocks on the east side, but outcrops locally throughout the Iberian Chain and the Catalonian Coastal Ranges (

Figure 10) a geological map of the Iberian Peninsula showing the major components of the Iberian Geology.



Figure 10. Geological map of the Iberian Peninsula

The Penedela permit area geologically belongs to the West Asturian-Leonese Zone (WALZ), a part of the Iberian Hercynian Massif. The WALZ represents the transition from the external to the internal zones of the Hercynian Orogen thus recording an increase in the metamorphic degree from East to West as well as in the importance of the granitic rocks. Therefore, two main domains are recognised: the "Navia and Alto Sil" to the East, with lower metamorphic grade, and the "Mondoñedo Nape" to the West, with higher metamorphic grade (

Figure **11**).



Figure 11. West Asturian-Leonese Zone

The Penedela permit is within the "Navia and Alto Sil domain" which consists of a large sequence (up to 10kms) of metasediments of the lower Paleozoic, mainly made up of sandy and slaty rocks. These detrital rocks were deformed during the Hercynian orogeny giving rise to the present regional structure. A well-developed system of tight, asymmetric, NNW-SSE trending and east-verging synclines and anticlines dominates the regional structure. This can be seen on the map by the parallel repetition of the different lithologies. (

Figure 12). The red polygon represents the research permit. The number in the legend represent the relative age of the lithology from oldest (number 1) to youngest (number 10).



#### Figure 12. Regional map, Penedela project

#### 7.2 PROPERTY GEOLOGY

The geology of the Penedela exploration permit is shown in

Figure 13.

Quartzites with sandstone and slate levels of *los Cabos* serie outcrop in the anticline core (orange pastel colour in

Figure 13). This is a shallow marine formation of around 3000m made up of several members ranging in age from the middle Cambrian to the lower Ordovician. Only the two uppermost members outcrop in the Penedela area.

*Los Cabos* serie is overlayed by the younger *Luarca* Slates. This is a homogeneous black shales formation from the middle Ordovician showing highly inconstant regional thickness ranging from 1000m to a few metres or it can be even inexistent. The *Luarca* slates outcrop at the anticline limbs in the Penedela area having around 300m thick (Marcos et al., 1979).

Figure 13. Geology of the Penedela exploration permit



The detrital rocks were deformed during the Hercynian orogeny giving rise to a structure that is dominated by a NNW-SSE trending anticline with sub-vertical axial plane verging to the East and sub-horizontal axis plunging to the South. Nevertheless, some domains where the fold axis plunge slightly to the North (no more than 10<sup>o</sup>) are found. This feature combined with the topography make fold core outcrops discontinuously. These folds were refolded in a later Hercynian deformation stage by upright folds, giving rise to a type III hook fold interference pattern (Figure 14).

Figure 14. Los Cabos Quartzites and the Luarca Slates Section



According to the geology mapped at surface and the observed in historical and recent drill holes, most of the sulphide mineralization is related at the tectonic breccia that appear at the contact between *Los Cabos* Quartzites and the *Luarca* Slates. This is discussed in the following section.

### 7.3 MINERALIZATION

The mineralization is hosted by Cambrian-Ordovician quartzite, sandstone and black shale, with some ironstone and volcaniclastic intercalations, belonging to the Cabos and Luarca Formations. The thickness of these formations ranges between 4500 and 6500 m.

The visible mineralisation (arsenopyrite, magnetite, blende, galena, pyrite, chalcopyrite, cummingtonite, pyrrhotine, iron hydroxides) is found associated to a tectonic breccias parallel to the direction of the San Martin anticline (a dominant north-northwest-trending belt) and dipping 45°-55° W, at the contact between *Los Cabos* quartzites and the *Luarca* slates. The morphology of the breccias is tabular (i.e. vein-like) and the thickness varies from 0.5m to 5.0 m and can be followed by several kilometres along strike.

This breccia is interpreted to have been formed at the contact between the quartzites and the slates during the main folding deformation stage as a consequence of the strain localization. It is mainly made of quartzites and slate clasts in a quartz matrix with sulphide minerals.

The brecciation process provided the space for the fluid circulation and the precipitation of mineralization. This fact, besides the impermeable slates overlying the quartzites and acting as cap rock, made the mineralization concentrate at the breccia.

The breccia vein system consists of three major veins: Penedela, Encarnita and Fornaza, which are part of the Ibias Gold Vein System. The Penedela vein is the most important structure known to date, runs

approximately in a north - south direction and is located on the western flank of the San Martin anticline. It contains quartz-arsenopyrite (gold) mineralization and areas containing such base metals as lead-zinc (silver). The known mineralization is continuous in length for about 450m, the width ranges from 1m to 4.6m and the depth has to be determined by additional drilling, although it has at least 100m.

This mineralization is composed of hyaline quartz with disseminated arsenopyrite and associated pyrite (Figure 15). A recent drilling campaign at Penedela has provided samples of the primary mineralization. Gold occurs encapsulated in primary sulfide minerals, mainly arsenopyrite and pyrite and along grain boundaries coating the Aspy and Py crystals and in microfractures of the sulfides or in associated quartz veins. Over 70% of the gold content can be liberated and the rest is refractory gold.

Recent sampling carried out in the zone, shows that the sector has the potential to host other significant mineralized structures, in addition to other potential exploration sites.

