



EMERITA RESOURCES CORPORATION

NI 43-101 TECHNICAL REPORT ON THE LA ROMANERA AND LA INFANTA  
POLYMETALLIC DEPOSITS, SPAIN

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**Effective Date: May 4, 2023**

**Signature Date: July 5, 2023**

**AUTHORED BY:**

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ENERGY AND CLIMATE CHANGE  
ENVIRONMENT AND SUSTAINABILITY  
INFRASTRUCTURE AND UTILITIES  
LAND AND PROPERTY  
MINING AND MINERAL PROCESSING  
MINERAL ESTATES  
WASTE RESOURCE MANAGEMENT

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## **1 SUMMARY**

### **1.1 Introduction**

Emerita Resources Corporation (Emerita) is an exploration company focussed on the discovery and development of high-grade polymetallic deposits in Spain. Emerita is a Canadian public company and its common shares are listed on the Toronto Stock Exchange (EMO).

Emerita commissioned Wardell Armstrong International Limited (WAI) to prepare this Technical Report in accordance with the disclosure requirements of National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (NI 43-101) to disclose recent information about Emerita's wholly-owned La Romanera and La Infanta polymetallic deposits in Andalusia, Spain. This Technical Report includes maiden Mineral Resource estimates (MRE) for the deposits.

### **1.2 Property Description and Ownership**

Emerita Resources Corporation holds 100% ownership of the La Romanera Exploration Permit (No. 15029) via its subsidiary Emerita Resources España SLU. The permit covers some 1,546.6ha which includes the La Romanera and La Infanta polymetallic deposits. It was granted July 12, 2021 for a period of 26 months, with the option to renew for a further 3 years. Emerita has surface access agreements with local landowners covering the main exploration area.

The permit is currently referred to by the Company as the Iberian Belt West (IBW) Project which is located in SW Spain within the Huelva Province of Andalusia. The project is situated approximately 500km southwest of Madrid, 142km west of Seville, 61km north-west of Huelva and 20km east of the Spanish/Portuguese border. Two small towns, Puebla de Guzman and Paymogo, are within 10km from the property. Approximately 80% of the property lies within the Municipality of Puebla de Guzman and the remainder within the Municipality of Paymogo.

### **1.3 Geology and Mineralisation**

The La Romanera and La Infanta deposits are located in the northwest of the Spanish Iberian Pyrite Belt (IPB), within the northern limb of the Puebla de Guzman anticline, hosted by the Paymogo Volcano-sedimentary Complex (VSC).

Both deposits are classified as Volcanic-Hosted Massive Sulphide (VHMS) deposits and occur primarily as tabular strata-bound lenses of polymetallic (Zn, Pb, Cu, Ag, Au) massive sulphides. Minor amounts of disseminated to semi-massive sulphide occur locally within the broader sulphide lenses, but have limited continuity at the current drill spacing. No significant stockwork-style mineralised zone is recognised in the deposits. The main mineralogy of the deposits is pyrite, sphalerite, galena, chalcopyrite, arsenopyrite and members of the tetrahedrite-tennantite solid solution series. La Infanta contains lower proportions of pyrite and arsenopyrite.

The Emerita geology team have completed detailed geological mapping and core logging to constrain the geological framework of each deposit, including the host lithostratigraphic sequence and the nature of key contacts. At La Romanera, mineralisation is hosted by a purple tuffaceous shale unit, underlain conformably by a footwall rhyolite. A sinistral thrust bounds the hanging wall contact of the mineralised horizon with overlying Gafo Formation shales and quartzites. Locally the base of the Gafo Formation is intruded by granodiorite. The La Infanta deposit is located at the contact between a footwall unit of highly silicified dacitic tuffs and a hanging wall volcanoclastic unit. Faulting is interpreted to have created a repetition of the mineralised horizon.

Surface drilling has so far defined five massive sulphide lenses used as estimation domains in Resource modelling: the Upper and Lower Lens at La Romanera and the North, South and South 1 Lenses at La Infanta.

The La Romanera deposit dips approximately 70° to the north from surface, with a down-dip extent of approximately 720m so far tested by drilling. The Upper and Lower Lens vary from around 2.0 to 32.0m in true thickness and average 10.0m overall, with a strike length around 700m. The lenses are locally both separated (~2.0 to 30m) and in contact with one another.

The La Infanta deposit dips approximately 70° to the north from surface, for a down-dip length of approximately 425m (North Lens), 190m (South Lens) and 150m (South Lens 1). The massive sulphide lenses vary from around 1.0m to 10m true thickness and average around 3.0m overall, with strike lengths of 1900m (North Lens), 1090m (South Lens) and 325m (South Lens 1). The lenses are separated from one another by 15.0m to 30.0m.

#### **1.4 Exploration and Drilling**

Emerita has carried out a range of exploration activities at the IBW Project including historic data compilation, geological mapping, soil geochemical sampling, surface and downhole geophysics, and exploration drill programmes.

Historical exploration drilling has been excluded from the MRE drillhole database, with drill coverage replaced by Emerita drilling. Emerita has completed over 70km of diamond drilling since July 2021. Nominal drill spacing is 50m x 50m in the core of the deposits and 100m x 100m on the periphery.

The authors consider that the drilling and core sample collection at the IBW Project are undertaken by competent personnel using procedures that are consistent with industry best practice. The authors conclude that the samples are representative of the mineralisation and there is no evidence that the drilling or sample collection process has resulted in a bias that could materially impact the accuracy and reliability of the results.

## **1.5 Sample Preparation, Analyses, Security and Data Verification**

WAI has reviewed core logging and sampling procedures on site with the Emerita geology team. All work is completed to a high standard based on comprehensive procedures. Samples are processed at Emerita's core facility in Puebla de Guzman, prior to transport to laboratories in Sevilla for preparation and analysis. All La Romanera samples and the majority of La Infanta samples (92%) were submitted to ALS Global (ALS), with the remainder submitted to AGQ Mining and Bioenergy S.L. (AGQ). Emerita employs a systematic Quality Assurance and Quality Control (QAQC) protocol for all sample batches. CRM, blank and duplicate results demonstrate acceptable levels of accuracy, contamination and precision in sample preparation and analysis.

The authors consider the sampling, sample preparation, security and analytical procedures for samples sent to both the ALS and AGQ laboratories, have been conducted in accordance with acceptable industry standards and the assay results generated following these procedures are suitable for use in Mineral Resource estimation.

## **1.6 Mineral Processing and Metallurgical Testing**

No metallurgical testwork has been completed on the La Romanera and La Infanta polymetallic deposits. At the time of reporting, Emerita has commenced an initial metallurgical testwork programme for the deposits. WAI's QP has reviewed petrographic reports and regional benchmarks in consultation with WAI metallurgists that have prior experience in the Iberian Pyrite Belt. Based on the review, WAI has used assumed recoveries for the current estimates. WAI recommends that recovery assumptions are reviewed and refined once metallurgical test-work has been completed.

## **1.7 Mineral Resource Estimates**

Mineral Resource estimation was completed by WAI using drillhole databases and geological models developed by the Emerita geology team and subsequently verified and refined in collaboration with WAI. Grades were estimated into a block model representing each mineralised domain. Grade estimation was carried out by ordinary kriging or inverse distance weighting. Estimated grades were validated globally, locally and visually. Mining, processing and long-term price assumptions were used to evaluate the proportion of the block models that could reasonably be expected to be economically mined. A 3.0% zinc equivalent (ZnEq) cut-off was selected in line with extraction via conventional underground mining methods.

The Mineral Resource estimates for the La Romanera and La Infanta polymetallic deposits are classified in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014). A summary of the Mineral Resource statement is shown in Table 1.1. The effective date of the Mineral Resource Estimate for La Romanera is May 4, 2023. The effective date of the Mineral Resource Estimate for La Infanta is April 30, 2023.

**Table 1.1: Mineral Resource Estimate for the Iberian Belt West Project**

Deposit	Class	Tonnes	Average Grade						Metal Content					
			Zn	Pb	Cu	Ag	Au	ZnEq	Zn	Pb	Cu	Ag	Au	ZnEq
			Mt	%	%	%	g/t	g/t	%	kt	kt	kt	koz	koz
La Romanera	Indicated	13.00	2.98	1.45	0.42	74.1	1.48	7.08	387	188	54	30,979	617	920
	Inferred	3.14	4.85	1.96	0.45	71.3	1.16	9.16	153	62	14	7,205	117	288
La Infanta	Indicated	1.07	7.10	4.24	1.03	88.5	0.32	14.32	76	45	11	3,051	11	154
	Inferred	1.56	4.41	2.49	0.74	74.7	0.38	9.55	69	39	12	3,758	19	149
IBW Project	<b>Indicated</b>	<b>14.07</b>	<b>3.29</b>	<b>1.66</b>	<b>0.46</b>	<b>75.2</b>	<b>1.39</b>	<b>7.63</b>	<b>463</b>	<b>233</b>	<b>65</b>	<b>34,030</b>	<b>629</b>	<b>1,074</b>
	<b>Inferred</b>	<b>4.71</b>	<b>4.70</b>	<b>2.14</b>	<b>0.54</b>	<b>72.4</b>	<b>0.90</b>	<b>9.29</b>	<b>222</b>	<b>101</b>	<b>26</b>	<b>10,963</b>	<b>137</b>	<b>438</b>

- Mineral Resources are classified according to definitions outlined in CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines (CIM, 2014);
- The effective date of the Mineral Resource Estimate for La Romanera is May 4, 2023 and the effective date of the Mineral Resource Estimate for La Infanta is April 30, 2023;
- Mineral Resources are reported at a cut-off grade of 3.0% zinc equivalent (ZnEq) where;
  - $ZnEq = [(Zn\ grade * Zn\ recovery * Zn\ price) + (Pb\ grade * Pb\ recovery * Pb\ price) + (Cu\ grade * Cu\ recovery * Cu\ price) + (Ag\ grade * Ag\ recovery * Ag\ price) + (Au\ grade * Au\ recovery * Au\ price)] / (Zn\ recovery * Zn\ price)$ ;
  - Long term price assumptions are US\$3000/t Zn, US\$2300/t Pb, US\$9500/t Cu, US\$25/oz Ag and US\$1800/oz Au;
  - Metallurgical recovery assumptions are 100% Zn, 80% Pb, 80% Cu, 80% Ag and 20% Au. 100% Zn recovery ensures ZnEq grade > Zn grade for all blocks;
- At La Infanta, blocks less than 3.0% ZnEq when diluted over a 3m minimum mining width were excluded from the Mineral Resource. Thickness at La Romanera typically exceeds 3m;
- Only primary sulphide mineralisation is included in the Mineral Resources;
- Metal grade and content represents contained metal in the ground and have not been adjusted for metallurgical recovery or mining dilution;
- Mineral Resources are not Reserves until they have demonstrated economic viability based on a pre-feasibility study or feasibility study;
- Numbers may not add due to rounding.
- The Qualified Person for the La Romanera and La Infanta Mineral Resource Estimates is Dr. Phil Newall, BSc (ARSM), PhD (ACSM), CEng, FIMMM of WAI, a Qualified Person as defined by NI 43-101.

The stated Mineral Resources are not materially affected by any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues, to the best knowledge of the authors. There are no known mining, metallurgical, infrastructure, or other factors that materially affect the Mineral Resource estimates, at this time.

The Qualified Person for the La Romanera and La Infanta Mineral Resource Estimates is Dr. Phil Newall, BSc (ARSM), PhD (ACSM), CEng, FIMMM of WAI, a Qualified Person as defined by NI 43-101.

## 1.8 Conclusions and Recommendations

Based on the work completed and associated input data, the authors consider the Mineral Resources for the La Romanera and La Infanta deposits to be reported in accordance with CIM Definition Standards for Mineral Resources and Mineral Reserves (2014).

The IBW project is considered to have significant exploration potential. Both La Romanera and La Infanta are open for extension, whilst initial exploration work has recently commenced at the neighbouring El Cura prospect. Drilling is expected to continue at IBW through 2023 and into 2024 targeting continued expansion of the IBW Mineral Resource.

The authors make the following recommendations:

### **General**

The authors recommend a preliminary economic assessment (PEA) is completed for the project. The cost estimate for a PEA is US\$250,000 to US\$400,000. The following actions are recommended as part of this next phase of study.

### **Exploration, Geology and Mineral Resources**

- Continue extensional drilling at depth at La Romanera and complete first pass drill testing at El Cura. Approximately US\$4.5M is budgeted for drilling in 2023;
- Investigate the use of wedge holes to reduce drilling costs at depth;
- Complete a simulation-based drill spacing study to test the existing classification approach and optimise drill spacing requirements at depth;
- Develop project scale fault and lithostratigraphic models;
- Optimise QAQC insertion rates such that CRM, blank and duplicate samples have individual insertion rates around 5%;
- Expand duplicate sample types to include a coarse duplicate submitted to the primary laboratory and a pulp duplicate submitted to an umpire laboratory;
- Implement a QAQC protocol for density measurements;
- Complete QAQC, model and estimate potential deleterious elements (Hg, As, Sb, Cd, Bi);
- On completion of metallurgical testwork, use results to develop an NSR cut-off value for reporting Mineral Resources; and
- Update Mineral Resource estimates based on findings from the above work.

### **Mineral Processing and Metallurgical Testwork**

It is recommended that a programme of metallurgical testing is completed to provide sufficient data pertaining to the processing characteristics of material from the La Romanera and La Infanta deposits to support the delivery of a PEA. The cost estimate for this metallurgical testwork is US\$90,000 to US\$120,000.

## **2 INTRODUCTION**

### **2.1 Background**

This NI 43-101 Technical Report has been prepared by Wardell Armstrong International Limited (WAI) for Emerita Resources Corporation (Emerita), to disclose recent information about the La Romanera and La Infanta polymetallic deposits in Andalusia, Spain. This information includes maiden Mineral Resource estimates. La Romanera and La Infanta are part of Emerita's wholly owned Iberian Belt West (IBW) Project.

The project is not considered an advanced property as defined by NI 43-101 and as such Sections 15 to 22 do not apply to the technical report.

### **2.2 Terms of Reference**

The scope of work included Mineral Resource estimates for the La Romanera and La Infanta polymetallic deposits, with classification of Mineral Resources in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Reserves: Definitions and Guidelines, May 10, 2014 (CIM, 2014), and preparation of a Technical Report in accordance with the requirements of NI 43-101 to support the public disclosure of the Mineral Resource estimates.

### **2.3 Qualified Persons**

Qualified Persons (QPs) from WAI who have completed the Mineral Resource estimates and supervised the production of this report are as follows:

- Phil Newall, BSc, ARSM, PhD, ACSM, CEng, FIMMM, QMR, Director.
- Frank Browning, MSci, MSc, MCSM, PGCert, FGS, CGeol, Principal Resource Geologist.

These consultants by virtue of their education, experience, and professional association, are considered to be independent QPs according to the definitions given in NI 43-101 and are members in good standing of appropriate professional institutions. The responsibilities of the QPs in the preparation of this Technical Report are shown in Table 2.1.

### **2.4 Personal Inspections**

A series of site visits to the La Romanera and La Infanta deposits have been undertaken by the QPs including:

- By Phil Newall on October 25 to 27, 2022;
- By Phil Newall and Frank Browning on March 16, 2023; and
- By Frank Browning on May 3 to 5, 2023.

**Table 2.1: Qualified Persons Responsibilities**

No.	Report Section	Report Sub-Sections	Qualified Person
1	Summary	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9	Phil Newall
		1.8	Frank Browning
2	Introduction		Phil Newall
3	Reliance on other Experts		Phil Newall
4	Property Description and Location		Phil Newall
5	Accessibility, Climate, Local Resources, Infrastructure and Physiography		Phil Newall
6	History		Phil Newall
7	Geological Setting and Mineralisation		Phil Newall
8	Deposit Type		Phil Newall
9	Exploration		Phil Newall
10	Drilling		Phil Newall
11	Sample Preparation, Analysis and Security		Phil Newall
12	Data Verification		Phil Newall
13	Mineral Processing and Metallurgical Testwork		Phil Newall
14	Mineral Resource Estimates		Frank Browning
15	Mineral Reserve Estimates		N/A
16	Mining Methods		N/A
17	Recovery Methods		N/A
18	Infrastructure		N/A
19	Market Studies and Contracts		N/A
20	Environmental Studies, Permitting and Social or Community Impact		N/A
21	Capital and Operating Costs		N/A
22	Economic Analysis		N/A
23	Adjacent Properties		Phil Newall
24	Other Relevant Data and Information		Phil Newall
25	Interpretation and Conclusions		Phil Newall
26	Recommendations		Phil Newall
27	References		Phil Newall

## 2.5 WAI Declaration

WAI has provided the mineral industry with specialised geological, mining and mineral processing expertise since 1987, initially as an independent company, but from 1999 as part of the Wardell Armstrong Group (WA). WAI's experience is worldwide and has been developed in the coal and metalliferous mining sector.

WAI's parent company, WA, is a mining engineering/environmental consultancy that services the industrial minerals sector from nine regional offices in the UK and an international office in Almaty, Kazakhstan. Total worldwide staff compliment is in excess of 400.

WAI, its directors, employees and associates neither has nor holds:

- Any rights to subscribe for shares in Emerita either now or in the future;
- Any vested interests in any mining or exploration concessions (licences) held by Emerita;
- Any rights to subscribe to any interests in any of the licences held by Emerita either now or in the future;
- Any vested interests in either any licences held by Emerita or any adjacent licences; and

- Any right to subscribe to any interests or licences adjacent to those held by Emerita, either now or in the future.

WAI's only financial interest is the right to charge professional fees at normal commercial rates, plus normal overhead costs, for work carried out in connection with the investigations reported here. Payment of professional fees is not dependent either on project success or project financing.

## **2.6 Units and Currency**

All units of measurement used in this report are metric unless otherwise stated. Tonnages are reported as metric tonnes (t), precious metal grades in grams per tonne (g/t) or parts per million (ppm) and base metal grades in percentage (%).

Unless otherwise stated, all references to currency or "USD" are to United States Dollars (US\$).



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

The authors have relied on information provided by Emerita as of June 12, 2023, regarding the legal status of the rights pertaining to the La Romanera and La Infanta deposits and have not independently verified the legality of surface land ownership, mineral tenure, legal status or ownership of the properties or any agreements that pertain to the licence areas. The extent of this reliance applies solely to the legal status of the rights detailed in Section 4.

The authors did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, but have relied on information provided by Emerita as of June 12, 2023, for land title issues.

## 4 PROPERTY DESCRIPTION AND LOCATION

### 4.1 Location

The IBW Project is located in SW Spain within the Huelva Province of Andalusia (Figure 4.1). The project is situated approximately 500km southwest of Madrid (Spain's capital), 142km west of Seville (capital of Andalusia), 61km north-west of Huelva City (capital of Huelva Province) and 20km east of the Spanish/Portuguese border. Huelva City is the political and administrative centre of Huelva Province.

Two small towns, Puebla de Guzman (circa 3,500 inhabitants), and Paymogo (circa 1,500 inhabitants) are within 10km from the property (Figure 4.2). Approximately 80% of the property lies within the Municipality of Puebla de Guzman and the remainder within the Municipality of Paymogo.



**Figure 4.1: Map of Spain Highlighting the Huelva Province of Andalusia**



**Figure 4.2: Location of the IBW Project Within Huelva Province**

#### 4.2 Ownership

Emerita Resources Corporation holds 100% ownership of the IBW Project. The mineral rights and concessions of the IBW Project were acquired by its subsidiary Emerita Resources España SLU by public tender process. On September 1<sup>st</sup>, 2020, Emerita was officially notified through a resolution by the Provincial Secretary of the Regional Ministry of Industry in Huelva that it had won the public tender.

#### 4.3 Mineral Tenure

The IBW Project exploration permit was granted for a period of 26 months with the option to renew for another 3 years. Permit details are provided in Table 4.1. A map of the IBW Project exploration permit is shown in Figure 4.3. The permit covers 51 claims, totalling 1,545.6ha, and are bounded by the coordinates listed in Table 4.2. The project boundary is broadly rectangular and extends in an east-west direction for approximately 18km.