#### Figure 15. "Penedela" vein outcrop



(Left). Hyaline quartz vein with diss. Aspy. 112 g/t Au (Right).

# 8. DEPOSIT TYPES

### 8.1 GOLD DEPOSITS IN SPAIN

Gold mining has a long history in Spain and occurs in a variety of ages, geological settings and deposit types. During the last 15-20 years, intensive exploration for precious metals in Spain led to a new understanding of the various deposit types in the country. The most recent classification for the gold

deposits in Spain was proposed by Castroviejo, 1995. The following is a summary of this classification (see also Table 8).

a) Volcanic-Sedimentary Deposits.

Gold mined from this type of deposit is a by-product occurring as disseminations in massive sulfide ore bodies. This type is mainly found in the Southwestern Iberian Pyrite Belt (SWIPB). Also in the SWIPB are abundant supergene gold concentrations in gossanous ore bodies derived from these deposits.

- **Gossan deposits:** Rio Tinto and Tharsis, Filon Sur and Lapilla mines, Huelva (Garcia Palomero et al., 1986).
- b) Hypogene Gold Concentrations in Hercynian Metamorphic Terrains.

These deposits, some of them discovered in pre-Roman times, were amongst the most explored for in the recent past, especially in the Hesperian Massif (Northwestern Iberia). They are classified into 4 subtypes:

- Vein type, shear-zone hosted: West Santa Comba-Fervenza area, Coruña (Castroviejo, 1990a)
- Mixed granitoid & shear-zone type: Corcoesto, Coruña (Gouanvic, 1983)
- Hydrothermal, granitoid related: Salave, Asturias (Harris, 1980 a, b)
- Skarn gold ores: Carlés, Asturias (Garcia Iglesias and Loredo, 1990; Martin-Izard et al., 1993).
- c) Epithermal Precious Metal Deposits

Epithermal gold, gold-silver or gold-silver and base metals mineralization occurs almost exclusively in the Neogene Volcanic Province of Southeast Spain. These deposits are related to Tertiary age igneous activity represented by calc-alkaline volcanic rocks outcropping mainly in the Almeria province.

- High-sulfidation brecciated orebodies: the Rodalquilar district, Almería (Arribas et at., 1988)
- Low-sulfidation veins: the Cabo de Gata system, Almería (Castroviejo, 1990)
- d) Sedimentary Gold Concentrations in Neogene and Recent Detrital Formations

Gold-bearing paleoplacers and placers occur mainly in northwestern Spain and have been extensively mined by the Romans, contributing significantly to Spanish prehistoric and ancient gold mining.

• Gold Paleoplacers: Las Médulas, León (Perez Garcia & Sánchez Palencia-Ramos, 1992)

The following table summarized the different gold deposits studied in Spain. (Table 4)

| PRECIOUS METALS DEPOSIT TYPES IN SPAIN |   |   |  |  |  |  |  |  |
|--|---|---|--|--|--|--|--|--|
| ТҮРЕ                                   | geological unit/period                            | ocurrence   | example/location                             |  |  |  |  |  |
| vulcanosedimentary<br>hypogenic gold   | hisperian massif<br>hercinian metamorfic terrains | disseminated gold in masive sulfides vein type in shear zones                     | Rio Tinto/ Huelva<br>Fervenza/ Asturias      |  |  |  |  |  |
|  |   | hydrothermal deposit related to granitoids<br>Mix type, shear zones in granitoids | Salave/ Asturias<br>Corcoesto/ Galicia       |  |  |  |  |  |
|  |   | skarn formations<br>vein type Sb(As)-Au and others                                | Carles/ Asturias<br>Santa marta/ Extremadura |  |  |  |  |  |
| epithermal deposits                    | Neogene volcanic province                         | breccia type high sulphidation<br>vein type low sulphidation                      | Rodalquilar/ Murcia<br>Cabo de Gata/ Almeria |  |  |  |  |  |
| paleoplacers                           | neogene detritic formations                       | paleoplacers  | No peninsular                                |  |  |  |  |  |
| Gossan                                 | Au-Ag in massive sulfide gossans                  |   | Rio Tinto/ Huelva                            |  |  |  |  |  |

#### Table 4. Gold deposit types found in Spain.

## 8.2 PENEDELA DEPOSIT TYPE

The Penedela deposit shows geological characteristics of those Hypogene gold deposits classified as Vein type, shear-zone hosted (see previous section).

They consist of quartz veins with arsenopyrite, associated with shear zones, embedded in more or less deformed igneous rocks, in metasediments, gneisses and migmatites. This type of mineralization has a strong structural control that determines the distribution and geometry of the mineralized bodies and the bonanza zones of the gold mineralization.

They are developed mainly in the innermost areas of the Varisco Belt, especially in the Central-Iberian area, in the Galicia-Trás-Os-Montes area and in the Asturoccidental-Leonesa area, according to the division established by Farias et al. (1987).

Boiron et al. (2003) propose a similar deposition model for all the mesothermal gold vein deposits of the European Variscan Belt, based on the ascent of fluids of deep origin through important tectonic structures and that finally mix with other fluids of superficial origin during the late stages of uplift and exhumation of the varisca mountain range, causing a decrease in the solubility of gold and, consequently, its deposition.