Permit Number	Tenure	Company	Application Date	Claims	Area (Ha.)	Date Granted	Expiration Date
15029	Section C*	Emerita Resources España S.L.U.	01/09/2020	51	1545.6	12/07/2021	12/09/2023

\*Section C covers non-energy mining, which comprises all mineral deposits and geological resources

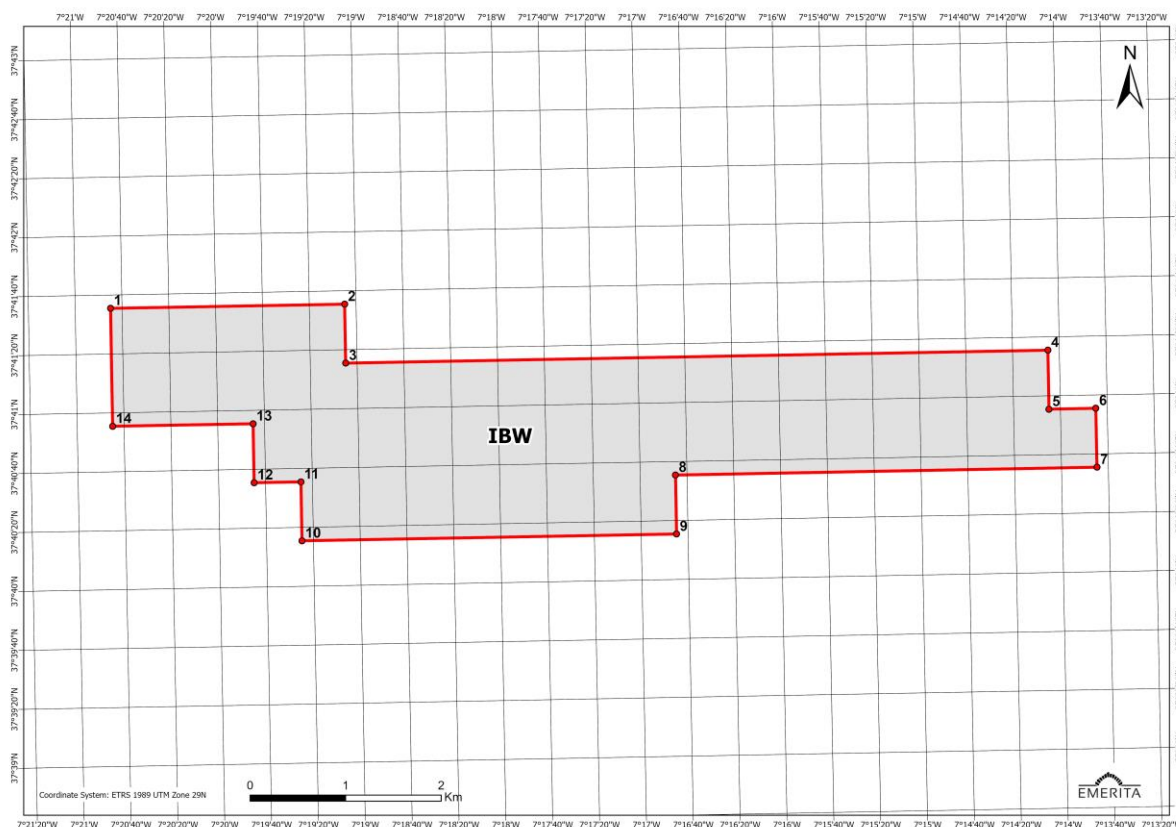


Figure 4.3: Exploration Concession, IBW Project

ID Point	Longitude (W)	Latitude (N)	X(UTM)	Y(UTM)	UTM Zone
1	7° 20' 44.891" W	37° 41' 35.5009" N	645842,237	4173062,688	29
2	7° 19' 4.8898" W	37° 41' 35.5004" N	648291,446	4173106,282	29
3	7° 19' 4.8899" W	37° 41' 15.5001" N	648302,510	4172489,838	29
4	7° 14' 4.8883" W	37° 41' 15.499" N	655650,768	4172624,991	29
5	7° 14' 4.8884" W	37° 40' 55.4987" N	655662,377	4172008,541	29
6	7° 13' 44.8882" W	37° 40' 55.4987" N	656152,303	4172017,785	29
7	7° 13' 44.8885" W	37° 40' 35.4983" N	656163,947	4171401,335	29
8	7° 16' 44.8899" W	37° 40' 35.4989" N	651754,312	4171319,197	29
9	7° 16' 44.89" W	37° 40' 15.4986" N	651765,626	4170702,751	29
10	7° 19' 24.8904" W	37° 40' 15.4993" N	647845,705	4170631,732	29
11	7° 19' 24.8902" W	37° 40' 35.4996" N	647834,682	4171248,175	29
12	7° 19' 44.8902" W	37° 40' 35.4997" N	647344,731	4171239,428	29
13	7° 19' 44.89" W	37° 40' 55.5" N	647333,742	4171855,871	29
14	7° 20' 44.89" W	37° 40' 55.5003" N	645864,000	4171829,805	29

Note: The delimitation of the Exploration Permit was made in the ED50 (European Datum 1950) coordinate system.

#### 4.4 Royalties

Mining is regulated by the Ministry of Industry under a specific mining law and royal decree. To keep the exploration concessions in good standing, Emerita must comply with annual concession fees (determined by the size of the permit) and fulfil the exploration investment requirements. The annual

concession fees for the IBW Project are €1,319 per year based on the 51 IBW claims. No other royalties, taxes, or administrative liabilities are associated with the exploration concession.

Spain does not levy mining royalties on minerals produced in the country. No other mining-specific royalty or tax applies to the mining industry. The corporate rate of income tax is 25% and value-added tax is 21%. There are tax write-offs available for exploration and capital investments in Spain.

#### **4.5 Surface Rights**

Mineral rights and surface land rights are separate under the Spanish Mining Law. In case of a conflict between the owner of the surface land rights and the owner of the mineral rights, the Spanish Mining Law applies a “temporary surface occupation” (expropiación temporal de territorio) allowing the mineral rights owner to access the land to carry out exploration work.

Emerita has access agreements with local landowners covering the main exploration area. These agreements allow Emerita to conduct surface exploration and prospecting in exchange for nominal monetary compensation.

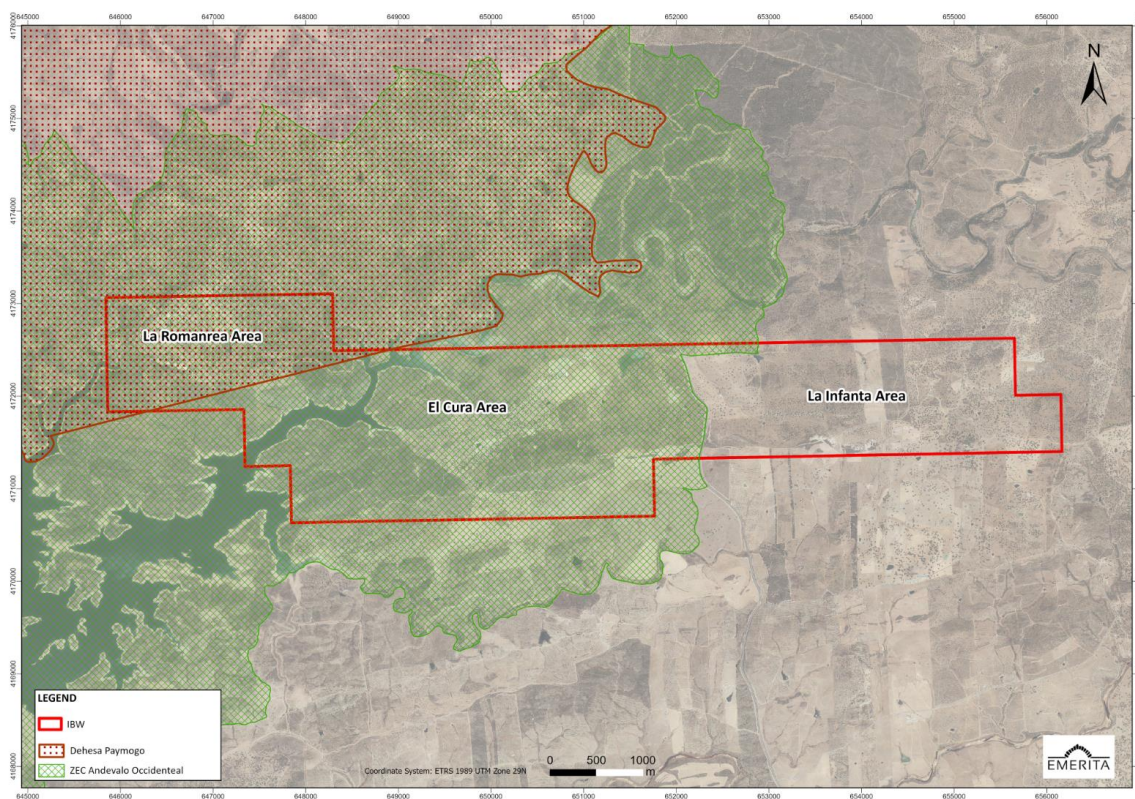
#### **4.6 Permitting Considerations**

Permits required for exploration works to be carried out by Emerita were granted by the Mining Department in Huelva. Emerita submitted a Restoration Plan on February 10, 2021. The Restoration Plan was on public display until March 26, 2021, approved on July 12, 2021, and is valid until September 12, 2023.

In areas with environmental protection, an Environmental Authorisation (AAU or Autorización Ambiental Unificada) is required. The AAU requires Emerita to prepare and submit an environmental impact assessment (EIA), which includes an archeological study and urban compatibility study issued by the municipal councils. The AAU is approved by the Environmental Department which indicates favourability to the Mining Department.

From an environmental permitting perspective, the IBW Project can be divided into three areas (Figure 4.4):

1. La Infanta: Area free of environmental protection zones, where no AAU is required.
2. El Cura: Area under “Lugar de interés cultural” (ZEC), which requires an AAU.
3. La Romanera: Area under “Lugar de interés cultural” (ZEC) and “Dehesa Paymogo”, which requires an AAU.



**Figure 4.4: Map of Environmentally Protected Areas Relative to the IBW Project Concession**

An AAU for La Romanera and El Cura (AAU/HU/075/2021) was approved on May 6, 2023, and is valid for 2 years.

Once the Restoration plan has been authorised by the Mining Department and the AAU has been obtained for environmentally protected areas (2 and 3 above), no other permits are required by the Regional or Central Governments.

At the time of issuing the permitting resolution, the Mining Department may request 10% of the exploration budget of the first year as a bond for remediation purposes. The Mining Department requested a €146,000 restoration bond of which €27,000 have been recovered through restoration work already carried out.

#### **4.7 Environmental Considerations**

Environmental approval of suppliers (drillers) is carried out prior to them working on the project. Continuous environmental control and monitoring of the disturbance and remediation of drill sites is carried out during drilling operations.

An environmental baseline study has been developed for the IBW project for the period 2022-2023, comprising the following works:

- Natural environment and landscape diagnosis carried out by specialist ecologists;
- Soil and water analytical research (surface and groundwater) by an ENAC accredited inspection entity; and
- Hydrological and hydrogeological study (water balance) by specialist hydrogeologists.

#### 4.8 Existing Environmental Liabilities

The three known IBW Project deposits are La Romanera, El Cura, and La Infanta. All contain remnants of historical exploration and mining, characterised by old shafts, pits, trenches and rock dumps. The rock dumps have a reddish-orange color due to the oxidation of pyrite and other iron sulphides (Figure 4.5).

For exploration permits such as those comprising the IBW Project, existing environmental liabilities are not considered in the Spanish Mining Law. Such obligations will only be incurred should the project progress to a mining phase when the exploration permits are upgraded to mining exploitation. No other type of environmental liability has been identified at the property.



**Figure 4.5: Historic Surface Workings at La Romanera**

An estimation of the rock dumps carried out by Emerita indicates an approximate volume of 200,000m<sup>3</sup> (La Romanera) 40,000m<sup>3</sup> (La Infanta) and 20,000m<sup>3</sup> (El Cura), totalling 260,000m<sup>3</sup> of oxidised rock dumps. The company will consider the remediation of the rock dumps as part of potential environmental improvements to the area. No acidic water is generated during exploration operations. In the event of moving to the exploitation phase, mitigation measures would be considered, and the costs would be assessed.

The authors are not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the IBW Project.



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

### 5.1 Accessibility and Transportation

The IBW Project can be accessed by road from several major cities in SW Spain, from Seville via the A-49 freeway (152km) and Huelva via the A-495 Regional Road (71km). Seville is connected to the main cities in Spain by domestic flights and high-speed rail services, and with the rest of Europe by an international airport. Huelva has a commercial port from which products from mining in the region can be shipped.

The closest towns to the IBW Project are Puebla de Guzman and Paymogo, with access by paved provincial road HU-5401. The project sits between these two towns, which are separated by 18km. Puebla de Guzman is 142km from Seville, with travel time around two hours by car. From Puebla de Guzman to the project is a further 8.5km. Access within the project is via all-weather gravel roads.



Figure 5.1: IBW Project Access Map

### 5.2 Climate

The climate of the region is Mediterranean with an average annual temperature of 16.7°C. The daily temperature ranges from 34°C in July to 4°C in January. Temperatures below freezing are rare. Average annual rainfall is typically 500-700mm, however this is highly variable year on year. Most

rainfall occurs from October through February with little or no rainfall occurring during the summer months. Exploration operations can be conducted all year round.

### **5.3 Local Resources and Infrastructure**

#### **5.3.1 Introduction**

The entire Andalusian Region is connected by a well-developed transport network, reliable energy and water supply, high-speed communication systems, and all the services of modern cities such as Huelva, Seville, and Cordoba.

#### **5.3.2 Labour and Skills**

The two neighbouring towns of Paymogo and Puebla de Guzman represent potential sources of labour, accommodation, and general services. The population of Andalusia is highly educated, with access to Andalusian universities or other universities in Spain. The University of Huelva has active geology and engineering departments.

#### **5.3.3 Power**

Several power stations exist in the project vicinity including wind, photovoltaic and hydroelectric. Several different high voltage power lines pass through the project. In some of the local farms, high-capacity power lines are already installed to supply farming activity.

#### **5.3.4 Water**

The project sits 1-2km from the Andevalo reservoir. Emerita currently has a water permit to use water from the reservoir during their exploration activities.

#### **5.3.5 Infrastructure Areas**

At this stage, insufficient work has been completed to assess the potential scale and location of tailings storage, waste disposal or processing plant sites.

### **5.4 Physiography**

The project area is characterised by undulating topography with elevations close to 200m. The natural environment (topography, vegetation, soil) has been greatly modified by human activity over millennia. The dominant vegetation is quercine meadows with holm oaks. In the western half of the project, grazing lands have been developed for livestock. These were derived by the transformation of the primeval forest, through removal of trees and understory shrubs.

## 6 HISTORY

### 6.1 Ownership History

Historical workings at La Romanera and La Infanta date back to the Pre-Roman and Roman era. The deposits have since undergone several phases of small to medium scale exploration by various owners prior to the current phase of exploration conducted by Emerita (Table 6.1 and Table 6.2).

<b>Time Period</b>	<b>Ownership</b>
-	Roman and Pre-Roman workings
1866	Sociedad Huelvana
1907	Unidentified owner
1926-1927	Unidentified owner
1960-1980	Asturiana de Zinc, SA
1982-1985	Phelps Dodge, Spain
1987-1995	Riotinto Minera, SA
Present	Emerita Resources Corporation

<b>Time Period</b>	<b>Ownership</b>
-	Roman and Pre-Roman workings
1890-1895	Unidentified owner
1965-1971	Productos Químicos de Huelva
1971-1975	Riotinto Minera, SA
1975	Asturiana de Zinc, SA
1980-1984	Phelps Dodge Española
1987-1995	Riotinto Minera, SA
Present	Emerita Resources Corporation

### 6.2 Exploration History

The most significant prior exploration in the IBW Project area was carried out by three companies: Asturiana de Zinc, Phelps Dodge and Rio Tinto. The exploration consisted of geochemical sampling, geological mapping at different scales, geophysical surveys and diamond drilling.

Part of the historical technical information and data has been preserved and made available to the public by the University of Cantabria. The National Geological Service is another source of technical information pertaining to the area. Emerita geologists have completed the digital compilation of historical hard copy data for the La Romanera and La Infanta deposits, as part of their initial project assessment. The resulting digitised database contains collar locations, drill hole surveys, lithological coding and core sample assay results. A summary of the historical drillhole database compiled for each deposit is provided in Table 6.3 whilst the holes are shown graphically in Figure 6.1 and Figure 6.2.

Table 6.3: Historical Drillhole Database			
Deposit	Company	Holes Drilled	Metres Drilled
La Romanera	Riotinto Minera, SA	29	5,282
	Asturiana de Zinc, SA	18	4,758.21
La Infanta	Asturiana de Zinc, SA	40	3,390.82
	Phelps Dodge Española	9	1,253.1

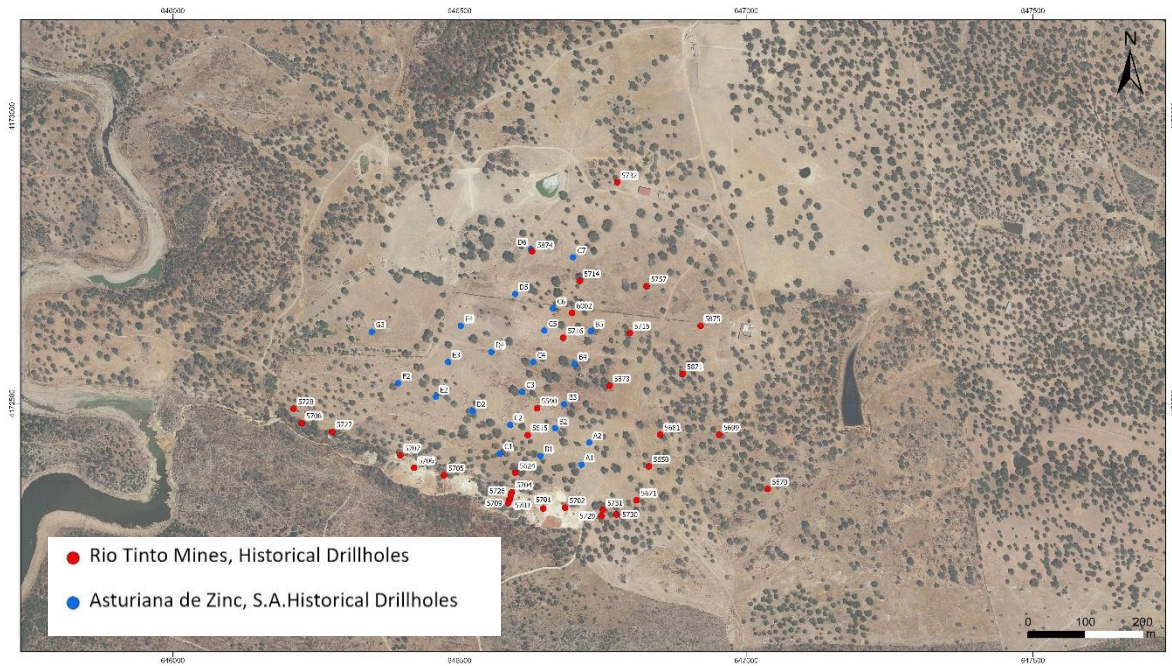


Figure 6.1: La Romanera Historical Drilling

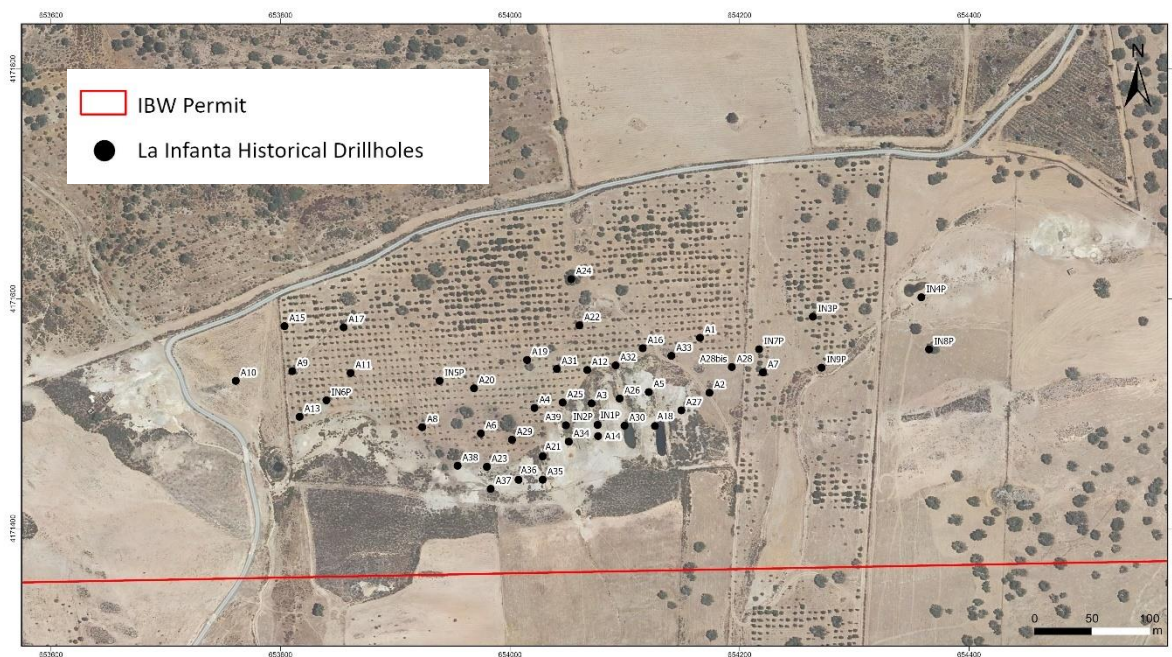


Figure 6.2: La Infanta Historical Drilling

Some historical Mineral Resource estimates completed by past owners have been found within the documents compiled from the University of Cantabria. At the La Romanera deposit, Rio Tinto Minera in the 1990s estimated 34Mt @ 0.42% Cu, 2.20% Pb, 2.3% Zn, 44.4g/t Ag, and 0.8g/t Au, which contained a higher-grade Resource of 11.21Mt @ 0.40% Cu, 2.47% Pb, 5.50% Zn, 64.0g/t Ag and 1.0g/t Au. Historical Mineral Resource estimates at La Infanta include 1Mt @ 1.54% Cu, 5% Pb, 12% Zn and 500g/t of Ag.