Some examples of this type of deposit includes that of **Jales**, in the north of Portugal, which consists of a system of subvertical quartz veins with arsenopyrite embedded in a tardi-varisco peraluminous granite and that were exploited since Roman times and until the beginning of the 1990s, by underground mining, to a depth greater than 600m. Historical data obtained from the Portuguese state company EDM (Empresa de Desenvolvimento Mineiro) indicates an approximate production of 1 million ounces of gold with an average grade of about 10 gr/t Au. Mineralized quartz veins are also embedded in the surrounding shale metasediments (**Gralheira**). Other deposits with similar characteristics also located in the north of Portugal are those of **Castromil**, **Penedono** and **Boticas**. In Galicia, several important gold structures have been defined. The westernmost is known as the **Malpica-Tuy** shear band, described by Castroviejo (1990), which hosts the **Corcoesto** deposit, in which the company Edgewater released resources for more than 1 million ounces of gold of measured and indicated categories at a depth of 250m, with an average grade

of 1.3 gr/t Au (cut-off grade of 0.5 g Au / t). High grade gold intercepts, such as 150 g/t Ag over 1.10m have also been recorded in Corcoesto deposit.

# 9. EXPLORATION

Limited modern exploration has been conducted on the Property since the mid-1970s. Western Metallica has compiled most of the historical data consisting in surface mapping, sampling and drilling. Other exploration activities carried out by Western Metallica during 2019 and 2020 include prospecting, geochemical surface sampling, geophysical survey, satellite image analysis, and drilling.

The historical data as well as the exploration work carried out until now by Western Metallica have revealed that the target mineralization in the area is mostly associated to methamorphic remobilization processes occurred along the faulted contact between the Los Cobos Series and the Luarca Shales, and it is also associated to the late Variscan framework of quartz-veins and veinlets that crosscut these units.

Most of the exploration activities in the Property, are centered around the San Matin Anticline and in the Penedela Tectonic window where exposures of gold-arsenic breccia veins were found. Outside of this area, the rest of the concession was explored to some extent by geochem, geophysical surveys and satellite photo analysis.

This section summarizes the exploration activities carried out by Western Metallica since October 2019 to December 2020, with an investment of CAD\$600.000.

# 9.1 SATELLITE IMAGE STUDY

A multispectral remote sensing analysis was performed in the area using the following four sets of images. These are:

- a Landsat ETM+ image acquired in September 2002.
- a Landsat OLI acquired in August 2019.
- an ASTER image from September 2003.
- a Sentinel 2 image acquired in August 2019.

The analytical techniques employed were Band Combination, Rationing, Principal Component Analysis (PCA) and Directed Principal Component Analysis (DPCA).

The objective of the image analysis was to identify areas that could be related to some sort of hydrothermal alteration. The Property was checked for clay minerals potentially related to hydrothermal alteration processes. The result was negative in all cases. By contrast, when the images of the different satellites were tested for Ferric Iron, the correlation with the PCA result was excellent. The Fe-oxide was interpreted as the result of the oxidation process of outcropping hydrothermal sulphide mineralization. The following figure shows the Fe-oxide rich areas picked up by the PCA analysis.

Map of target areas deduced by the remote sensing analysis based on the Sentinel 2 PCA-2 image. Color legend is dimensionless. PNOA high resolution orthophoto as background image. (Figure 16).



Figure 16. Map of target areas deduced by the remote sensing analysis

#### 9.2 GEOPHYSICAL SURVEY

A ground Induced Polarization and Resistivity survey was carried out by International Geophysical Technology (IGT), a reputable consulting firm out of Madrid. The survey consisted of three E-W profiles

with a variable length of 900 to 1000 m, totaling 2875m. The study concluded the sulphide mineralization would be associated to levels of resistivity (quartz tabular bodies hosted in quartzites) with high chargeability values. Four targets (A, B, C and D) were identified in the Profile TE-1 and TE-2. (Figure 17 and Figure 18)





Figure 18. Resistivity and chargeability pseudo sections, profile TE-2



#### 9.3 GEOLOGICAL MAPPING.

A detailed geological map 1:1000 scale was completed over the entire property. The objective was to update the geological and structural interpretation as well as to carry out geological modelling (Figure 19).





### 9.4 GEOCHEM SAMPLING

Two types of geochemical sampling were performed: rock and soil sampling. A total of 163 samples of rock were collected from the area of interest including sectors that have never been sampled before. Gold values over 2.0 g/t were recorded in the south edge of the Penedela structure, which added 150 m

of strike length to the south. The location of these samples is shown in Figure 20a. Additionally, a geochemical soil program was performed totaling 260 samples in three lines spaced 100m from each other (Figure 20b). Samples were spaced 5m.



Figure 20. Western Metallica Geochem Sampling.

(b) Penedela Soil Samples - Au



Table 5 shows the location of the start and end of each soil sampling line. 89 samples were collected in Line 1, 90 samples in Line 2 and 81 samples in Line 3.

Table 5. UTM location of geochemical soil sampling.

| 1 |              | LINE 1    |                  |              | LIN       | E 2              | LINE 3       |           |                  |
|---|--------------|-----------|------------------|--------------|-----------|------------------|--------------|-----------|------------------|
|   | Distance (m) | Sample Nº | UTM Coordinates  | Distance (m) | Sample Nº | UTM Coordinates  | Distance (m) | Sample Nº | UTM Coordinates  |
|   | 0            | L1001     | 0668962/4768840  | 0            | L2001     | 0668930//4768938 | 0            | L3001     | 0668887//4769034 |
|   | 440          | L1089     | 0668551//4768748 | 445          | L2090     | 0668498//4768864 | 400          | L3081     | 0668503//4768978 |

## 9.5 TARGET SELECTION

The most important exploration strategy at the Property has been detailed mapping of structures followed by geochem sampling and drilling. The main objective of Western Metallica in its first exploration campaign was to confirm the presence of mineralization and extend it along strike beyond what was explored by previous companies.

The Penedela exploration potential remains open in both directions and at depth. Opportunities to intercept the projection of the Penedela breccia veins and find other veins are considered good. The results of the exploration served to determine three areas of interest for follow-up (Figure 21).

**Penedela structure**. Test the extension of the Penedela structure underneath of the Luarca shales along strike to the north and south, and at depth towards the west.

**Cerro-Anticline Target.** Test the hinge of the anticline which eventually could also be mineralized at the contact between the quartzites and shales. The target is supported by the geophysical and geochemical anomalies found in this area.

**Cerro East Target.** Test the breccia contact in the western flank and its extension to north, south and at depth. Structural mapping, roman vestiges and geochem assay results support this target.



Figure 21. Penedela Targets

## 10. DRILLING

A total of 23 holes has been drilled in the Penedela project, of which 18 were drilled by the previous operators, Exmine S.A. and Rio Narcea Gold Mines in the 1990s. The results of these drilling campaigns are presented in section 6 of this report.

All the drilling has been diamond core. Unfortunately, Western Metallica has not been able to find the old core. However, Western Metallica could find most of the collar location in the field and had access to the data base (logs, collar coordinates, survey and assay results). The historical drilling data has been used as a reference only as it cannot be validated.

Figure 22 shows the location of historical drilling (in red) and the Western Metallica drill plan (in blue). Western Metallica selected three drilling target areas: Penedela, Cerro-Anticline and Cerro East, of which Penedela target is the only one that has been drilled so far.



#### Figure 22. Historical drilling and Western Metallica drilling.

## **10.1 DRILL METHODS**

All five drill holes at the Property were completed using core drilling and classified as exploration drilling. Core drilling size is HQ (63.5 mm core diameter). Western Metallica engaged GEONOR to complete the drill program (Figure 23).



Figure 23. Geonor drill machine at Penedela Project August 2020.

The first drilling program by Western Metallica in the Penedela project consisted of 1600m of drilling, of which the company has completed about 50%. A total of 5 holes (IB019 to IB023) were drilled along the Penedela breccia vein with the objective of checking the continuity of the vein along strike and at depth (Table 6). The target zone to be tested is approximately within the first 100m along dip and for 400m along strike. The Figure 24 shows the location and attitude of the drilling performed by Western Metallica in the Penedela target.

|       | DRILLING PROGRAM PENEDELA 2020                       |        |         |     |       |              |            |            |         |             |
|-------|--|--------|---------|-----|-------|--------------|------------|------------|---------|-------------|
|       | WESTERN METALLICA SL                                 |        |         |     |       |              |            |            |         |             |
|       | SECTOR EAST NORTH ELEV. BEARING DIP START COMPLETION |        |         |     | ME    | METERAGE     |            |            |         |             |
|       |  |        |         |     |       |              |            |            | PLANNED | CARRIED OUT |
| IB019 | PENEDELA   | 668409 | 4768202 | 458 | N120E | -47º         | 02/06/2020 | 10/06/2020 | 110     | 115.6       |
| IB020 | PENEDELA   | 668374 | 4768136 | 410 | N90E  | -45º         | 11/06/2020 | 23/06/2020 | 140     | 134.4       |
| IB021 | PENEDELA   | 668374 | 4768134 | 410 | N120E | -45⁰         | 24/06/2020 | 10/07/2020 | 200     | 213.6       |
| IB022 | PENEDELA   | 668410 | 4768350 | 491 | N105E | <b>-</b> 55⁰ | 14/07/2020 | 22/07/2020 | 150     | 154.85      |
| IB023 | PENEDELA   | 668355 | 4768500 | 550 | N90E  | -50º         | 23/07/2020 | 21/08/2020 | 170     | 206.5       |
|       |  |        |         |     |       |              |            | TOTAL      |         | 824.95      |
|       |  |        |         |     |       |              |            |            |         | 52%         |

#### Table 6. Western Metallica Drilling program





Figure 26, Figure 27 and Figure 28 show the geological interpretation of the Penedela vein in cross sections based on the drilling. The location of the sections in plan view are presented in Figure 25.



Figure 25. Plan view geological map of the Penedela tectonic window. Section's location.