A Qualified Person, as defined in National Instrument 43-101, has not done sufficient work on behalf of Emerita to classify the historical estimates as Mineral Resources. The historical estimates should not be relied upon and are superseded by the Mineral Resource Estimate presented in Section 14.

### **6.3 Production History**

The IBW Project contains various historical mine workings including small scale prospecting pits, shallow shafts, adits, and tunnels. Limited production records are available.

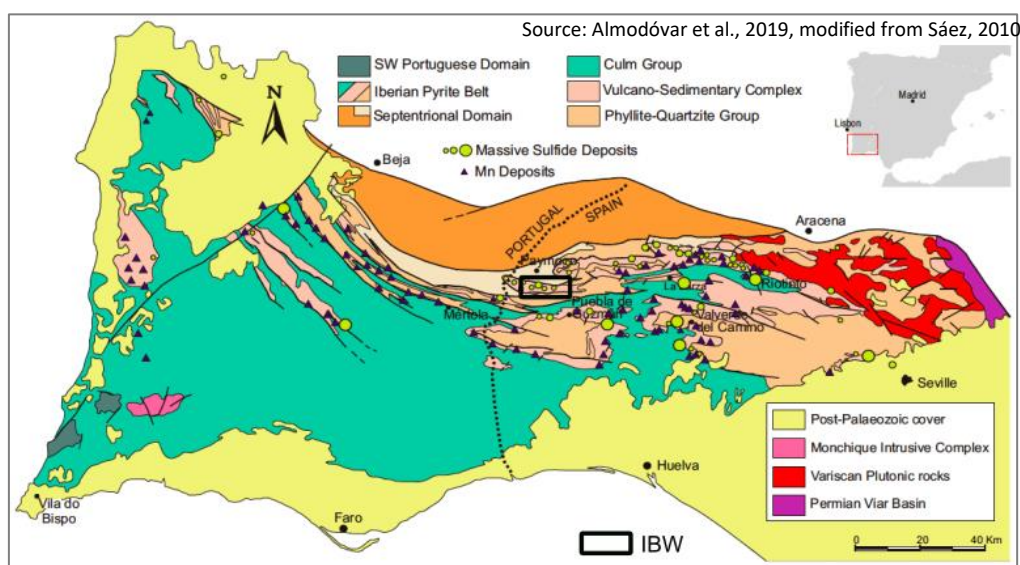
The La Romanera deposit has produced minerals since Roman times, primarily from surface gossan material. Prior to modern exploration, small scale mining at La Romanera was carried out. In 1866, Sociedad Huelvana mined 46t of copper ore from trenches along the mineralised lenses. In 1907, an additional 100t of copper ore were mined by an unknown owner. In 1926, further research work was carried out up to 50m depth, where 3 massive sulphide lenses were identified, with thicknesses from 2m to 6m over a 400m strike extent.

The La Infanta deposit produced 400t between 1890 and 1895. A shaft 40m deep connected to two parallel mining levels 15m apart and 10-15m long. Between 1965 and 1971, small scale underground mining was completed by Productos Químicos de Huelva, S.A.

## 7 GEOLOGICAL SETTING AND MINERALISATION

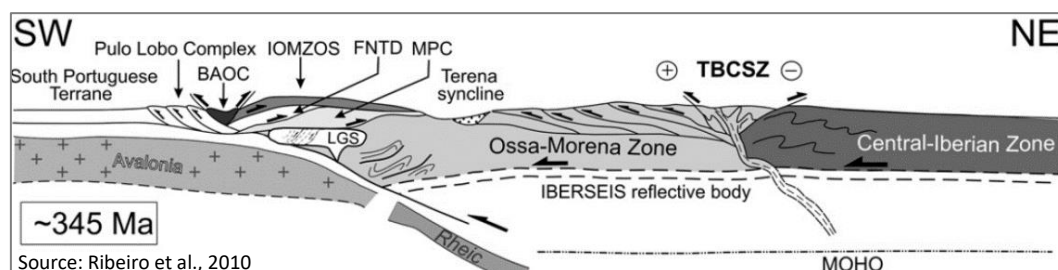
### 7.1 Regional Geology

The IBW Project is located in the Iberian Pyrite Belt (IPB), one of the largest mining districts in the world and a key area of base metal production in Europe. It hosts more than 1600Mt of massive sulphides, around 250Mt of stockwork-associated mineralisation and more than 90 volcanic hosted massive sulphide (VHMS) deposits, comprising 22% of the known VHMS deposits globally (Tornos, 2006). The map in Figure 7.1 shows the location of the project relative to regional geology.



**Figure 7.1: Regional Geological Map of the South Portuguese Terrane**

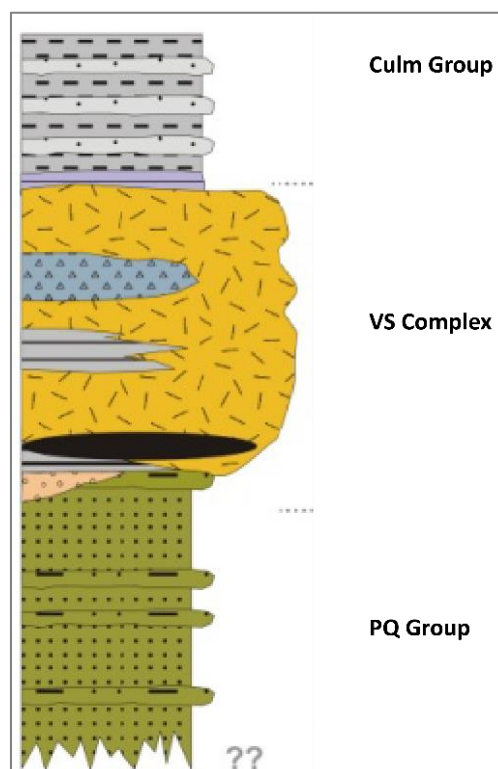
The IPB is the southernmost domain of the South Portuguese Zone (SPZ). North of the SPZ is the Ossa Morena Zone (OMZ), separated by the Variscan suture, which formed during the closure and northward oblique subduction and later obduction of the Rheic Ocean (Silva et al., 1990), evidenced by the Beja-Acebuches ophiolite (BAOC) and the Pulo do Lobo accretionary prism (Silva, 1989; Quesada, 1991; Quesada et al., 1994; Ribeiro et al., 1990) (Figure 7.2). The oblique nature of the collision under a compressive sinistral transtensional regime (Ribeiro et al., 1990; Quesada et al., 1994) promoted magmatic activity (Silva et al., 1990; Quesada, 1998; Tornos et al., 2002; Jesus et al., 2007). This generated the VHMS deposits of the IPB, formed within an intracontinental forearc basin from the Upper Devonian to the Lower Carboniferous (Quesada et al., 1998; Tornos, 2006).



**Figure 7.2: Schematic Geological Section of the Suture Zone Between the SPT and the OMZ**

The IPB stratigraphic sequence can be divided into three main groups despite lateral facies variations and tectonic deformation that complicate the stratigraphy (Leistel et al., 1998) (Figure 7.3):

- **PQ Group:** (Frasnian to Late Famennian) Is over 2km thick (Tornos, 2006) and is composed of a detrital-siliciclastic sequence with alternating mudstone, limestones and sandstones with typical characteristics of a stable epicontinental platform (Moreno et al., 1996).
- **VS Complex:** (Late Famennian to Early Viséan) Comprises a 1.3km thick bimodal volcanic sequence, dominated by felsic rocks, of rhyolitic-dacitic composition, with minor proportions of mafic volcanic rocks and intercalations of mudstone, limestone and chemical sediments (Tornos 2006). The VS Complex represents deposition during the collision of the SPV (Avalonia), with the Iberian Massif (Gondwana), in an intracontinental basin (Tornos, 2009).
- **Culm Group:** (Late Viséan to Late Pensilvanian) Is also known as the Baixo Alentejo Flysch Group in Portugal. This flysch includes more than 3000 meters of shales, sandstones, and scarce conglomerate intercalations, with turbiditic characteristics. This Group represents the Variscan syn-orogenic foreland flysch related to the collision and its tectonic inversion (Moreno, 1993).



Source: modified from  
Schermerhorn, 1971 and Conde, 2016

**Figure 7.3: General Stratigraphic Column of the IPB**

The IPB has been interpreted to comprise of three distinct litho-structural domains (Quesada, 1996):

- **The Northern Domain** has the highest number of mineral deposits in the IPB along a 26km strike length. It includes La Romanera, La Infanta, Aguas Teñidas, Lomero-Poyatos, Cueva de la Mora, Concepción, San Platón, Monte Romero and San Miguel (Tornos et al., 2009). This domain is characterised by massive sulphides hosted by felsic volcanoclastic rocks, replacing pumice or volcanic glass metastable layers, such as dome hyaloclastites, and developing stratiform layers to irregular orebodies (Tornos, 2006). The VS Complex here consists mainly of fine-grained sediments with massive submarine lavas and interbedded felsic volcanoclastic units. Leistel et al., 1998 interpreted it to be an isolated basin from continental source.
- **The Intermediate Domain** contains the least massive sulphide deposits. The only two significant deposits are La Zarza and Rio Tinto. Rio Tinto massive sulphide shares common characteristics between the northern and southern domains of the IPB (Tornos et al., 2009).
- **The Southern Domain** includes the most important VHMS deposits in the IPB, associated with sedimentary rocks in a continental supplied basin with minor volcanic activity (Leistel et al., 1998). These include Aznalcollar-Los Frailes, Sotiel-Migollas, Masa Valverde, Tharsis and Las Cruces. Most of these deposits are exhalative type, associated with more saline and lower temperature fluids, embedded in black shales deposited on an anoxic seafloor during the Upper Devonian and formed by bioinduced precipitation (Tornos et al., 2018).

## 7.2 Local Geology

The La Romanera and La Infanta deposits are located in the northwest of the Spanish section of the IPB, within the normal northern limb of the Puebla de Guzman anticline, hosted by the Paymogo Volcano-sedimentary Complex (VSC) (Figure 7.4). The southern volcanic axis of Paymogo represents the most northwestern outcrop of the IPB in the province of Huelva (Donaire et al., 1998).

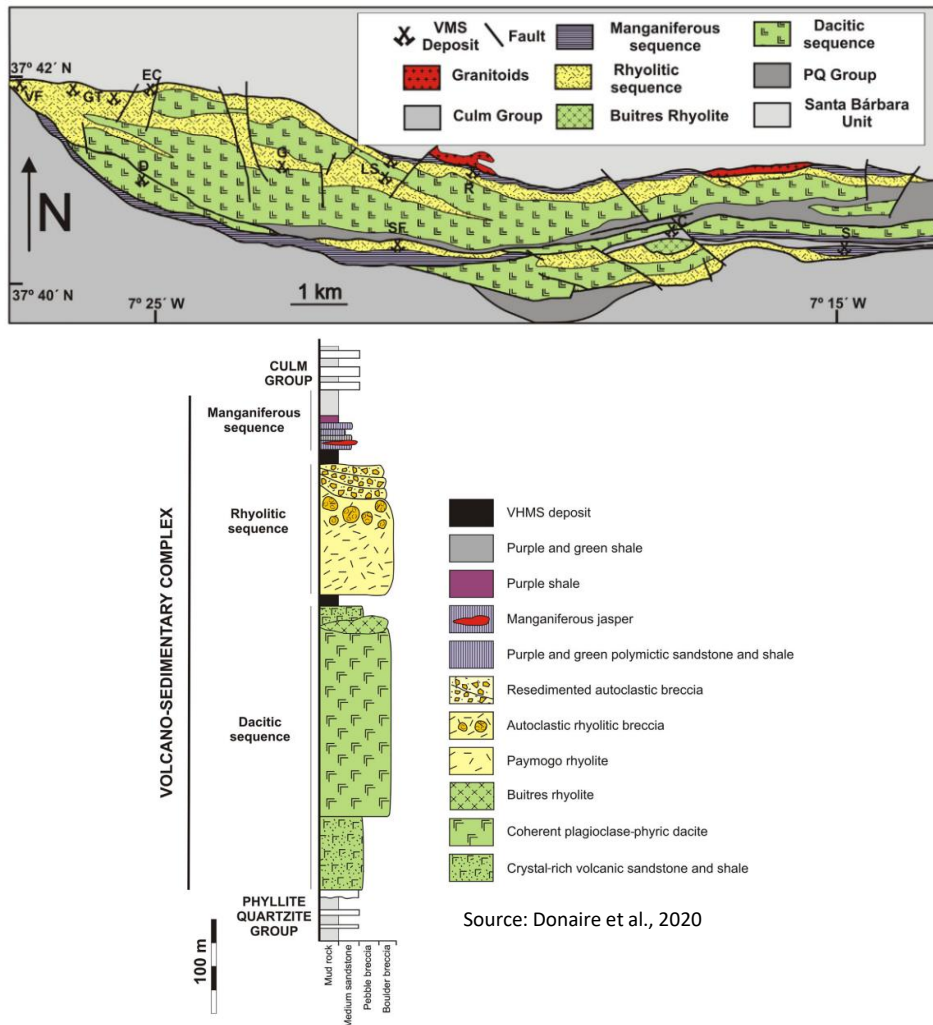
Felsic tuffs and black shales within VSC host the La Romanera and La Infanta VHMS deposit in different stratigraphic levels, with La Infanta located at the footwall and La Romanera at the hanging wall of the sequence. The Puebla de Guzman anticline is isoclinal and verges to the south.

There are several levels of dacitic rocks of variable composition and texture. In the hanging wall of the dacitic sequences appear rhyolitic breccias and grayish strongly silicified massive rhyolites. The dacitic sequence is older ( $348.9 \pm 0.4\text{Ma}$ ) than the rhyolitic sequence ( $347.3 \pm 0.8\text{Ma}$ ) (Donaire et al., 2020). The VHMS mineralisation has been dated at 350Ma (Oliveira et al., 2004).

The Gafo formation is located north of the mineralised horizons in La Romanera, by mechanical contact with the VSC. U-Pb zircon geochronology results determined a depositional age of  $369.1 \pm 2.5\text{Ma}$  for the Gafo formation. These depositional facies can be correlated to the Santa Barbara unit (Mendes et al., 2022).



IBW project rocks record a penetrative regional axial planar foliation (S1) that strikes around 100°E and dips around 75° to the north. The layering (S0) is oriented subparallel to S1, but shows greater oscillations. There is a large sector with gently dipping or subhorizontal bedding due to the presence of a kilometer scale fold hinge. The minor fold axes and intersection lineation between S0 and S1 have a dominant gentle plunge to the east, and the general vergence of the foliation is to the south (Azor, 2023). The VSC, which hosts the mineralisation, dips to the N-NW.



**Figure 7.4: Geological Map and Schematic Lithostratigraphic Column of the Paymogo VSC. IBW Project VHMS Deposits are coded as R = La Romanera, C = El Cura and S = Sierrecilla / La Infanta**

### 7.3 Deposit Geology

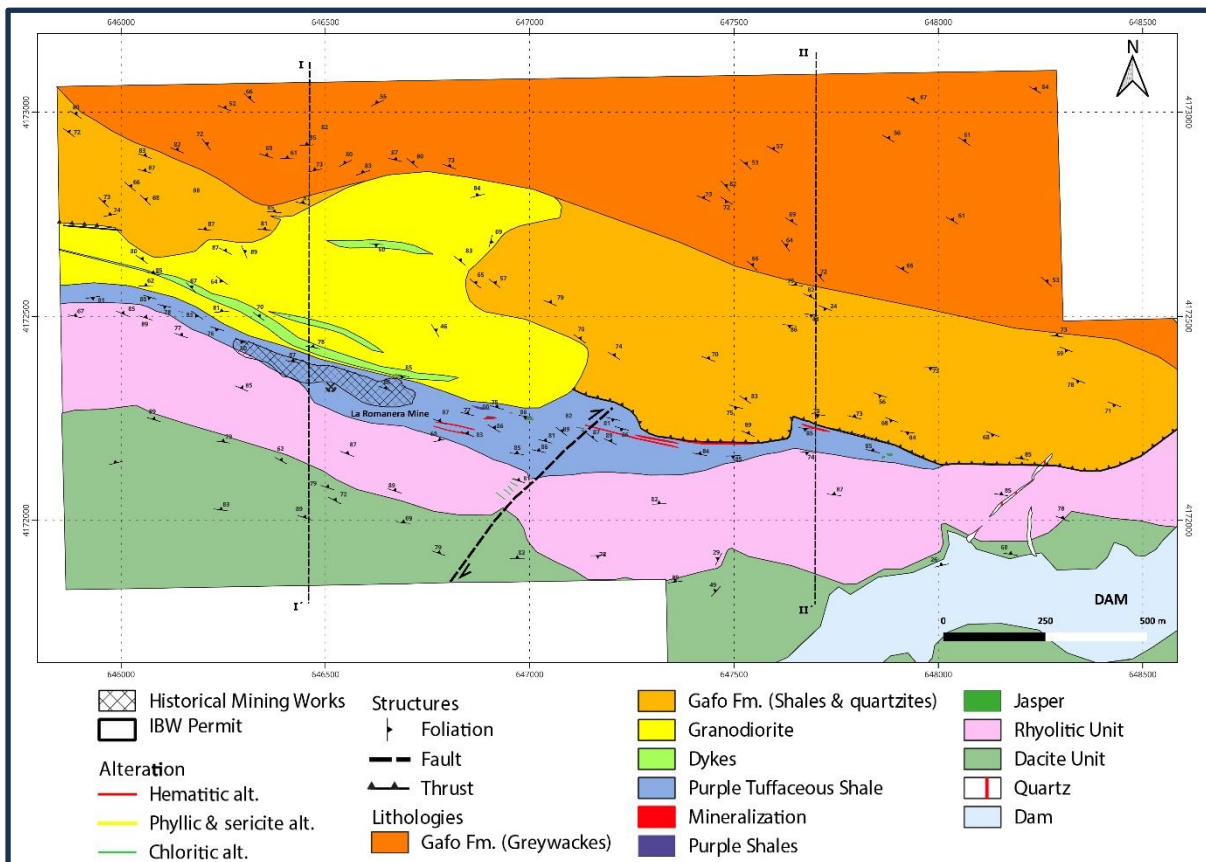
#### 7.3.1 Geological Framework

##### 7.3.1.1 Introduction

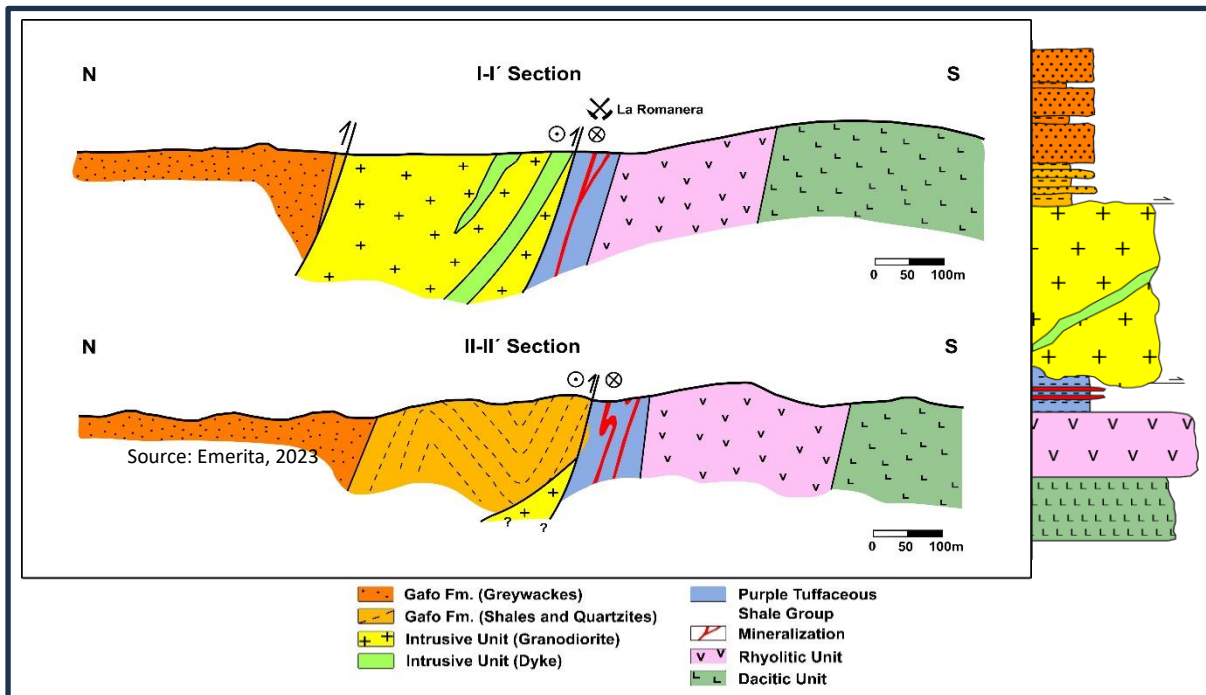
The Emerita geology team have completed detailed geological mapping and core logging to constrain the geological framework of each deposit, including the host lithostratigraphic sequence and the nature of key contacts. Both deposits are classified as VHMS deposits and occur primarily as tabular strata-bound lenses of polymetallic (Zn, Pb, Cu, Ag, Au) massive sulphides.