Figure 27. Geological interpretation of the Penedela vein Section #2

Figure 28. Geological interpretation of the Penedela vein Section #3



Table 7 lists the significant intercepts for the five holes drilled by Western Metallica in the Penedela vein.

|               |       |       |        | Au  | Ag    | Cu  | Mn  | Pb  | Zn   |
|---------------|-------|-------|--------|-----|-------|-----|-----|-----|------|
| HOLE          | From  | То    | Meters | g/t | g/t   | %   | %   | %   | %    |
| IB019         | 25.5  | 41.0  | 15.5   | 2.0 | 7.3   | 0.1 | 1.2 | 0.8 | 0.0  |
| Including 1   | 25.5  | 32.0  | 6.5    | 2.5 | 9.4   | 0.0 | 0.0 | 1.1 | 0.0  |
| including 1.1 | 30.5  | 32.0  | 1.5    | 4.3 | 2.0   | 0.0 | 0.0 | 0.0 | 0.0  |
| including 2   | 36.0  | 41.0  | 5.0    | 2.5 | 9.4   | 0.1 | 3.7 | 1.1 | 0.1  |
| IB019         | 65.5  | 66.8  | 1.3    | 2.3 | 8.0   | 0.0 | 0.0 | 1.1 | 0.0  |
| IB019         | 73.0  | 74.0  | 1.0    | 2.8 | 6.0   | 0.0 | 0.0 | 3.9 | 0.0  |
| IB019         | 75.0  | 76.0  | 1.0    | 2.3 | 4.0   | 0.0 | 0.0 | 0.1 | 0.0  |
| IB019         | 37.0  | 46.0  | 9.0    | 1.3 | 2.4   | 0.1 | 5.2 | 0.0 | 0.1  |
| IB019         | 69.0  | 70.0  | 1.0    | 0.9 | 42.0  | 0.1 | 0.0 | 6.3 | 0.0  |
|               |       |       |        |     |       |     |     |     |      |
| IB020         | 45.0  | 51.0  | 6.0    | 3.0 | 35.8  | 0.1 | 0.0 | 1.4 | 0.0  |
| Including 1   | 47.0  | 51.0  | 4.0    | 3.6 | 51.8  | 0.2 | 0.0 | 2.0 | 0.0  |
| including 1.1 | 47.0  | 48.0  | 1.0    | 6.1 | 23.0  | 0.2 | 0.0 | 0.1 | 0.0  |
| including 1.2 | 50.0  | 51.0  | 1.0    | 6.1 | 177.0 | 0.3 | 0.0 | 8.0 | 0.0  |
|               |       |       |        |     |       |     |     |     |      |
| IB021         | 45.0  | 48.0  | 3.0    | 2.7 | 19.3  | 0.2 | 0.1 | 0.1 | 0.0  |
| Including 1   | 47.0  | 48.0  | 1.0    | 5.3 | 49.0  | 0.4 | 0.1 | 0.2 | 0.0  |
| IB021         | 70.0  | 74.0  | 4.0    | 0.7 | 38.5  | 0.1 | 0.0 | 0.1 | 0.0  |
| IB021         | 89.2  | 94.0  | 4.8    | 0.7 | 2.3   | 0.1 | 0.6 | 0.0 | 0.1  |
|               |       |       |        |     |       |     |     |     |      |
| IB022         | 23.0  | 29.0  | 6.0    | 0.6 | 84.0  | 0.1 | 1.1 | 1.9 | 2.3  |
| including     | 23.0  | 27.6  | 4.6    | 0.5 | 108.0 | 0.1 | 1.5 | 2.4 | 3.0  |
| IB022         | 35.0  | 36.0  | 1.0    | 0.4 | 102.0 | 0.0 | 2.9 | 7.0 | 10.1 |
|               |       |       |        |     |       |     |     |     |      |
| IB023         | 80.8  | 83.8  | 3.0    | 3.0 | 21.7  | 0.0 | 0.0 | 0.0 | 0.0  |
| including     | 81.8  | 82.8  | 1.0    | 8.7 | 59.0  | 0.1 | 0.0 | 0.1 | 0.0  |
| IB023         | 106.0 | 107.0 | 1.0    | 6.5 | 2.0   | 0.0 | 0.0 | 0.0 | 0.0  |

Table 7. Western Metallica drilling significant intercepts

#### **10.2 DRILL HOLE LOGGING PROCEDURE**

Drill core is boxed and transported to the core shed facilities in San Antolin de Ibias where the core is logged and processed.

The core was logged on paper on a columnar log sheet and rock codes assigned at the time of data entry.

Sampling was completed on the known veins with an adequate interval of waste rock around the vein, with sample intervals placed on the contacts.

The sample width is between 0.75–1.0 m. All core is labelled and photographed. The core is split for sampling with a diamond saw. Samples are then bagged and tagged with sample identifiers and sent to the ALS lab in Seville.

## **10.3 CORE RECOVERY**

The rock quality at the Property is good in the mineralized intercept as well as in the wall rock. The core is received in the core shack and the pieces are reconstructed. The length of the core is measured and compared with the downhole length recorded in the core box.

A 95% recovery in the mineralized zone is considered acceptable, and the average recovery is 97%. Recoveries between 85% and 95% are usually related to fault zones.

The Author reviewed the recovery data for drill holes and agrees with the exploration geologist's assessment of overall good recoveries.

## **10.4 COLLAR SURVEY**

Collar coordinates and downhole azimuth and inclination are determined using total station equipment, before and after hole completion. The surveyors orient the rigs and provide proper initial alignment and inclination to the drilling rods. Collar locations are plotted and verified in plan view and cross section by geologists.