##### 7.3.1.2 La Romanera

The deposit scale geological interpretation for La Romanera is outlined in Figure 7.5 and Figure 7.6. Mineralisation is hosted by a purple tuffaceous shale unit, underlain conformably by a footwall rhyolite. A sinistral thrust bounds the hanging wall contact of the mineralised horizon with overlying Gafo Formation shales and quartzites. Locally the base of the Gafo Formation is intruded by granodiorite, which is the dominant hanging wall unit in the west of the deposit. The granodiorite is itself intruded by a series of andesite dykes.



**Figure 7.5: La Romanera Geological Map**




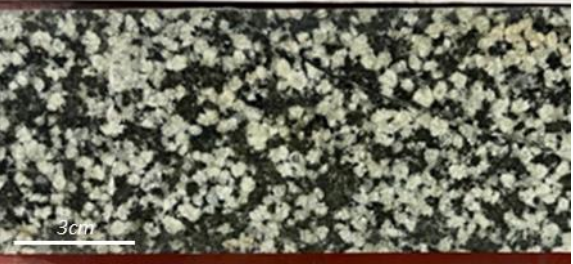



**Figure 7.6: La Romanera Geological Cross Section and Schematic Lithostratigraphic Column**

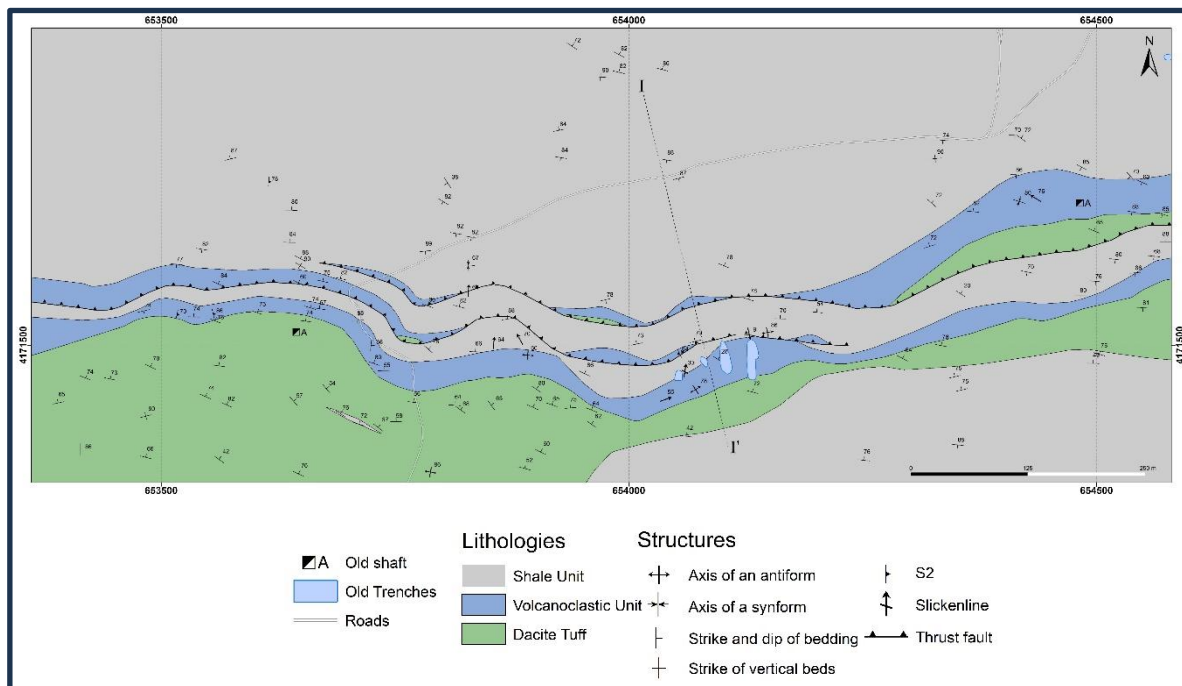
Type examples and descriptions of the main lithostratigraphic units at La Romanera are provided in Table 7.1.

### 7.3.1.3 La Infanta

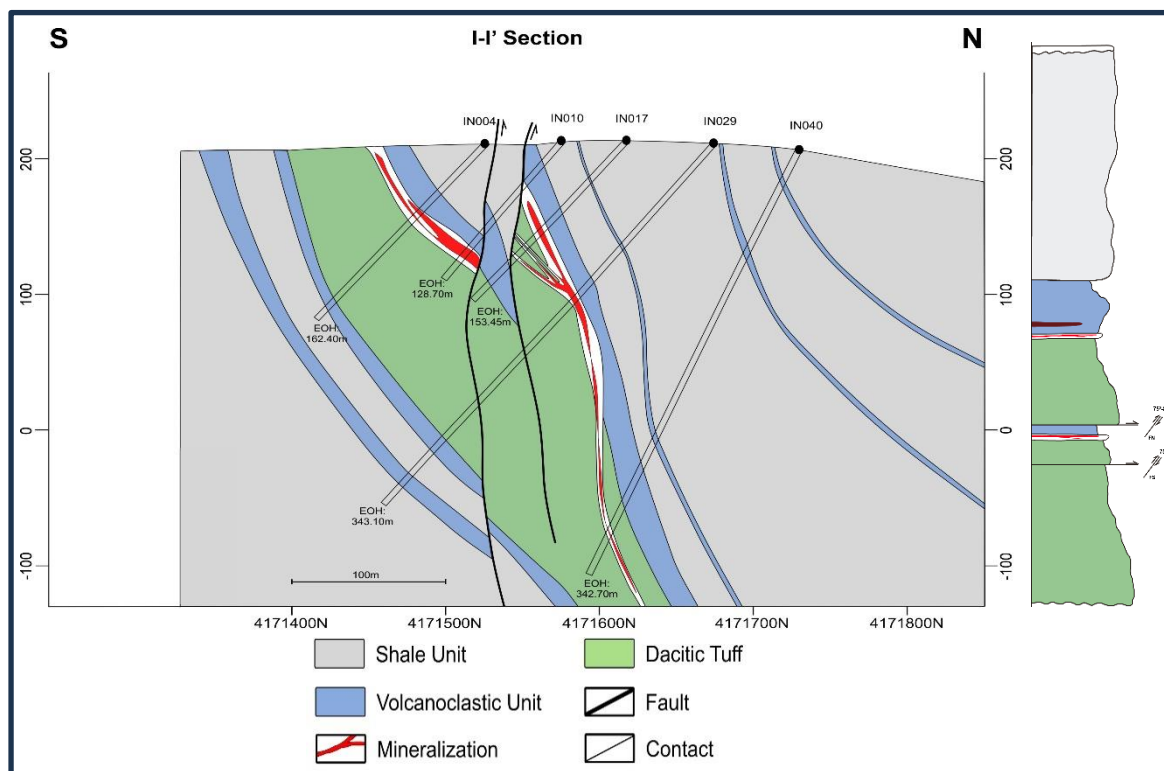
The deposit scale geological interpretation for La Infanta is outlined in Figure 7.7 and Figure 7.8. The La Infanta deposit is located at the contact between a footwall unit of highly silicified dacitic tuffs and a hanging wall volcanoclastic unit. Tectonically, the mineralisation is located on the northern flank of an extensive anticline, which is consistently faulted. These faults create a repetition of the mineralised horizon, which divide the mineralisation into the North, South and South 1 lenses or fault blocks.

**Table 7.1: La Romanera – Major Lithostratigraphic Units**

Name	Type Example	Description
<i>Gafo Formation Shales and Quartzites</i>		<p>Characterised by flysch facies turbiditic sedimentary rocks including greywackes and interbedded shales-quartzites with minor tuffite intercalations.</p>
<i>Granodiorite</i>		<p>Granodiorite texture, grain size and alteration varies spatially. Shown here is a melanocratic granodiorite with a coarse grained phaneritic texture.</p>
<i>Purple Tuffaceous Shale Group</i>		<p>Reddish to purple fine-grained sediment. Colour related to pervasive hematite alteration. Used as a mapping guide at project to regional scale.</p>
<i>Rhyolitic Unit</i>		<p>Combination of massive rhyolites, rhyolitic breccia and agglomerates. Strong silicification is common.</p>
<i>Dacitic Unit</i>		<p>Combination of porphyritic massive dacite and dacitic tuffs. Porphyritic dacite is plagioclase-phyric with frequent microgranular enclaves and strong chlorite alteration.</p>



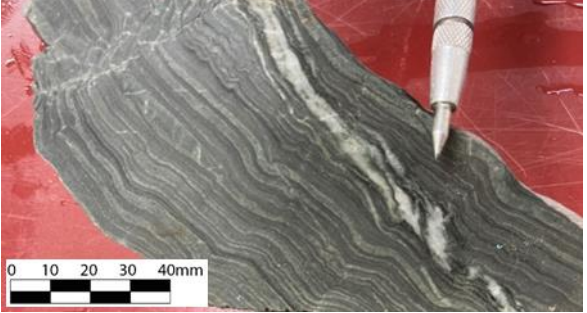
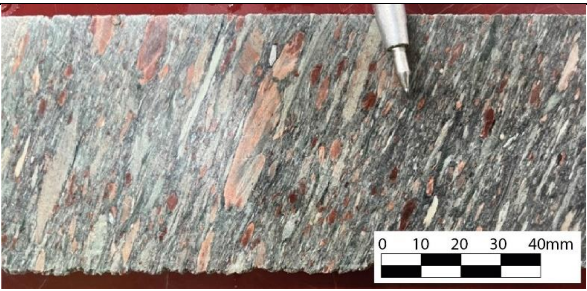
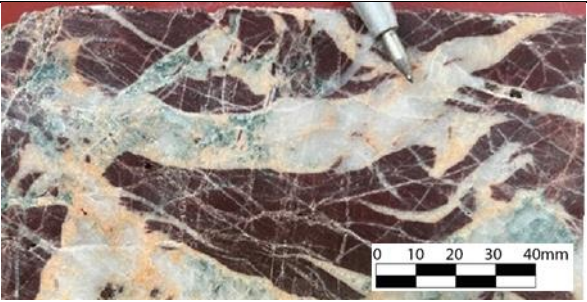

**Figure 7.7: La Infanta Geological Map**



**Figure 7.8: La Infanta Geological Cross Section and Schematic Lithostratigraphic Column**

Type examples and descriptions of the main lithostratigraphic units at La Infanta are provided in Table 7.2.

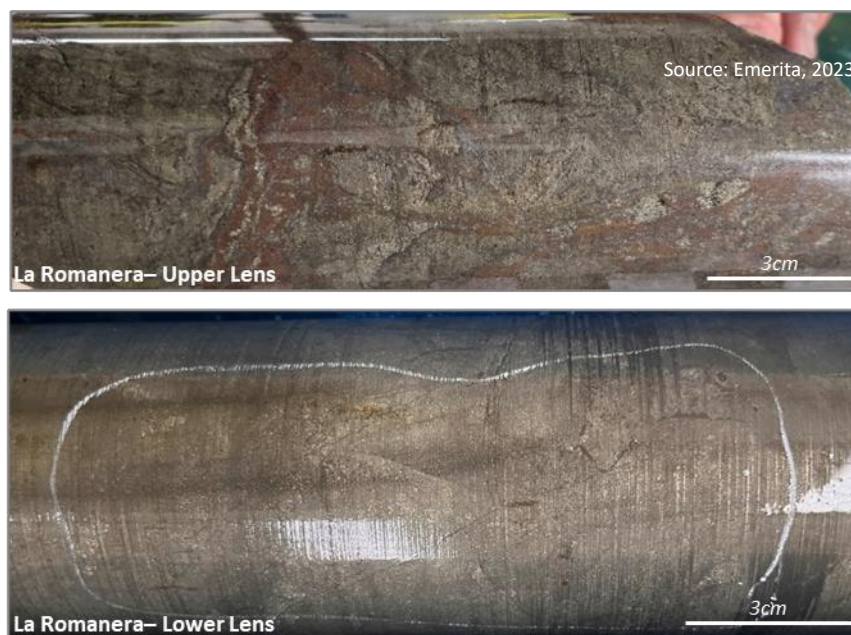
**Table 7.2: La Infanta – Major Lithostratigraphic Units**

Name	Type Example	Description
<i>Shale Unit</i>		<p>Grey to black color due to organic content. Laminated to massive textures. Quartz veins parallel to a strong penetrative foliation.</p>
<i>Volcanoclastic Unit</i>		<p>Unit is differentiated into volcanoclastic tuffs, sandstones and conglomerate according to grain size and texture.</p>
<i>Marker Horizon</i>		<p>Mixture of Jasper and purple shales. Jasper more abundant than in La Romanera, forming marker horizon outcrops due to associated silicification.</p>
<i>Dacitic Tuff</i>		<p>Combination of volcanoclastic lapilli tuffs and bedded tuffs. Fine to medium grain size, grayish to greenish colors and silicification alteration. Some minor base metal mineralisation characterised by veins and patches of sphalerite and galena.</p>

### 7.3.2 Significant Mineralised Zones

#### 7.3.2.1 La Romanera

Two major sulphide lenses have so far been defined at La Romanera, which show a style of mineralisation typical of VHMS deposits. The Upper Lens consists of massive to semi-massive sulphide mineralisation. The Lower Lens underlies the Upper Lens and consists of massive to semi-massive sulphide mineralisation. No significant stockwork-style mineralised zone is recognised in the deposit. The main mineralogy of the deposit is pyrite, sphalerite, galena, chalcopyrite, arsenopyrite and members of the tetrahedrite-tennantite solid solution series. Examples of La Romanera massive sulphide mineralisation are shown in Figure 7.9.



**Figure 7.9: Examples of La Romanera Upper and Lower Lens Massive Sulphide Mineralisation**

The Upper Lens massive sulphide is a continuous mineralised horizon which varies approximately from 2.0 to 32.0m in true thickness and averages 10.0m overall, with a strike length of 700m.

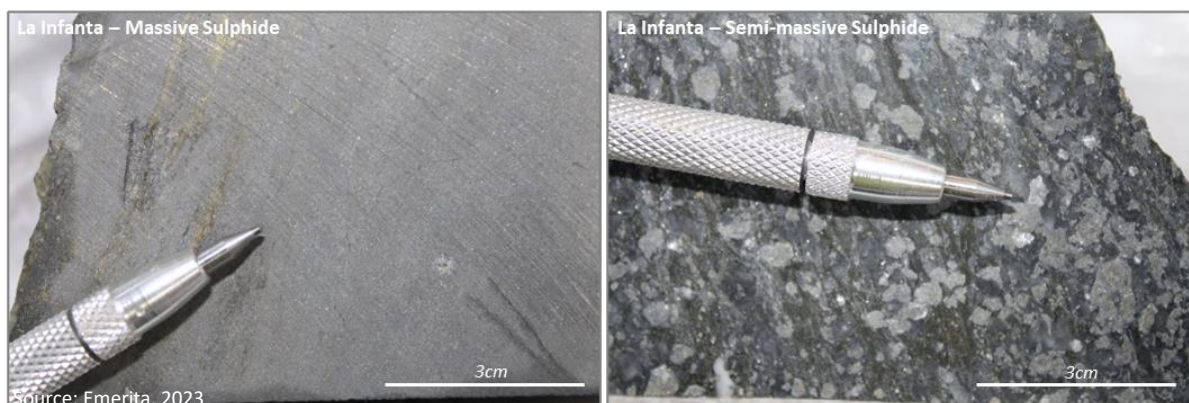
The Lower Lens massive sulphide is a continuous mineralised horizon which varies approximately from 2.0 to 30.0m in true thickness and averages 13.0m overall, with a strike length of 720m.

The Upper Lens massive sulphide and the underlying Lower Lens are locally both separated and in contact with one another throughout the Deposit. The Upper Lens occurs approximately 2.0 to 30.0m in the hanging wall above the Lower Lens. The lenses appear to be getting closer and potentially merge at depth.

The Deposit dips at approximately 70° to the north from surface for a down-dip length of approximately 675m (Upper Lens) and 720m (Lower Lens) so far tested by drilling.

### 7.3.2.2 *La Infanta*

Three major sulphide lenses have so far been defined at La Infanta, thought to be faulted repetitions of a single mineralised horizon. Mineralisation style is broadly typical of VHMS deposits, but exhibits greater variability in sulphide abundance from disseminated to massive sulphide. The North Lens is underlain by the South Lens, which itself is underlain by the South 1 Lens. No significant stockwork-style mineralised zone is recognised in the deposit. The main mineralogy of the deposit is sphalerite, pyrite, galena, chalcopyrite, and members of tetrahedrite-tennantite solid solution series. The proportion of pyrite is exceptionally low (typically <10%) and pyrite is absent over large areas. Examples of La Infanta mineralisation are shown in Figure 7.10.



**Figure 7.10: Example of La Infanta Sulphide Mineralisation**

The North Lens massive sulphide is a continuous mineralised horizon which varies approximately from 1.0 to 10.0m in true thickness and averages 3.0m overall, with a strike length of 1900m.

The South Lens massive sulphide is a continuous mineralised horizon which varies approximately from 1.0 to 9.0m in true thickness and averages 3.0m overall, with a strike length of 1090m approximately.

The South Lens 1 massive sulphide is a continuous mineralised horizon which varies approximately from 1.0 m to 7.0m in true thickness and averages 2.6m overall, with a strike length of 325m approximately.

The North Lens massive sulphide and the underlying South Lens are generally separated throughout the Deposit by around 30.0m. The South Lens massive sulphide and the underlying South Lens 1 are generally separated throughout the Deposit by about 15.0m.

The Deposit dips at approximately 70° from surface for a down-dip length of approximately 425m (North Lens), 190m (South Lens) and 150m (South Lens 1).



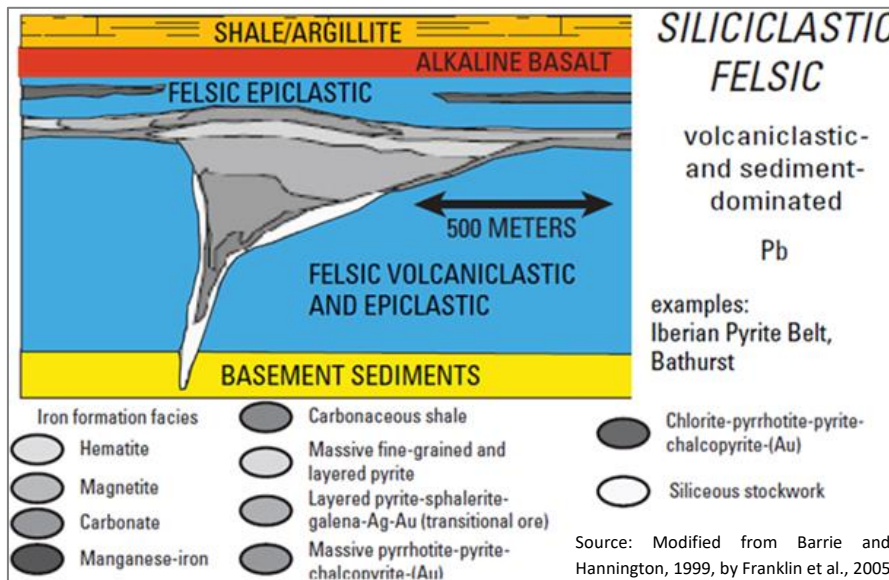
## 8 DEPOSIT TYPES

The polymetallic deposits of the IBW Project are classified as volcanic hosted massive sulphide (VHMS) deposits. VHMS deposits are stratabound concentrations of sulphide minerals precipitated from hydrothermal fluids in extensional seafloor environments. They are also known as volcanogenic massive sulphide (VMS) deposits. The term volcanogenic implies a genetic link between mineralisation and volcanic activity, but siliciclastic rocks dominate the stratigraphic assemblage in some settings (including the IPB).

The principal tectonic settings for VHMS deposits include mid-oceanic ridges, volcanic arcs (intraoceanic and continental margin), back arc basins, rifted continental margins, and pull-apart basins. The composition of volcanic rocks hosting individual sulphide deposits range from felsic to mafic, but bimodal mixtures are not uncommon. The volcanic strata consist of massive and pillow lavas, sheet flows, hyaloclastites, volcanic breccias, pyroclastic deposits, and volcanoclastic sediment. Deposits range in age from Early Archean (3.55Ga) to Holocene; deposits are currently forming at numerous localities in modern oceanic settings (Shanks et al., 2010).

VHMS deposits have two morphological and genetic components (Figure 8.1):

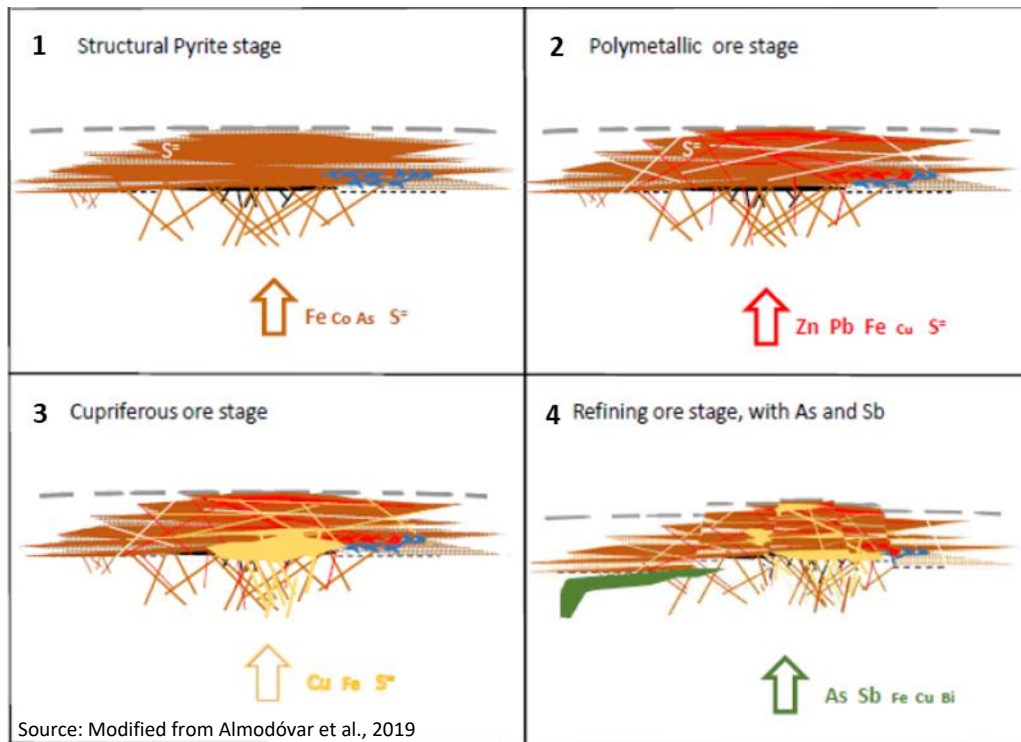
1. A mound-shaped to tabular strata bound body composed mainly of massive sulphides; and
2. An underlying zone with development of a stockwork system of irregular veins filled by quartz and disseminated sulphides.



**Figure 8.1: Schematic Diagram of a Siliciclastic Felsic VHMS Deposit**

The mineral composition of massive sulphide deposits from the IPB mostly comprises pyrite, and subordinate sphalerite, galena, chalcopyrite, arsenopyrite, tetrahedrite–tennantite, cobaltite, Sb–As–Bi sulphosalts, gold, and electrum. Common oxide phases include magnetite, hematite, cassiterite, and barite.

The mineralogical and textural evolution of massive sulphides leads to a common general model for IPB deposits including four main stages (Figure 8.2): (1) An early oxic system dominated by Fe-oxides and barite precipitation; (2) BSR disoxic dominated conditions; and (3) a high temperature hydrothermal system responsible for the main base metal mineralisation. Later in this stage, the refining processes takes place, driven by the emplacement of mafic magmas at depth leading the Sb and As-rich mineralisation; and (4) formation of ore shoots by selective remobilisation during the Variscan deformation.



**Figure 8.2: Different Stages of IPB VHMS Mineralisation**

## 9 EXPLORATION

### 9.1 Introduction

Since 2012, Emerita has completed exploration activities associated with the IBW Project. Until 2020, the main activity was reviewing existing information, through desktop research (publications and other companies reports) and visual inspection in the field. After formal granting of the IBW permits in 2021, Emerita has carried out a range of exploration including:

- Geological mapping;
- Soil geochemical sampling;
- Surface and downhole geophysics; and
- Exploration drill programmes.

Further information around drilling programmes is available in Section 10. A description of all other exploration work is given in the following subchapters.

### 9.2 Geological Mapping

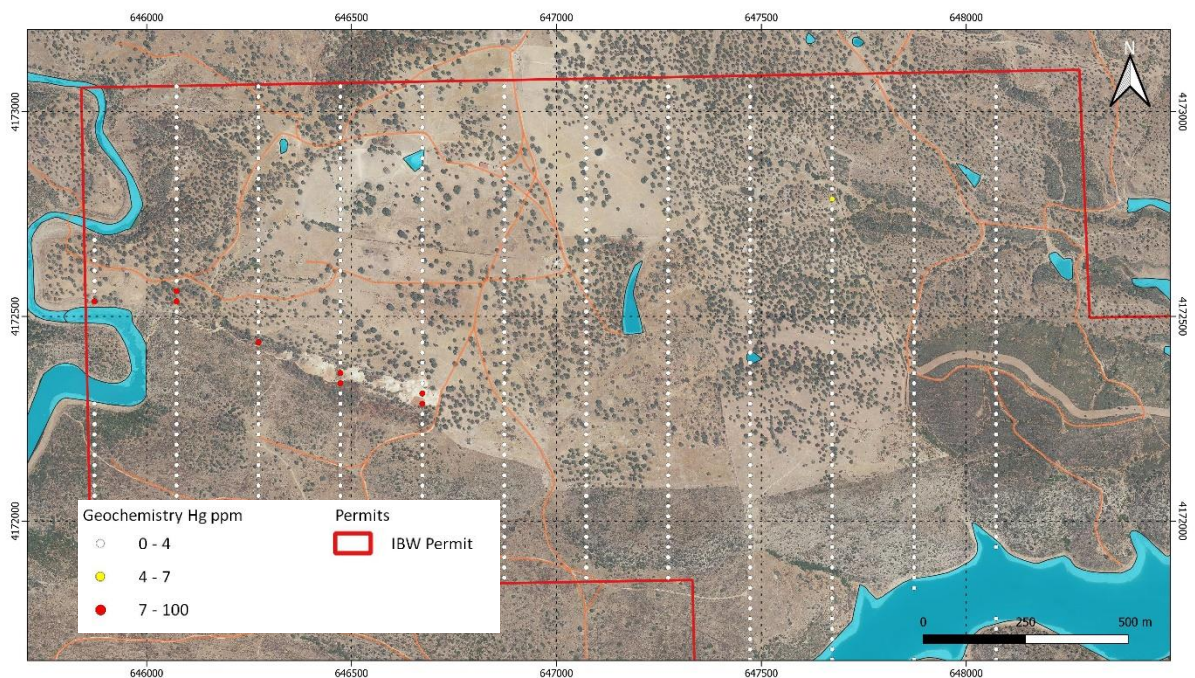
Detailed geological mapping has been completed over the La Romanera and La Infanta deposits as presented in Figure 7.5 and Figure 7.7. Mapping helped constrain the surface distribution of lithology, alteration, structure and mineralisation.

### 9.3 Soil Geochemistry

Emerita has planned a soil geochemistry programme through the entire IBW permit, comprising a total of 52 lines with a 200mE x 25mN sample spacing. The primary purpose of the programme is to find additional drill targets, by detecting potential geochemical indicators/pathfinders including As, Ba, Cu, Hg, Pb, Sb, Sn, Zn. A secondary purpose is to locate changes in soil geochemistry that mark lithological contacts and inform geological mapping.

Approximately 5,000 samples are planned to be collected for the entire project. At the time of reporting, all La Romanera area sample lines have been collected (12 lines) and analysed by the pXRF method (773 samples). The remaining samples are expected to be completed in the coming months.

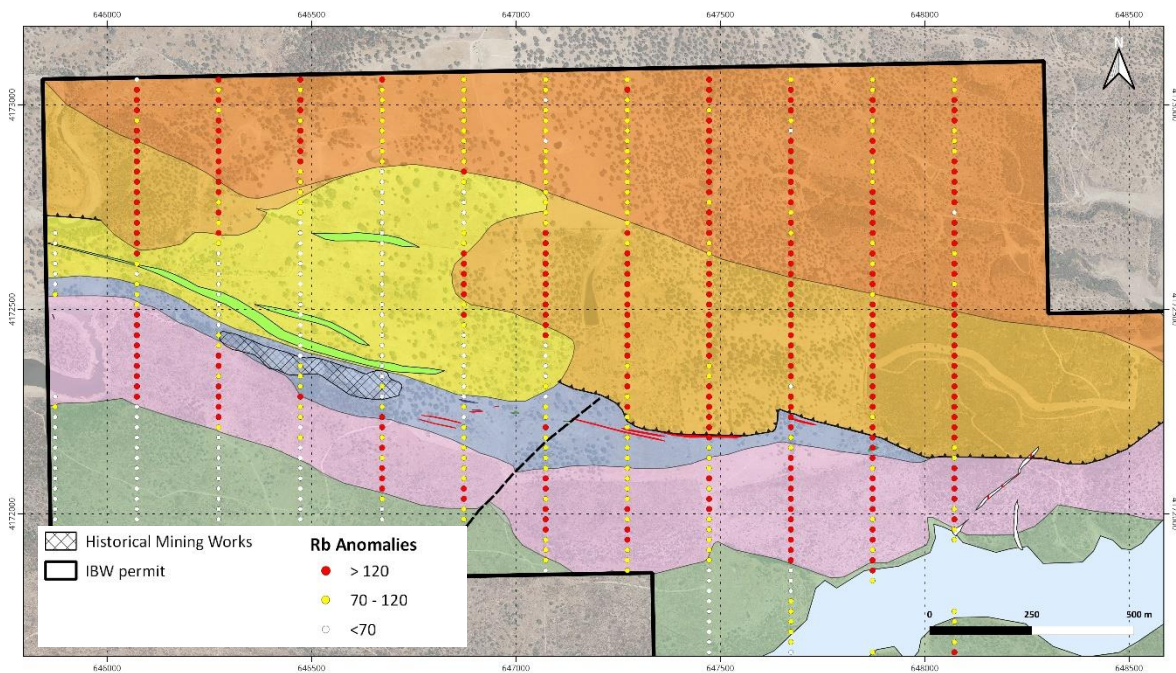
Initial insights include that some elements have a direct relationship with the polymetallic mineralisation. One of them is Hg, where the highest values coincide consistently with the position of the La Romanera orebody (Figure 9.1). The same occurs for As and Pb and these elements will help explore for new mineralisation in other areas of the project and can give an indication of the surface continuity of mineralisation.



**Figure 9.1: Map of Hg in Soil for the La Romanera Area**

Rb has been identified as a useful lithogeochemical marker. Figure 9.2 presents the geology based on outcrop mapping, overlain by soil sample points coloured by Rb concentration. Contrasting Rb in soil values mark lithological contacts, with granodiorite and dacite having distinctly lower Rb values than surrounding lithologies.

100 of the 773 samples were sent for laboratory analysis to compare with the pXRF results and to assay for Au. The results are pending at the time of this report. The sample batch sent to the laboratory contained 19 QAQC samples including 7 coarse blanks, 6 fine blanks and 6 low grade Zn standards.

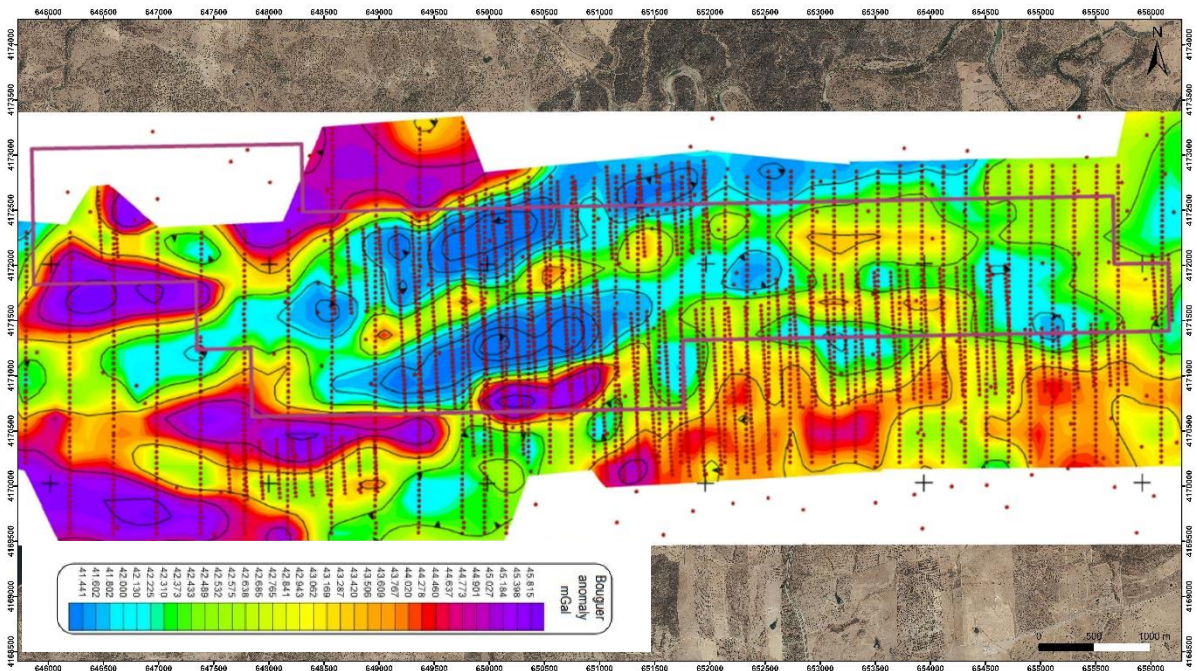


**Figure 9.2: Comparison of Rb in Soil vs. Geological Map for the La Romanera Area**

#### 9.4 Geophysics

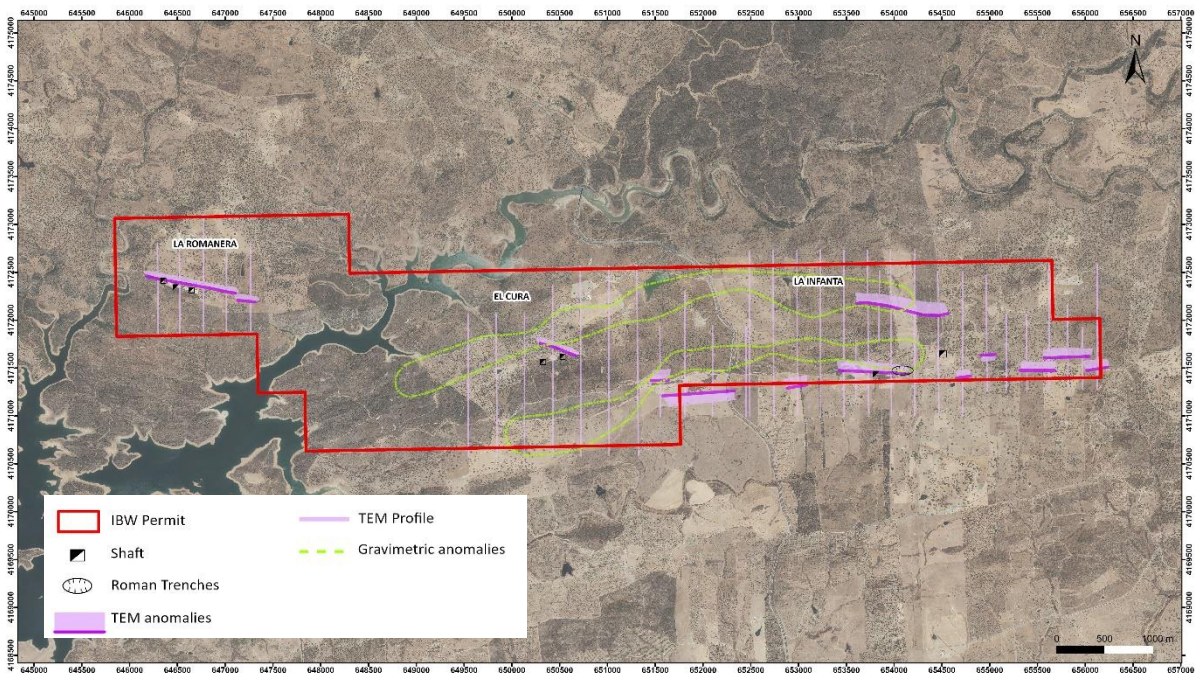
Emerita has compiled and analysed historical gravimetric data, alongside completing its own geophysical campaigns (June 2021 to present), which included surface Time Domain Electromagnetics (TEM) and downhole TEM (DHTEM).

The historical gravimetric data was provided by the Geophysics Branch of the Spanish Geological and Mining Survey (IGME). These data covered most of the permit area and were collected by different companies in different programmes. Evidence of historical mining was verified and subsequently compared to the compiled gravimetric data (Figure 9.3 and Figure 9.4).



**Figure 9.3: IBW Project Bouguer Anomaly Map**

Emerita completed a surface TEM programme, comprising 28km of fixed loop (Turam) and 19km of mobile loop (Slingram). Frequencies included 2.5Hz, 6.25Hz and 25Hz. Separation between loops ranged from 250m to 350m. The geophysical survey detected a series of high conductivity TEM anomalies, interpreted to trend east-west like the known VHMS mineralisation (Figure 9.4).



**Figure 9.4: Map of IBW Project TEM and Gravimetric Anomalies**

In March and May 2023, Emerita completed six downhole-TEM surveys. Drillholes located on the edges of the orebodies were surveyed to investigate potential extensions. One hole was surveyed at La Infanta and five at La Romanera. Measurements are collected at 10m intervals. Results included:

- IN068: Weak anomaly between 220-230m;
- LR065: Significant conductivity mass subvertical at 560m;
- LR087: Positive polarity indicates that the edge of ore is far from the drillhole;
- LR101: Polarity change in the mineralised zone indicating the drillhole is on an edge;
- LR117: Results indicate that the ore has continuity laterally; and
- LR142: Measured the first 100m only and no anomaly detected.

TEM and DHEM demonstrated a good response on relatively thick massive sulphide orebodies like the La Romanera deposit. For La Infanta the response was more subtle. Emerita is planning several additional geophysical surveys to cover the whole permit and test the continuity of the mineralised horizons. TEM will be the preferred method although Inductive Polarity (IP) could be used as well, in combination with TEM, to test for disseminated ores.

## 10 DRILLING

### 10.1 Type and Extent

#### 10.1.1 Historical Drilling (Prior to 2021)

Historical exploration drilling is described in Section 6.2. Limited supporting documentation is available regarding historical drilling and it has been excluded from the MRE drillhole database, with drill coverage replaced by Emerita drilling. Only Emerita drilling is described in the remainder of this section.