### **10.5 DOWNHOLE SURVEY**

The procedure consists of down hole azimuth and inclination readings using Reflex equipment every 30– 50m downhole and a last reading at the bottom of the hole. The trace of the hole is validated by the geologist.

### **10.6 GEOTECHNICAL DRILLING**

Geotechnical logging consists of descriptions of the fracturing degree of the mineralized veins and host rock on both sides of the vein contact, visual determination of the rock-quality designation (RQD) and rock resistance and descriptions of the fracture types.

#### **10.7 DRILL CORE INTERVAL LENGTH/TRUE THICKNESS**

Drill holes are drilled to obtain the best intersection possible, such that the intersected interval is as close as possible to the true width. The Penedela target is a tabular body dipping 45°-55°W so the drill holes were setup between 45°-55° to the east in order to intercept as much perpendicular as possible.

## 11. SAMPLING PREPARATION, ANALYSIS AND SECURITY

### 11.1 SAMPLING METHOD

Diamond drill core of HQ diameter is delivered to the core logging facility in San Antolin de Ibias where the Western Metallica geologists select and mark sample intervals according to lithological contacts, mineralization, alteration and structural features. Sample intervals range from 0.75–1.20m in length within mineralized structures to 1.5–2.0m in length when sampling waste rock.

Drill core intervals selected for sampling are cut in half using a diamond saw. One half of the core is retained in the core box for further inspection and the other half is placed in a sample bag.

The sample number is printed with a marker on the core box beside the sampled interval. Samples were weighed and identified by bar codes to avoid transcription errors with manual markings. Also, both sides of the bag were numbered with a permanent marker and a moisture-resistant plastic cardboard was inserted inside. The bags were highly resistant (600 gauges), to ensure that no breakage occurred during transport to the laboratory. Once they had been coded, they were placed in plastic boxes to ensure good transport condition.

### 11.2 DENSITY

Bulk density measurements were systematically taken on drill core. The specific gravity measurements were collected on 10cm or longer whole core vein samples using the unsealed water immersion method. The samples are weighed in air, recorded, then placed in a basket suspended in the water and the weight is recorded again. The samples are not waxed or sealed. The formula used is:

```
Specific gravity (SG) = Weight in air / (Weight in air – Weight in water)
```

Based on this method, an average bulk density value of 2.8 t/m<sub>3</sub> was determined.

### **11.3 LABORATORY**

The samples were shipped to ALS Geochemistry Sevilla laboratory, Spain, for sample preparation. ALS Geochemistry Sevilla is a satellite sample preparation facility accredited under ALS Minerals, the global leader in providing analytical geochemical and metallurgical services to the mining industry. After preparation at ALS Minerals Sevilla, split pulp samples were shipped to ALS Geochemistry Loughrea, Ireland, for assaying. ALS Minerals Loughrea is an independent laboratory certified with a global quality

management system that meets all requirements of International Standards ISO/IEC 17025:2017 and ISO 9001:2015. ALS Minerals includes its own internal quality control samples comprising certified reference materials, blanks, and pulp duplicates.

## **11.4 SAMPLE PREPARATION**

A Sample Submittal Form provided by ALS was used to indicate to the laboratory the sample preparation procedures and the chemical analyses that have been requested, in accordance with the laboratory's own codes.

On receipt of the samples, the laboratory sent work orders (WO) confirming receipt and instructions.

The samples, which are usually around 2kg in weight, were prepared according to the following procedure: the sample is crushed to at least 70% of the sample less than 2mm, the sample is split to obtain 1kg of sample, and the split is then pulverised to obtain more than 85% below 75 microns (ALS code 31BY).

Rejects and pulps resulting from the preparation were returned to Western Metallica's facilities for storage and to have material available for duplication, metallurgical testing or other studies.

## 11.5 ANALYSIS

The analysis for gold was carried out by fire assay with 25 grams of sample and the subsequent reading of the concentration by atomic absorption (AAS). The code used in ALS is AA-25.

An ICP analysis was also requested for a series of 33 elements by "almost complete" digestion by leaching with four acids and a reading by ICP-AES (inductively coupled plasma atomic emission spectroscopy)

When the concentration detection limit exceeded 10% for some elements, code OG62 was requested, which analysed upper limits using 4 acids by ICP-AES.

## 11.6 QUALITY ASSURANCE AND QUALITY CONTROL

### 11.6.1 OVERVIEW

Western Metallica implemented its own QAQC protocol to ensure the accuracy and quality of the assay results.

Blanks, standards and duplicates were used in the following way:

Sample number 5 of the shipment is entered as a blank, sample number 10 of the shipment is entered as a standard and sample number 15 of the shipment is sent for analysis in a different laboratory as a duplicate (in this case rather than ALS, SGS is used).

The cycle is then repeated, so that sample number 20 is once again a blank, sample number 25 a standard and sample number 30 a duplicate, so that, in summary, all samples that are a multiple of 5 are control samples.

The laboratory carries out its own QA-QC controls which it sends out with each set of analytical results.

From the analysis of the lithogeochemistry sampling and the channel sampling control samples we conclude that there are no abnormal values in the blank samples, and no significant differences in excess of the two standard deviations in the case of the standards.

Of the 36 blank samples, only two have gold values of 0.01 g/t; the rest are below the detection limit.