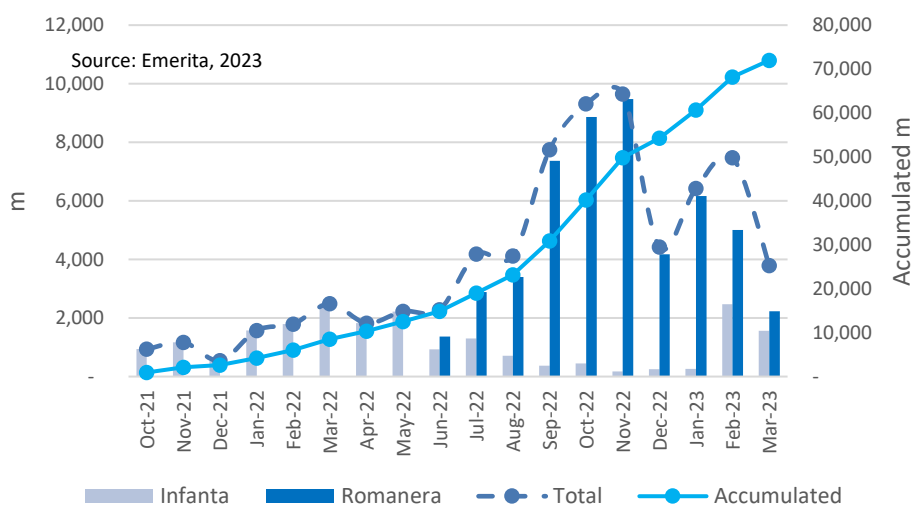
#### 10.1.2 Emerita Drilling (2021 to Present)

##### 10.1.2.1 Introduction

Emerita’s exploration strategy has focused on diamond drilling (DDH). Over 70,000m (Table 10.1 and Figure 10.1) of diamond drilling has been carried out since 2021 in two different phases:

- From July 2021 to June 2022 most of the exploration was carried out in the La Infanta area; and
- From June 2022 to March 2023 diamond drilling increased substantially when drilling started in La Romanera area.

Area	2021	2022	2023	Total
La Infanta	4,920.9	10,686.2	3,957.8	19,564.9
La Romanera	-	37,098.8	15,652.1	52,750.9
Total	4,920.9	47,785.0	19,609.9	72,315.8

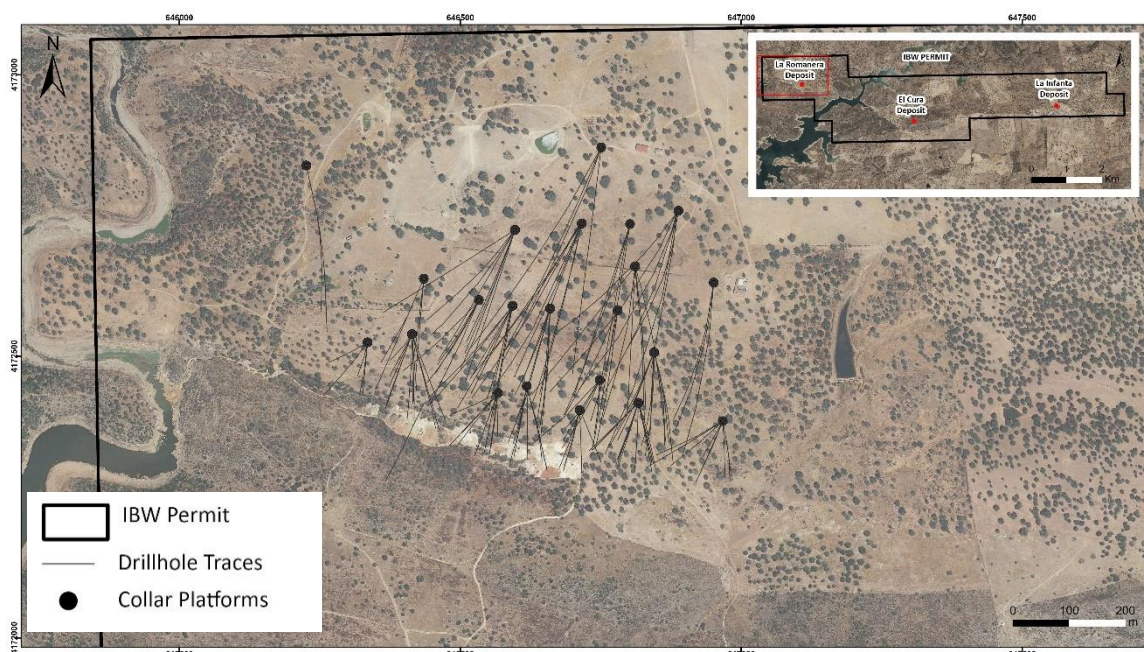


**Figure 10.1: Summary of DDH Meters per Month and in Total at Each Deposit**

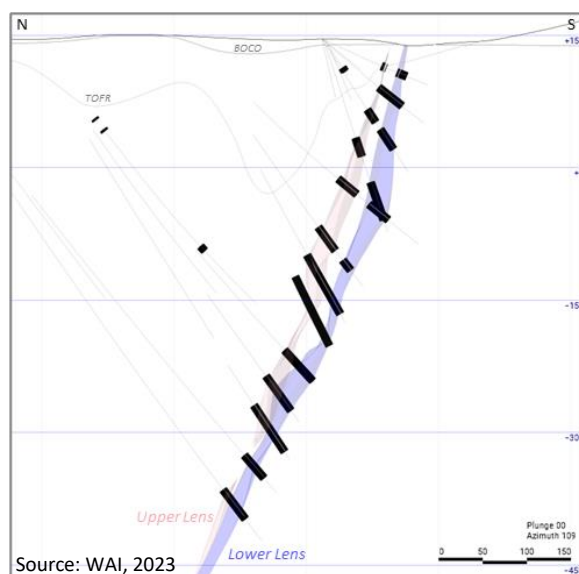


### 10.1.2.2 La Romanera

A map of La Romanera is provided in Figure 10.2 and shows the location and azimuth of Emerita diamond drilling. Multiple holes are drilled from a single collar to minimise rig moves, drill site preparation and environmental disturbance. Azimuth (180-220° typical) and dip (50-70° typical) are varied to cover a coherent panel of the ore body in long section. The drilling cross section in Figure 10.3 shows the typical sample coverage and range of dip orientations. This drillhole configuration means downhole widths typically vary from 60% to 100% of true width. Nominal drill spacing is 50m x 50m in the core of the deposit, increasing to 100m x 100m on the periphery.



**Figure 10.2: La Romanera Drill Plan**



**Figure 10.3: Representative Drill Section through the La Romanera Deposit (Sampling in Black)**

### 10.1.2.3 La Infanta

A map of La Infanta is provided in Figure 10.4 and shows the location and azimuth of Emerita diamond drilling. Holes have been drilled on a broadly consistent azimuth around 175°. The drilling cross section in Figure 10.3 shows the typical sample coverage and dip orientation around 50°. This drillhole configuration means downhole widths typically vary from 80% to 90% of true width. Nominal drill spacing is locally 50m x 50m in the upper 150m of the deposit, increasing to >100m x 100m in the down-dip and strike extensions.

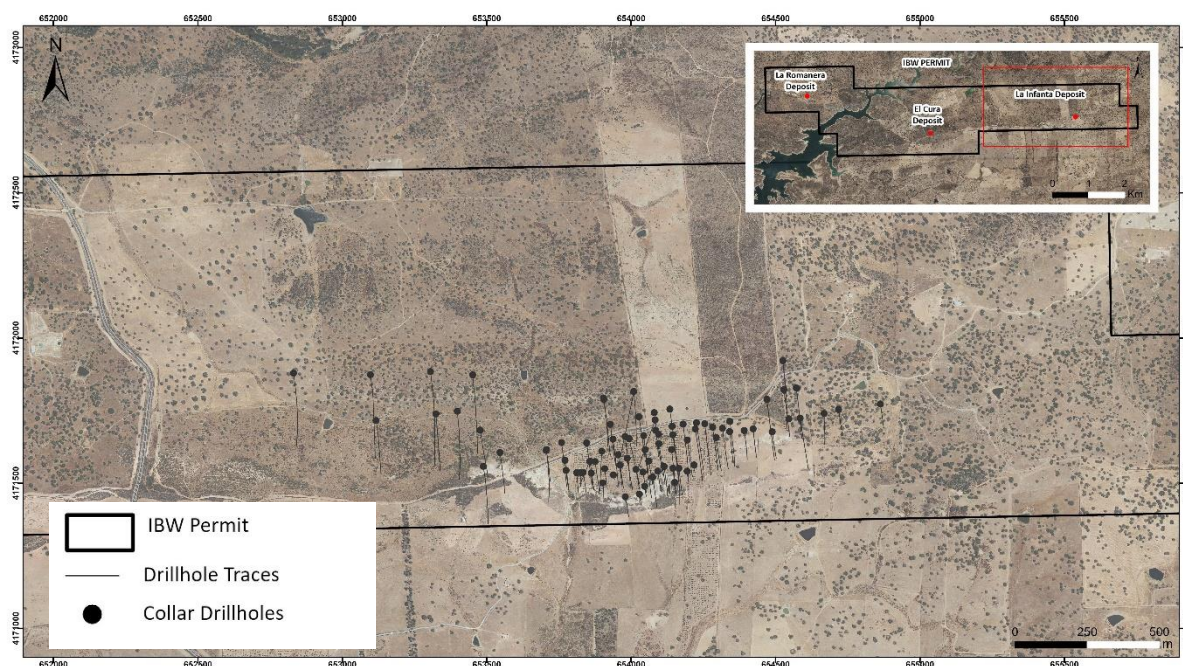


Figure 10.4: La Infanta Drill Plan

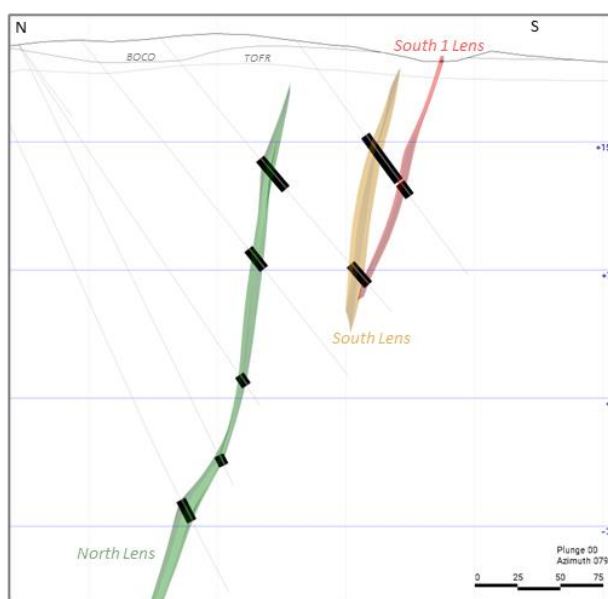


Figure 10.5: Representative Drill Section through the La Infanta Deposit (Sampling in Black)

## 10.2 Procedures

### 10.2.1 Drilling Method

All drill holes at La Romanera and La Infanta are diamond drill holes. Diamond drilling includes PQ (85mm), HQ (63.5mm) and NQ (47.6mm) core diameters. For initial meters, just below the weathering zone, PQ is used. Then, the hole continues in HQ until the end of the hole. When downhole issues arise, NQ can be used.

### 10.2.2 Collar Survey

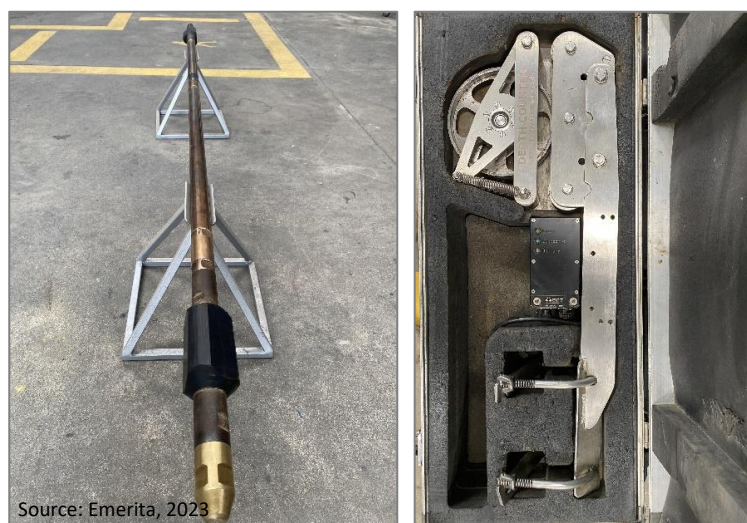
Surveying of all drillhole collar locations is done by Geovance, an independent contractor. Geovance use a GEOMAX GPS, model ZENITH60, with serial number Z60ST272100139.

### 10.2.3 Downhole Survey

All drillholes are downhole surveyed to capture hole dip and azimuth. A summary of the tools used is provided in Table 10.2.

Tool	Dip precision	Azimuth precision	Dip range
GyroMaster™ 2074	± 0.05°	± 0.5°	-90° a +90°
GyroLogic™ 29	± 0.05°	± 0.3°	-85° a +85°
GyroLogic™ 11	± 0.05°	± 0.3°	-85° a +85°
Reflex EZ-TRACK™	± 0.25°	± 0.35°	-90° a +90°
MagCruiser™ MM013	± 0.05°	± 0.3°	-90° a +90°

Currently, the tool Emerita is using is the GyroLogic™ 11 with an optical depth counter (Figure 10.6).



**Figure 10.6: GyroLogic™ SPT Downhole Survey Tool and Optical Depth Counter**

#### **10.2.4 Logging**

Drill core boxes are collected on the rig and taken to the Emerita core shed where the core is logged and processed. All data is captured in a relational database using MX Deposit<sup>®</sup> software. The logging procedure is as follows:

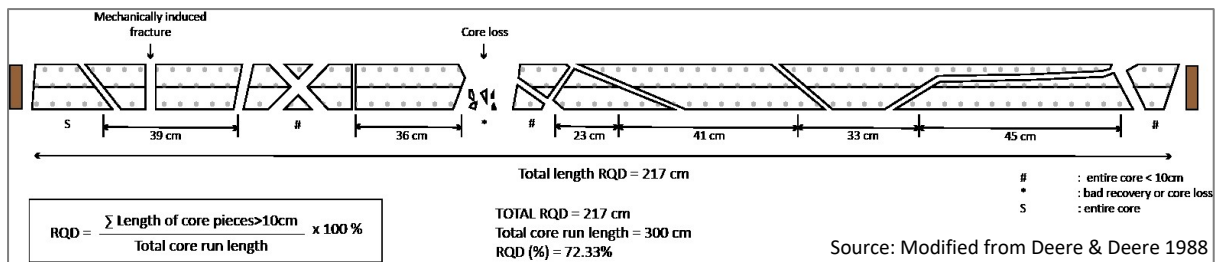
- Core boxes are placed in order from left to right and the boxes are marked with the hole id and meters;
- Core is fitted and oriented in one preference direction;
- Core is wet and photographed;
- Core recovery and rock quality designation (RQD) is measured;
- Units and lithologies are logged, including colour, texture, alteration, structures, grain size, veining, presence or not of mineralisation, type and composition of the mineralisation and other relevant information;
- Assay sample intervals are marked on the boxes and the core using a permanent marker. Sampling is selective based on logging observations. Sample intervals do not cross lithological contacts;
- The photos are uploaded into a company information storage system; and
- Density measurements are taken on barren zones and sample intervals using the standard water displacement method (Section 11.2).

#### **10.2.5 Core Recovery**

Core recovery is calculated by measuring the total length of a known defined interval to calculate the recovery percentage of the total core run. The natural fractures are counted and grouped in the defined interval. Average recovery percentage at La Romanera is 98%. Average recovery percentage at La Infanta is 95.3%. No correlation between metal grades and core recovery has been observed. The authors of this report consider there are no material issues resulting from drill core recovery and that the core recoveries attained are acceptable for use in Mineral Resource estimation.

#### **10.2.6 RQD**

Rock Quality Designation (RQD) is the sum of all core fragments larger than 10cm, measured along the centerline in a geotechnical interval, considering only natural discontinuities (Figure 10.7). This RQD length is then compared with the total core run length of the interval to obtain the RQD percentage. Mean RQD for La Romanera is 82.5%, indicating that rock quality is good according to the Deere & Deere, 1988 classification scheme. Mean RQD for La Infanta is 71.5%, indicating the rock quality is fair according to the Deere & Deere, 1988 classification scheme.



**Figure 10.7: Procedure for Measuring and Calculating RQD**

### 10.3 Interpretation of Relevant Results

Relevant drill sections showing the geological interpretation of the La Romanera and La Infanta deposits are contained in Section 7.3. The drill assay results, geological logging and geological interpretation, have enabled the three-dimensional delineation of the VHMS lenses for use in Mineral Resource estimation as outlined in Section 14.3.

The authors consider that the drilling and core sample collection at the IBW Project are undertaken by competent personnel using procedures that are consistent with industry best practice. The authors conclude that the samples are representative of the mineralisation and there is no evidence that the drilling or sample collection process has resulted in a bias that could materially impact the accuracy and reliability of the results.

## 11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

### 11.1 Sampling Methods

#### 11.1.1 Core

Emerita geologists manage the core sampling and select sampled zones based on lithology, texture, alteration and mineralisation. To ensure sample size is within laboratory requirements, a minimum and maximum length is defined according to the diameter of the core (Table 11.1):

<b>Core Diameter</b>	<b>Minimum Length</b>	<b>Maximum Length</b>
PQ	20cm	100cm
HQ	50cm	150cm
NQ	80cm	200cm
BQ	45cm*	150cm*

\*Whole core sampled

Samples are marked on the core and the core boxes with a permanent marker by two arrows, one at the beginning of the sample interval and the other at the end. The cut line is marked in the middle of the core following the apex of the foliation as a guide for the core saw operator.

To identify the samples, a sample tag with a sample number and a bar code is assigned to each sample. Samples are cut in halves using a diamond core saw by the line drawn before.

The same half is collected for analysis by placing it in a sample bag together with the sample tag used beforehand.

#### 11.1.2 Soil

Soils sampling for geochemical analysis is supervised by a geologist and is undertaken using a mattock or a pickaxe depending on the hardness of the soil, removing the topsoil layer, until the bedrock is visible. The procedure starts by locating the sample point in the field with a GPS. Then, once the sample is selected, a double sieve is carried out, the first one taking the soil sample to the bowl and the second one from the bowl to the sample bag, which is closed with a cable tie (Figure 11.1).



**Figure 11.1: Soil Sampling Process**

To date the soil sample weights have been around 200g and the sampling depth was up to 30-40cm, depending on the area.

Each sample bag is labelled and analysed with an Olympus Vanta Portable X-Ray Fluorescence (pXRF) device (Figure 11.2).



**Figure 11.2: Olympus Vanta pXRF**

## 11.2 Bulk Density

Bulk density measurements are performed on barren and ore zones using the following sample selection procedure:

- **Lithological density samples.** One sample of bulk lithology density every 10m at 10-20cm sample lengths.
- **Ore density samples.** One sample of bulk sample density within each assay sample at 10-20cm sample length.

Weight measurements are taken for both dry and wet conditions to calculate the bulk density of the samples by using the following formula:

$$\rho = \frac{x}{x-y} \text{ where } x \text{ represents the dry weight and } y \text{ the immersed (wet) weight}$$

Emerita use a U.S. Solid brand USS-DBS28-30 model balance and a GRAM brand EH-6000 model balance for sample weighing. The precision of the balances are 0.01g and 0.1g respectively. The method for the wet weighing is based on the suspension of the sample in a metal basket inside of a water tank that allows the sample to be submerged (Figure 11.3).



**Figure 11.3: U.S. Solid USS-DBS28-30 Balance Taking a Wet Weight for Bulk Density Calculation**



### 11.3 Sample Security

The project core shed is located in Puebla de Guzman, 22km from La Romanera and 8km from La Infanta. There are all-weather gravel and paved roads all the way to the core shed. The drill core is transported to the core shed by Emerita or drill contractor personnel by pickup truck.

All core boxes are carefully placed on the truck and secured by straps and a net. The number of boxes carried is in accordance with national transportation rules and laws. The integrity of the core boxes is inspected prior to beginning the logging and sampling process. The boxes are unloaded from the pickup and then the established core handling procedure is followed.

At the end of the logging and sampling process, the core boxes are organised in covered pallets depending on if they are mineralised, and then stored in metal racks, so they can be quickly accessed if necessary.

The samples sent for analysis are delivered to the laboratories in Seville, by authorised Emerita personnel in a company vehicle. Laboratory reject material is brought back to the core shed by Emerita personnel and stored in large boxes.

The authors consider the sample security and chain of custody procedures used by Emerita to be of a high standard.

### 11.4 Laboratories

The laboratories used for geochemical analysis by Emerita are listed in Table 11.2. Only ALS Global was used for La Romanera core samples and IBW soil samples, whilst a combination of ALS Global (ALS) and AGQ Mining and Bioenergy S.L. (AGQ) were used for La Infanta core samples.

<b>Laboratory</b>	<b>Certification</b>
ALS Global	ISO 17025:2017. INAB Registration No: 173T
AGQ Mining and Bioenergy S.L.	UNE-EN-ISO/IEC 17025:2017 for mining laboratory analysis.

### 11.5 Sample Preparation and Analysis

#### 11.5.1 ALS

##### 11.5.1.1 Core

Samples are transported from the Emerita core facility to the ALS laboratory in Seville by Emerita personnel. The sample preparation procedure by ALS Global is listed in Table 11.3.

Laboratory	Sample Preparation	Description
ALS Global	WEI-21	Received Sample Weight
	LOG-22	Sample login – Rcd w/o Barcode
	CRU-QC	Crushing QC Test
	PUL-QC	Pulverizing QC Test
	CRU-31	Fine crushing – 70% < 2mm
	SPL-22Y	Split Sample – Boyd Rotary Splitter
	PUL-32	Pulverize 1000 gr to 85% < 75um
	LOG-24	Pulp Login – Rcd w/o Barcode

ALS Sevilla then sends the pulps to the ALS Loughrea laboratory, located in Ireland, to be analysed using an oxidising aqua regia digestion followed by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) for a suite of 19 elements including Cu, Pb, Zn and Ag (code ME-ICPORE). ME-ICPORE is applicable to base metal ores and is particularly used for massive sulphides, where the oxidising agents ensure sulphides are fully decomposed. The method delivers the following elements and detection ranges (Table 11.4).

Method Code	Analytes and Ranges (%)			
ME-ICPORE	Ag	1-1500 ppm	Mn	0.005-50
	As	0.005-30	Mo	0.001-10
	Bi	0.005-30	Ni	0.001-30
	Ca	0.01-50	P	0.01-20
	Cd	0.001-10	Pb	0.005-30
	Co	0.001-20	S	0.05-50
	Cu	0.001-40	Sb	0.005-100
	Fe	0.01-100	Tl	0.005-1
	Hg	8-10000 ppm	Zn	0.002-100
	Mg	0.01-50		

Pulps are sent to ALS Johannesburg to analyse for Au via a Fire Assay with an Atomic Absorption Spectroscopy (code Au-AA23) or gravimetric (code Au-GRA21) finish (Table 11.5).

Method Code	Analytes and Ranges (ppm)	
Au-AA23	Au	0.005-10
Au-GRA21	Au	0.05-10,000

ME-MS61r uses four-acid digestion paired with ICP-MS and ICP-AES such that REE analytes included (Table 11.6). Some REE's are only partially recovered with a four-acid digestion.

Method Code	Analytes and Ranges (ppm)			
ME- MS61r	Dy	0.05-1000	Nd	0.01-1000
	Er	0.03-1000	Pr	0.03-1000
	Eu	0.03-1000	Sm	0.03-1000
	Gd	0.05-1000	Tb	0.01-1000
	Ho	0.01-1000	Tm	0.01-1000
	Lu	0.01-1000	Yb	0.03-1000

### 11.5.1.2 Soil

For soil geochemistry the preparation differs and uses the PREP-41 method, that consists of drying the sample at <60°C, then sieving to -180 micron with an 80 mesh and retaining both fractions. The analytical method used is ME-MS61L™, which consists of a four-acid super trace analysis with lower detection limits (Table 11.7).

Method Code	Analytes and Ranges (ppm)							
ME-MS61L	Ag	0.002-100	Cu	0.02-10000	Na	0.001-10%	Sr	0.02-10000
	Al	0.01-50 %	Fe	0.002-50%	Nb	0.005-500	Ta	0.01-500
	As	0.02-10000	Ga	0.05-10000	Ni	0.08-10000	Te	0.005-500
	Ba	1-10000	Ge	0.05-500	P	0.001-1 %	Th	0.004-10000
	Be	0.02-1000	Hf	0.004-500	Pb	0.01-10000	Ti	0.001-10 %
	Bi	0.002-10000	In	0.005-500	Rb	0.02-10000	Tl	0.002-10000
	Ca	0.01-50 %	K	0.01-10 %	Re	0.0004-50	U	0.01-10000
	Cd	0.005-1000	La	0.005-10000	S	0.01-10 %	V	0.1-10000
	Ce	0.01-10000	Li	0.2-10000	Sb	0.02-10000	W	0.008-10000
	Co	0.005-10000	Mg	0.01-50 %	Sc	0.01-10000	Y	0.01-500
	Cr	0.3-10000	Mn	0.2-100000	Se	0.006-1000	Zn	0.2-10000
	Cs	0.01-10000	Mo	0.02-10000	Sn	0.02-500	Zr	0.1-500

### 11.5.2 AGQ

Samples are transported from the Emerita core facility to the AGQ laboratory in Seville by Emerita personnel. Only drill core samples have been analysed by AGQ. The sample preparation method applied is listed in Table 11.8.

Laboratory	Description
AGQ Mining and Bioenergy S.L.	Oven drying at 105°C
	Fine crushing – 70% < 2mm
	Split Sample – Riffle Splitter
	Pulverize 250 gr to 85% < 75µm

Geochemical analysis is via method PE-4042 or PE-4043. Both are multielement analysis designed for metallic ores and use an oxidising aqua regia digestion followed by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) for a suite of 37-38 elements including Cu, Pb, Zn and Ag (Table 11.9 and Table 11.10).

Method Code	Analytes and Ranges (mg/kg)					
PE-4042	Al	200-100,000	Fe	200-200,000	S	500-100,000
	Ag	5.00-100	Ga	5.00-1000	Sb	10.0-10,000
	As	10.0-10,000	Hg	10.0-1000	Sc	5.00-10,000
	Au	0.05-100 (g/t)	In	5.00-500	Se	10.0-500
	B	10.0-10,000	K	500-200,000	Sn	10.0-10,000
	Ba	5.00-10,000	Li	5.00-1000	Sr	5.00-10,000
	Be	5.00-500	Mg	500-200,000	Ti	100-5000
	Bi	10.0-10,000	Mn	5.00-10,000	Tl	5.00-10,000
	Ca	500-200,000	Mo	10.0-1000	V	10.0-10,000
	Cd	5.00-1000	Na	500-200,000	W	5.00-10,000
	Co	5.00-1000	Ni	5.00-1000	Zn	100-10,000
	Cr	10.0-1000	P	200-10000		
	Cu	5.00-10,000	Pb	5.00-10,000		

Method Code	Analytes and Ranges (mg/kg)					
PE-4043	Al	500-150,000	Fe	500-200,000	Pb	10.00-10,000
	Ag	2.00-100	Ga	5.00-1000	S	500-200,000
	As	10.0-10,000	Hg	10.0-1000	Sb	10.0-10,000
	Au	0.05-100 (g/t)	In	5.00-1000	Sc	5.00-10,000
	B	10.0-10,000	K	500-200,000	Se	10.0-500
	Ba	50.00-10,000	La	50.0-10,000	Sn	10.0-10,000
	Be	5.00-500	Li	10.00-10,000	Sr	5.00-10,000
	Bi	10.0-10,000	Mg	500-200,000	Ti	100-10,000
	Ca	500-200,000	Mn	25.0-10,000	Tl	5.00-10,000
	Cd	5.00-2500	Mo	5.00-10,000	V	5.0-10,000
	Co	5.00-10,000	Na	500-200,000	W	50.0-10,000
	Cr	5.00-10,000	Ni	5.00-10,000	Zn	50.0-10,000
	Cu	5.00-10,000	P	500-50,000		

PE-4014 is used to analyse for gold via a Fire Assay method (Table 11.11):

Method Code	Analyte and Range (g/t)	
PE-4014	Au	0.05-100

## 11.6 QAQC Protocol

### 11.6.1 Introduction

The implementation of a Quality Assurance and Quality Control (QAQC) is industry best practice and involves establishing appropriate procedures and the routine insertion of control samples to monitor the sampling, sample preparation and analytical process. Routine analysis of QC data is made to:

1. Identify and promptly correct any errors; and
2. To assess the reliability of sample assay data and the confidence in the data used for the Mineral Resource estimation.

The Emerita QAQC protocol is designed to measure and monitor accuracy, precision and contamination.

### 11.6.2 Accuracy

Accuracy refers to the proximity of a measurement to a 'true' value. It is controlled by certified reference materials (CRMs). A CRM is a composite sample pulp of known matrix (rock type) and element content (certified mean and standard deviation), submitted to verify laboratory accuracy. The CRMs used by Emerita are listed in Table 11.12.

CRM	Cu	Pb	Zn	Au	Ag
<b>OREAS 620</b>	0.175% ±	0.774% ±	3.12% ±	0.685ppm ±	38.4ppm ±
	0.005%	0.024%	0.086%	0.021ppm	1.31ppm
<b>OREAS 622</b>	0.484% ±	2.19% ±	10.01% ±	1.85ppm ±	101ppm ±
	0.013%	0.06%	0.258%	0.066ppm	4ppm
<b>OREAS 623</b>	1.72% ±	0.252% ±	1.01% ±	0.827ppm ±	20.4ppm ±
	0.066%	0.01%	0.038%	0.039ppm	1.15ppm
<b>OREAS 630b</b>	523ppm ±	0.408% ±	1.10% ±	0.358ppm ±	19.1ppm ±
	20ppm	0.021%	0.033%	0.013ppm	0.72ppm

### 11.6.3 Precision

Precision refers to the capacity to repeat the results of a measurement under similar conditions. It is evaluated by inserting duplicates. Duplicate types implemented by Emerita include:

- **Field duplicate**

Sample of the same interval/site taken identically to the original sample, to measure the precision of the entire sampling process, from the field to laboratory sample preparation and analysis. Field duplicate results are also influenced by the nugget effect i.e. natural small-scale variability of the mineralisation. There may be significant variation between the original and the duplicate result.

- **Pulp duplicate**

Duplicate taken from the pulverised sample to measure the precision of the laboratory pulverising and analytical process. Variation should be minimal as the pulp should be homogeneous.

#### **11.6.4 Contamination**

Refers to the unintentional alteration of a sample of one material with the presence of another material. This is evaluated by the insertion of blanks:

- **Coarse Blank (BLANK)**

Coarse sample with values below detection for the elements of interest in the analytical method applied. Coarse blanks are subjected to and monitor contamination for the entire process of preparation and analysis.

- **Fine Blank (BLANK F)**

Pulp sample with values below detection for the elements of interest in the analytical method applied. Evaluates contamination during sample analysis.

All blanks have been prepared in the core shed by the following methods:

- **Coarse Blank (BLANK)**

The source of these materials has changed over time. Until November 2022 the blanks were purchased from a quarry and subsequently from ALS Global. The preparation procedure consists of measuring 1kg, placing it in a sample bag and closing it with a plastic clip.

- **Fine Blank (BLANK F)**

Fine blanks have been bought from ALS Global. The preparation procedure consists of measuring 100g of material and placing it in a zip lock bag.

#### **11.6.5 Quality Control Rules**

Quality control rules define when a control sample is considered to have failed and needs to be investigated (Table 11.13).

Rule	QC Sample	QC Measure	Failure Criteria
1	BLANK	Contamination	The result of a blank is 5 times greater than the average blank sample value
2	CRM	Accuracy	The result of a CRM is greater than 3 standard deviations to its certified mean value
3	CRM	Accuracy	The results of 2 adjacent CRMs are greater than 2 standard deviations (same side) from their certified mean values

Once the possibility of having out of sequence samples has been ruled out, the pulps of the failed sample and the adjacent samples to the next accepted QC sample are sent for reanalysis.

In the case that the failure is for accuracy (CRM), the pulps of the samples are sent for reanalysis. In the case that the failure is due to contamination (blank), the coarse rejects of the samples are sent for reanalysis. A new analysis request is generated for the samples to be reanalysed and the original label numbers are retained. Samples are re-analysed until QC results are satisfactory.

If there is suspicion of a problem occurring during the initial sampling in the core yard, or if there is breakage and/or contamination of the coarse rejects or pulps, the remaining half of the core will be taken as a sample to be analysed. This is the only case where new label numbers are assigned because it corresponds to a re-sampling of the core.

## 11.7 QAQC Results

### 11.7.1 La Romanera (ALS)

#### 11.7.1.1 Introduction

The La Romanera MRE database includes a total of 7,008 samples assayed by ALS. 5,780 samples were original drill core samples and the remaining 1,228 were QC samples (Table 11.14). Total QC sample insertion rate exceeds the industry standard of 15%. Duplicate samples were not introduced until January, 2023, which accounts for their lower insertion rate relative to other QC sample types.

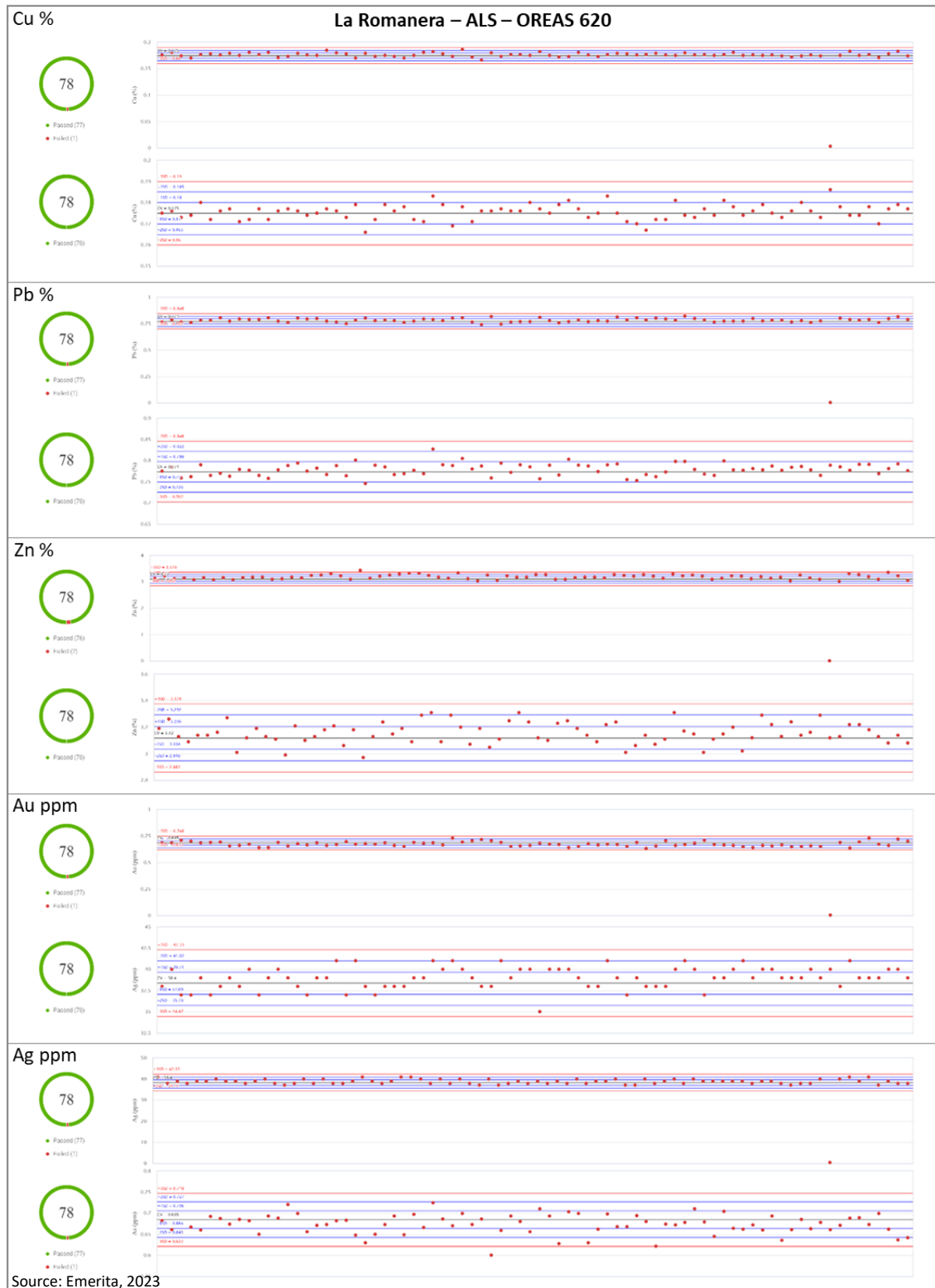
Sample Type	Number of Samples	% Total	
Original	5,780	82.5	
Control	1,228	17.5	
	Duplicates	180	2.6
	CRMs	358	5.1
	Blanks	690	9.8
Total	7,008	100	

11.7.1.2 *Certified Reference Materials*

La Romanera CRM results for ALS are outlined in Table 11.15 and an example CRM control chart is shown in Figure 11.4. Failure rates for each CRM were typically low for a given element and no material bias is evident in CRM control charts.

<b>Table 11.15: Summary of La Romanera CRM Submissions to ALS</b>							
<b>CRM</b>	<b>Element</b>	<b>Unit</b>	<b>Number of Samples</b>	<b>Certified Mean</b>	<b>1SD</b>	<b>Number of Failures</b>	<b>Failure %</b>
OREAS 620	Cu	%	156	0.175	0.005	1	0.64
	Pb	%	156	0.774	0.024	1	0.64
	Zn	%	156	3.12	0.086	2	1.28
	Au	ppm	156	0.685	0.021	2	1.28
	Ag	ppm	156	38.4	1.31	2	1.28
OREAS 622	Cu	%	15	0.484	0.013	1	6.67
	Pb	%	15	2.19	0.06	0	0.00
	Zn	%	15	10.01	0.258	0	0.00
	Au	ppm	15	1.85	0.066	0	0.00
	Ag	ppm	15	101	4	0	0.00
OREAS 623	Cu	%	23	1.72	0.066	0	0.00
	Pb	%	23	0.252	0.01	0	0.00
	Zn	%	23	1.01	0.038	0	0.00
	Au	ppm	23	0.827	0.039	1	4.35
	Ag	ppm	23	20.4	1.15	0	0.00
OREAS 630b	Pb	%	164	0.408	0.021	0	0.00
	Zn	%	164	1.1	0.033	5	3.05
	Au	ppm	164	0.358	0.013	4	2.44
	Ag	ppm	164	19.1	0.72	8	4.88



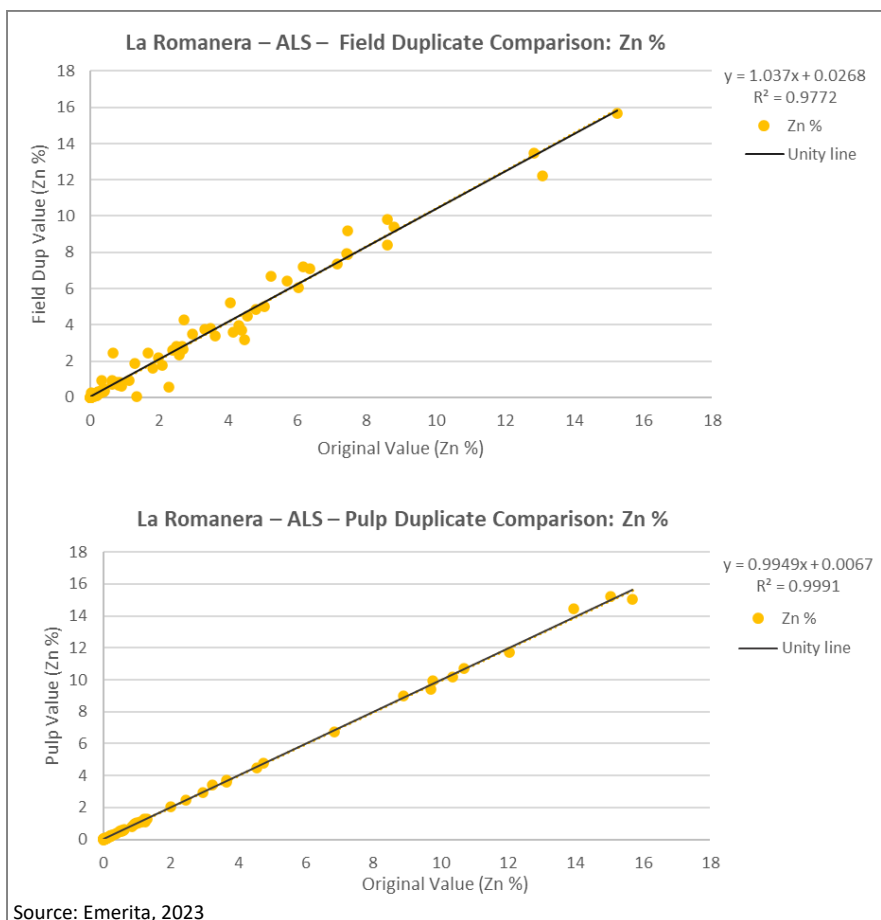


**Figure 11.4: Example CRM Control Charts for OREAS 620 (La Romanera - ALS)**

### 11.7.1.3 Duplicates

La Romanera duplicate results for ALS are outlined in Table 11.16 and example scatter plots for each duplicate type are shown in Figure 11.5. Plots show a strong correlation to the 1:1 line with no significant outliers.