Of the standard samples used for quality control, the values obtained are within the range of the two standard deviations. The following standard is an example of this (Figure 29):



Figure 29. Example of a value graph of the jk-17 standard with respect to acceptable values.

### 11.6.1 DATABASE

Collar, down-hole survey, lithology, structures, alteration, and assays are stored in a series of Excel Spreadsheets.

Logging data is captured using paper log sheets that is loaded into a excel spreadsheet. Assay data were received from the ALS lab via emails in comma-separated value (CSV) data files and Excel files, which are imported into the Excel database. After data is imported, visual checks are done to ensure that the data was imported properly. The backup files are located on the Western Metallica cloud.

## **11.7 SAMPLE SECURITY**

Drill core was transported by Western Metallica personnel and by drilling contractors' trucks from drilling locations to a secured coreshed where the core was logged and processed. The coreshed is located in San Antolin de Ibias, about 9km from the project area.

Upon completion of logging and sampling, all the core boxes were stored, and the samples securely sealed and transported to ALS lab in Seville using a courier service.

The assay results from the samples were received by authorized Western Metalllica geologists. Remaining drill-core and laboratory reject samples are stored at the coreshed.

Western Metallica's facilities in San Antolin de Ibias are kept under lock and key. The office is also separate from the coreshed. Personnel can only access Western Metallica's offices and coreshed for the purposes of carrying out the tasks assigned to them.

According to the Author experience, the sample preparation, security and analytical procedures are the most adequate available.

# 12. DATA VERIFICATION

The Author visited the Property for 1 day on July 5, 2021 reviewing the local geology, the soil and rock sampling and the drilling (drill core) completed by the Company. Four rock chip samples were collected from Penedela outcrops and another 4 samples from holes IB019 and IB023, in order to compare the results. During his last visit to the property on November 3<sup>rd</sup>, the Author checked the results from the samples collected in his previous visit.

The same sampling methodology as that used by the Company was used. Samples were collected by the Author and delivered personally to ALS's sampling preparation facility in Seville. No limitations or failure were found to conduct this verification.

Samples collected by the Author were analyzed using Fire Assay followed by AA-25, same package used by Western Metallica. Table 8 shows the comparison between the Author's samples and the Western Metallica's results. Both set of samples show a high level of correlation, indicating that the protocols used for sample preparation and assaying were adequate. According to this, the Author's opinion is that data obtained by Western Metallica has been verified.

| Author<br>Sample | WM<br>Sample | type  | Laboratory | Au (g/t)_AA25_original | Au (g/t)_AA25_check |
|------------------|--------------|-------|------------|------------------------|---------------------|
| 5654332          | IB019003     | IB019 | ALS        | 3.61                   | 3.12                |
| 5654333          | IB019009     | IB019 | ALS        | 4.32                   | 4.06                |
| 5654334          | IB023041     | IB023 | ALS        | 6.51                   | 6.98                |
| 5654335          | IB023107     | IB023 | ALS        | 1.97                   | 2.24                |

#### Table 8. Data Verification

Technical Report on the Penedela Exploration Concession Asturias Region, Spain

| 5654336 | 100027 | rock chip | ALS | 4.18 | 3.98 |
|---------|--------|-----------|-----|------|------|
| 5654337 | 100029 | rock chip | ALS | 1.52 | 1.87 |
| 5654338 | 100030 | rock chip | ALS | 5.78 | 6.33 |
| 5654339 | 100032 | rock chip | ALS | 11.9 | 9.87 |

# 13. MINERAL PROCESSING AND METALLURGICAL TESTING

This section is not applicable.

## 14. MINERAL RESOURCE ESTIMATES

This section is not applicable.

#### 15. MINERAL RESERVE ESTIMATES

This section is not applicable.

#### 16. MINING METHODS

This section is not applicable.

### **17. RECOVERY METHODS**

This section is not applicable.

#### **18. PROPERTY INFRASTRUCTURE**

This section is not applicable.

### **19. MARKET STUDIES AND CONTRACTS**

This section is not applicable.

## 20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This section is not applicable.

# 21. CAPITAL AND OPERATING COSTS

This section is not applicable.

## 22. ECONOMIC ANALYSIS

This section is not applicable.

## 23. ADJACENT PROPERTIES

There are no other overlapping or adjacent claims that may have an impact on the Property.

## 24. OTHER RELEVANT DATA AND INFORMATION

There is, to the Author's knowledge, no additional data or information, of either a positive or negative aspect, that would change the data presented herein.

## 25. CONCLUSIONS

The conclusions that emerge from the results obtained from the exploration work carried out by Western Metallica in the Penedela project can be summarized as follows:

- The Penedela district contains a complex system of breccia veins, controlled by Hercynian structures, which primarily follow the regional direction of the anticline fold. It also contains NE-SW, NW-SE as well as east-west structures, all of which have the potential to host mineralized veins.
- The current drilling results performed by Western Metallica in the Penedela vein correlate well with the historical data base drilling results.
- Sulphide mineralization is located at the brecciated contact between shales and quartzites, and it could be extended into the quartzites.
- The drilling has confirmed the continuity of the Penedela breccia vein along strike for at least 450m and the width varies from 1.0 to 4.6 m at gold grades between 2.0 g/t and 8.7 g/t.
- The predominant sulphide mineralization is Aspy and Py with associated Au and Ag. Hole IB022 presented high base metal content as well. Possibly due to a different mineralizing episode that needs to be investigated.
- Towards the north end, hole IB023 intercepted 3 m @ 3.04 g/t Au and 21.7 g/t Ag including 1m at 8.69 g/t Au and 59.0 g/t Ag. Towards the south end, hole IB021 intercepted 3m @ 2.07 g/t Au and 19.3 g/t Ag including 1 m at 5.30 g/t Au and 49.0 g/t Ag. It is very likely the Penedela structure will continue in both directions underneath of the Luarca shales.
- In addition to the Penedela vein, the reconnaissance programme carried out by Western Metallica has identified other areas with the potential to be evaluated by drilling. The main targets identified include the mineralization associated with the anticline at the point of the lithological

contact between the quartzite and shale formations, referred to as the Cerro Target, and the discovery of a vein similar to the Penedela on the eastern flank of the fold, which has been given the name Cerro East Target.

The Author has verified the exploration data, as well as the local geology and drill core logging information. No uncertainties or mistakes have been found, thus the exploration information is considered reliable. The interpretation of this data supports the geological potential of the Property for finding other breccia veins within the context of the San Matin anticline.

## 26. RECOMMENDATIONS

The Property is of sufficient geological potential to recommend exploration programs focused on exploration targeting. The exploration programs should consist of drilling aimed to identify new areas to look for new discoveries. The total program consists of 6,000m of diamond drilling.

The targets identified for drilling are:

- Extend the exploration of the Penedela vein along the western limb for another 3km. When the quartzite unit is exposed by erosion the lithological contact shows outcropping mineralization along three kilometres to the north. Several occurrences and old artisanal mines are in this trend.
- **Explore the anticline eastern limb.** Continuous and intense soil geochem and geophysical anomalies obtained by Western Metallica surveys indicate a potential target in the eastern limb. Never drilled.
- **Test the mineralization hosted in the hinge area.** An area of 1000m x 500m in the hinge covered by shales has never been drilled. Geochem and geophysics anomalies are in this area.
- South extension of the Anticline. Covered by shales, this area has never been explored. The breccia vein style of mineralization could continue to the south. Two phases of diamond drilling are recommended for exploring these targets:

**Phase 1:** 3000m of drilling program is recommended as follow:

1) A 750m drill program to extent the exploration of the Penedela vein along the western limb strike.

2) a 750m exploration drill program to test the mineralization at the hinge area is recommended. This length is according to the thinner cover of the shale pile upon the breccia (no more than 50m).

3) a 1000m exploration drill program to explore the anticline eastern limb. Field works point to the possibility of a Saddle Reef-type deposit. Thus, if there is mineralization at the western limb, it is expected to find mineralization at the eastern limb.

4) A 500m drill program to extent the exploration of the Penedela vein along the western limb strike.

**Phase 2:** 3000m of drilling program is recommended as follows:

- 1) A mineralized vein in the breccia located at the lithological contact between the quartzites and the shales, outcrops 3km North along the strike of the so-explored mineralizaed vein at the eastern limb of San Martin anticline in Penedela. Thus, another 1000m of drilling program besides those of Phase 1, are recommended to check the continuity between the outcrops. The metres planned for the other exploration points of Phase 2, if not applicable for negative results at Phase 1, are recommended to be dedicated to this target.
- 2) If point 2 at Phase 1 reveals positive results, then an additional 750m drill program to widen the explored area at Phase 1, is recommended. If the results at Phase 1 were negative, the hinge area is not a target and no drilling in the area is recommended. In such case, these 750m would explore the continuity of the western limb vein to the North.
- **3)** If point 3 at Phase 1 reveals positive results, then an additional 1000m drill program to widen the explored area at Phase 1, is recommended. If the results at Phase 1 were negative, the eastern limb area is not a target and no drilling in the area is recommended. In such case, these 1000m would explore the continuity of the western limb vein to the North.
- 4) If point 4 at Phase 1 reveals positive results, then an additional 500m drill program to widen the explored area at Phase 1, is recommended. If the results at Phase 1 were negative, the hinge area is not a target and no drilling in the area is recommended. In such case, these 750m would explore the continuity of the western limb vein to the North.

In addition, an annual prospect generation program consisting of prospecting, soil and rock geochemical surveys, mapping, and geophysical surveys is recommended. This annual prospect generation program is estimated to cost \$50k per year regardless the results of Phase 1.

Table 9 summarizes the proposed budget for the exploration program

| ITEM                   | Phase_1 (\$) | Phase_2 (\$) |
|------------------------|--------------|--------------|
| Geological Mapping     | 30,000.00    | 15,000.00    |
| Rock and Soil Sampling | 40,000.00    | 20,000.00    |
| Drilling               | 500,000.00   | 500,000.00   |
| Metallurgical Testwork |              | 80,000.00    |
| Geophysics             | 70,000.00    | 40,000.00    |
| Special Studies        | 30,000.00    | 15,000.00    |
| Administration         | 60,000.00    | 60,000.00    |
| Contingency            | 20,000.00    | 20,000.00    |
| Total                  | 750,000.00   | 750,000.00   |

Table 9. Proposed budget for the next two phases of exploration program

# 27. REFERENCES

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