Duplicate Type	Element	Unit	Number of Pairs	Mean Original	Mean Duplicate	Bias
FIELD	Cu	%	103	0.30	0.29	-0.01
	Pb	%	103	1.02	1.05	0.01
	Zn	%	103	2.09	2.20	0.04
	Au	ppm	103	1.12	1.11	-0.02
	Ag	ppm	103	50.79	50.16	-0.56
PULP	Cu	%	77	0.18	0.18	0.00
	Pb	%	77	1.03	1.03	0.00
	Zn	%	77	2.08	2.08	0.00
	Au	ppm	77	1.21	1.21	0.00
	Ag	ppm	77	47.85	48.38	0.25



**Figure 11.5: Example X-Y Scatter Plot for Zn (La Romanera - ALS)**

11.7.1.4 Blanks

Results for La Romanera blank samples analysed at ALS are presented in Table 11.17. Example coarse blank control charts are shown in Figure 11.6. Whilst some failures occurred, their frequency and values do not indicate any material issues with sample contamination.

Table 11.17: Summary of La Romanera CRM Submissions to ALS						
Standard type	Element	Unit	Number of Samples	5* Mean	Number of failures	Failure %
BLANK (Quarry Material)	Cu	%	32	0.0051	0	0.00
	Pb	%	32	0.0151	0	0.00
	Zn	%	32	0.0189	1	0.00
	Au	ppm	32	0.02	2	0.00
	Ag	ppm	32	3.125	0	0.00
BLANK (ALS Material)	Cu	%	190	0.0059	2	1.05
	Pb	%	190	0.0150	0	0.00
	Zn	%	190	0.0250	1	0.53
	Au	ppm	190	0.0190	2	1.05
	Ag	ppm	190	3.3026	0	0.00
BLANK F	Cu	%	468	0.0076	3	0.64
	Pb	%	468	0.0213	2	0.43
	Zn	%	468	0.0526	1	0.21
	Au	ppm	468	0.0508	15	3.21
	Ag	ppm	468	3.4498	1	0.21

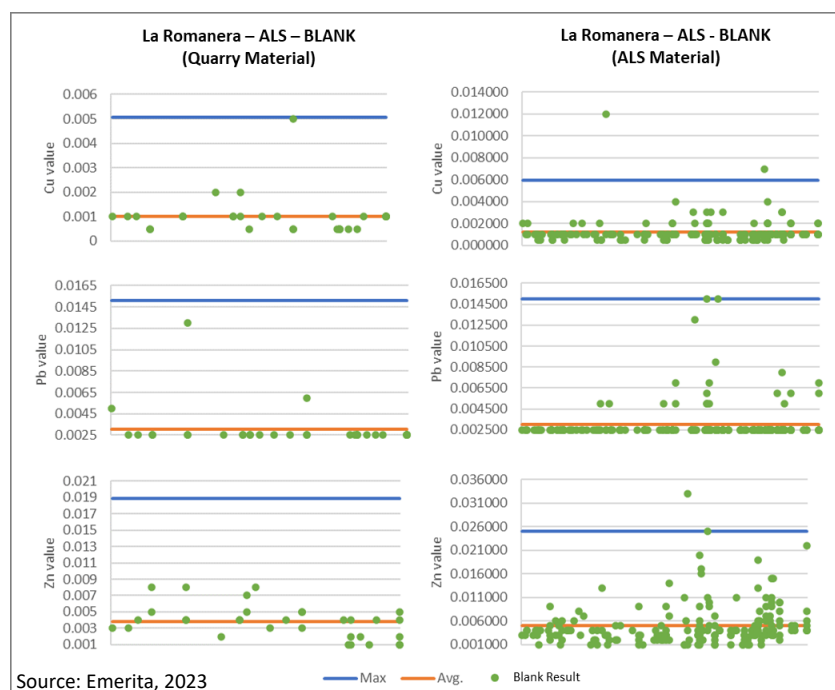


Figure 11.6: Example Blank Control Charts for Cu, Pb and Zn (La Romanera - ALS)

## 11.7.2 La Infanta (ALS)

### 11.7.2.1 Introduction

The La Infanta MRE database includes a total of 2,333 samples assayed by ALS. 1,963 samples were original drill core samples and the remaining 370 were QC samples (Table 11.18). Total QC sample insertion rate exceeds the industry standard of 15%. Duplicate samples were not introduced until January, 2023, which accounts for their lower insertion rate relative to other QC sample types.

Sample Type	Number of Samples	% Total
Original	1,963	84.1
Control	370	15.9
	Duplicates	36
	CRMs	131
	Blanks	203
Total	2,333	100

### 11.7.2.2 Certified Reference Materials

La Infanta CRM results for ALS are outlined in Table 11.19 and an example CRM control chart is shown in Figure 11.7. Failure rates for each CRM were typically low for a given element and no material bias is evident in CRM control charts.

CRM	Element	Unit	Number of Samples	Certified Mean	1SD	Number of Failures	Failure %
OREAS 620	Cu	%	47	0.175	0.005	0	0.00
	Pb	%	47	0.774	0.024	0	0.00
	Zn	%	47	3.12	0.086	1	2.13
	Au	ppm	44	0.685	0.021	1	2.27
	Ag	ppm	47	38.4	1.31	0	0.00
OREAS 622	Cu	%	33	0.484	0.013	3	9.09
	Pb	%	33	2.19	0.06	0	0.00
	Zn	%	33	10.01	0.258	2	6.06
	Au	ppm	28	1.85	0.066	0	0.00
	Ag	ppm	33	101	4	0	0.00
OREAS 623	Cu	%	43	1.72	0.066	0	0.00
	Pb	%	43	0.252	0.01	0	0.00
	Zn	%	43	1.01	0.038	0	0.00
	Au	ppm	37	0.827	0.039	4	10.81
	Ag	ppm	43	20.4	1.15	0	0.00
OREAS 630b	Pb	%	8	0.408	0.021	0	0.00
	Zn	%	8	1.1	0.033	0	0.00
	Au	ppm	7	0.358	0.013	0	0.00
	Ag	ppm	8	19.1	0.72	2	25.00

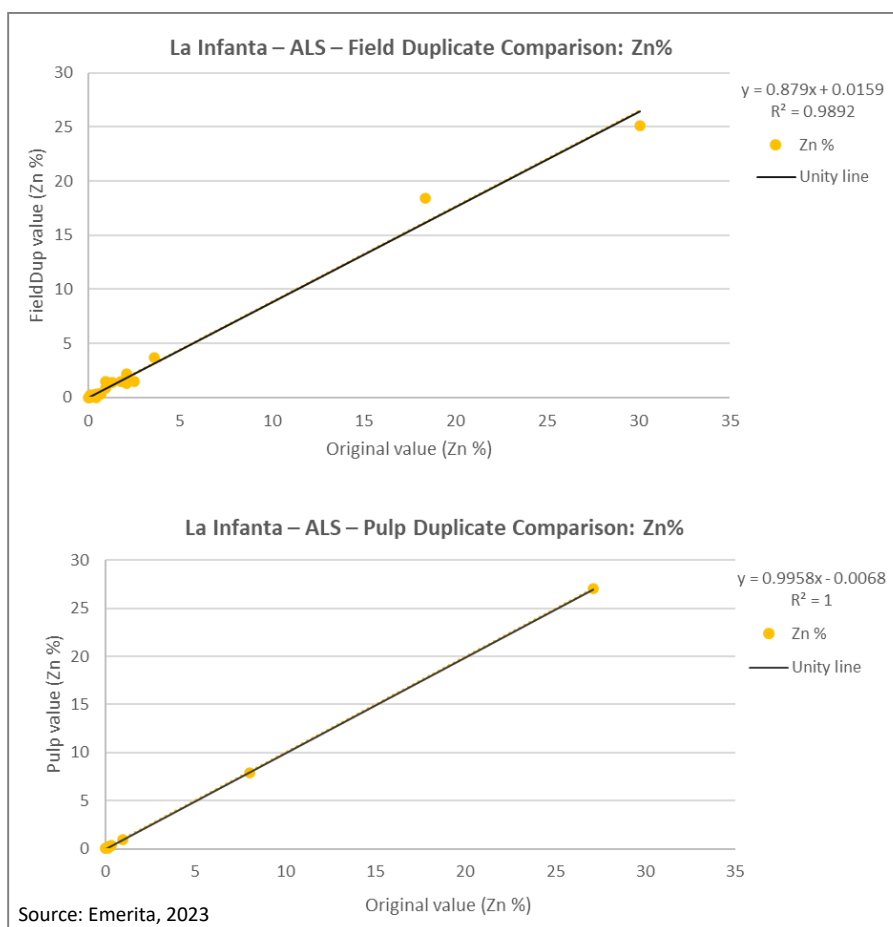


Figure 11.7: Example CRM Control Charts for OREAS 623 (La Infanta - ALS)

### 11.7.2.3 Duplicates

La Romanera duplicate results for ALS are outlined in Table 11.20 and example scatter plots for each duplicate type are shown in Figure 11.8. Plots show a strong correlation to the 1:1 line with no significant outliers.

Duplicate Type	Element	Unit	Number of Pairs	Mean Original	Mean Duplicate	Bias
FIELD	Cu	%	24	0.32	0.28	-0.02
	Pb	%	24	1.47	1.28	-0.11
	Zn	%	24	2.84	2.51	-0.19
	Au	ppm	24	0.14	0.13	-0.01
	Ag	ppm	24	35.75	34.04	-1.07
PULP	Cu	%	12	0.26	0.25	0.00
	Pb	%	12	1.62	1.60	-0.01
	Zn	%	12	3.12	3.10	-0.01
	Au	ppm	12	0.12	0.12	0.00
	Ag	ppm	12	23.42	23.71	0.10



**Figure 11.8: Example X-Y Scatter Plot for Zn (La Infanta - ALS)**

11.7.2.4 Blanks

Results for La Infanta blank samples analysed at ALS are presented in Table 11.21. Example coarse blank control charts are shown in Figure 11.9. Whilst some failures occurred, their frequency and values do not indicate any material issues with sample contamination.

Standard type	Element	Unit	Number of Samples	5* Mean	Number of failures	Failure %
BLANK (Quarry Material)	Cu	%	94	0.0048	0	0.00
	Pb	%	94	0.0168	1	1.06
	Zn	%	94	0.0213	1	1.06
	Au	ppm	94	0.0184	0	0.00
	Ag	ppm	94	3.0851	0	0.00
BLANK (ALS Material)	Cu	%	32	0.0059	0	0.00
	Pb	%	32	0.0148	0	0.00
	Zn	%	32	0.0227	0	0.00
	Au	ppm	32	0.0153	0	0.00
	Ag	ppm	32	3.8281	0	0.00
BLANK F	Cu	%	77	0.0056	0	0.00
	Pb	%	77	0.0160	0	0.00
	Zn	%	77	0.0210	0	0.00
	Au	ppm	76	0.0359	3	3.95
	Ag	ppm	77	3.0844	0	0.00

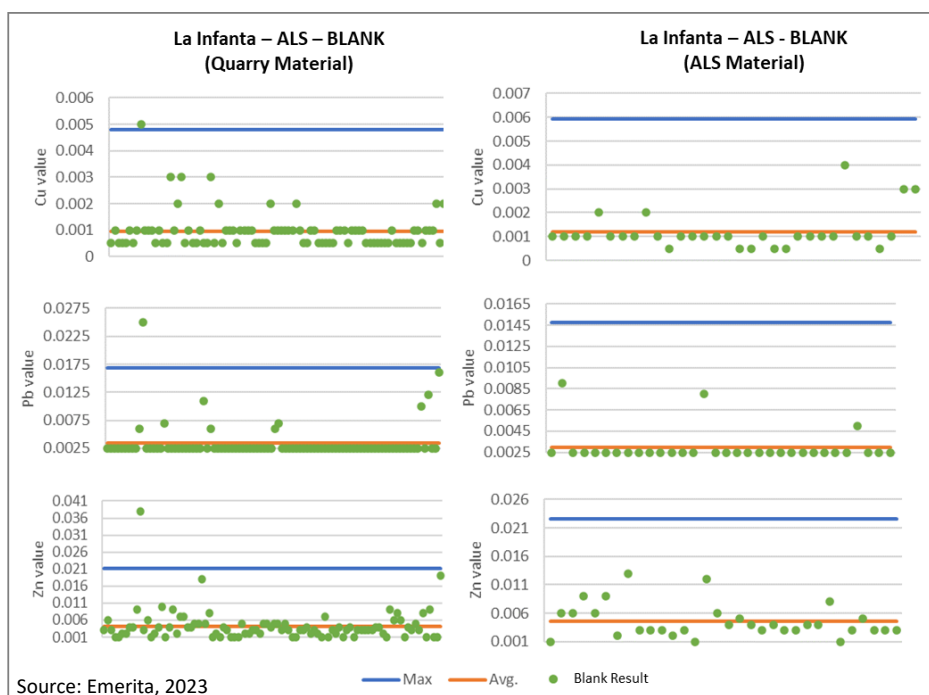


Figure 11.9: Example Blank Control Charts for Cu, Pb and Zn (La Infanta - ALS)

### 11.7.3 La Infanta (AGQ)

The La Infanta MRE database includes a total of 201 samples assayed by AGQ. 164 samples were original drill core samples and the remaining 37 were QC samples (Table 11.22). AGQ samples represent less than 10% of the La Infanta database. QC results are in line with those returned from ALS.

Sample Type	Number of Samples	% Total
Original	164	81.3
Control	37	18.4
Duplicates	0	0.0
CRMs	10	5.0
Blanks	27	13.4
Total	201	100

### 11.7.4 Summary and Recommendations

In the La Romanera and La Infanta MRE databases, the total QC sample insertion rates exceed the industry standard of 15% of the sample population. WAI recommends that the proportion of different QC sample types is optimised such that CRM, blank and duplicate samples have individual insertion rates around 5%. The CRMs used by Emerita are appropriate for the deposit grade distribution and mineralisation type. WAI recommends that duplicate sample type is expanded to include a coarse duplicate submitted to the primary laboratory and a pulp duplicate submitted to an umpire laboratory. CRM, blank and duplicate results demonstrate acceptable levels of accuracy, contamination and precision in sample preparation and analysis.

### 11.8 Adequacy of Procedures

The authors consider the sampling, sample preparation, security and analytical procedures for samples sent to both the ALS and AGQ laboratories, have been conducted in accordance with acceptable industry standards and the assay results generated following these procedures are suitable for use in Mineral Resource estimation.



## **12 DATA VERIFICATION**

### **12.1 Data Verification by Emerita**

Data entry, validation, storage and database management is carried out by Emerita staff using established procedures. Only diamond core drilling completed by Emerita was included in the Mineral Resource estimates. All data are stored in a cloud based relational database using MX Deposit® software. MX Deposit includes an in-built audit trail, data entry and import validation tools and QAQC plot generation. The quality of the assay data contained within the databases is monitored by Emerita staff using established QA/QC procedures. Drillhole data is imported directly from the cloud into Leapfrog® modelling and estimation software.

### **12.2 Database Cut-Off Dates**

Drilling is on-going at the IBW project. Cut-off dates used to close the databases prior to Mineral Resource estimation were 4th May 2023 for La Romanera and 30th April 2023 for La Infanta.

### **12.3 Data Verification by The Authors**

#### **12.3.1 Site Visit**

Three site visits have been undertaken by the authors on (October 25-27 2022, March 16 2023, May 3-5 2023) and included the following inspections:

- Extent of exploration work completed to date;
- Review of drill core logging, sampling, sample preparation, analysis and QA/QC procedures;
- Inspection of the core logging, sampling and storage facilities;
- Inspection of drilling sites and operations;
- Inspection of selected drill core to confirm the nature of the mineralisation and the geological descriptions; and
- Inspection of geology and mineralisation at the La Romanera and La Infanta surface outcrops and historic workings.

#### **12.3.2 Database Review**

A review of the La Romanera and La Infanta drillhole databases was carried out by the authors and included the following checks:

- Comparison of a random selection of collar, survey and assay database values with original data certificates;
- Verification that collar coordinates coincide with topographic surfaces;
- Verification that downhole survey azimuth and inclination values display consistency;

- Evaluation of minimum and maximum grade values;
- Evaluation of minimum and maximum sample lengths;
- Assessing for inconsistencies in spelling or coding (typographic and case sensitive errors);
- Ensuring full data entry and that a specific data type (collar, survey, lithology and assay) is not missing and assessing for sample gaps or overlaps; and
- Review of QA/QC procedures and assay data (as detailed in Section 11).

Overall, no significant issues in terms of data collection, data entry or data storage were identified by the qualified persons in a review of the electronic databases.

### **12.3.3 Limitations**

The authors have not undertaken any independent check analysis of samples nor conducted any twin hole drilling to confirm the assays contained in the electronic databases. The authors do not consider referee samples necessary given:

- The procedures used by Emerita for sampling, logging, sample preparation, analysis, sample security and data storage are considered to be robust; and
- Routine monitoring of QA/QC data demonstrates an acceptable level of accuracy and precision.

### **12.3.4 Adequacy of Data**

The verification procedures carried out by the authors confirmed the integrity of the data contained in the electronic databases. The authors consider the databases to be suitable for the purposes of Mineral Resource estimation and for the purposes of this Technical Report.

### **13 MINERAL PROCESSING AND METALLURGICAL TESTING**

No metallurgical testwork has been completed on the La Romanera and La Infanta polymetallic deposits.

Emerita has commenced an initial metallurgical testwork programme for the deposits.

WAI's QP has reviewed petrographic reports and regional benchmarks in consultation with WAI metallurgists that have prior experience in the Iberian Pyrite Belt. Based on the review WAI has adopted the recovery assumptions for Mineral Resource estimation detailed in Section 14. WAI recommends that these assumed recoveries are reviewed and refined once metallurgical testwork has been completed.

## 14 MINERAL RESOURCE ESTIMATES

### 14.1 Introduction

The Mineral Resource estimates discussed in this Technical Report are located within Emerita’s Iberian Belt West project, contained in the La Romanera and La Infanta polymetallic deposits. Mineral Resource estimation was completed by WAI using drillhole databases and geological models developed by the Emerita geology team and subsequently verified and refined in collaboration with WAI.

### 14.2 Mineral Resource Estimate Data

#### 14.2.1 General

Drillhole data used for Mineral Resource estimation was limited to surface diamond core drilling. The cut-off dates for the databases are detailed in Section 12.2. Historic drilling exists at La Romanera and La Infanta, but was excluded from estimation due to an incomplete assay suite, lack of QAQC support and uncertain location accuracy. New Emerita drilling has replaced any historic drill coverage. A summary of the Mineral Resource databases is shown in Table 14.1.

Deposit	Year	Diamond Drillholes	Drill Metres	Drill Samples	Drill Sample Metres	Density Samples	Density Metres
La Romanera	2022	93	35,485.20	4,169	3,847.42	3,852	557.00
	2023	51	17,265.75	1,611	1,599.90	1,395	203.10
	Sub-Total	144	52,750.95	5,780	5,447.00	5,247	760.00
La Infanta	2021	30	4,334.25	861	903.80	763	109.60
	2022	39	10,973.90	920	898.31	811	121.90
	2023	17	4,256.75	346	347.20	302	43.00
	Sub-Total	86	19,564.90	2,127	2,149.31	1,876	274.50
<b>IBW Total</b>		<b>230</b>	<b>72,315.85</b>	<b>7,907</b>	<b>7596.63</b>	<b>7,123</b>	<b>1,034.50</b>

#### 14.2.2 Software

Database import, and preparation, wireframe modelling, statistical analysis, compositing, variographic analysis, block modelling and grade estimation were undertaken using Leapfrog Geo® and Leapfrog Edge® software. Statistical and variographic analysis were also undertaken using Supervisor® software.

#### 14.2.3 Data Validation

The database was reviewed by the authors using the checks outlined in Section 12.3.2. Checks identified only minor errors that were corrected prior to resource modelling.

### 14.3 Geological Interpretation and Domaining

La Romanera and La Infanta are classified as VHMS deposits and occur as tabular strata-bound lenses of polymetallic (Zn, Pb, Cu, Ag, Au) massive sulphides. Minor amounts of disseminated to semi-massive sulphide occur locally within the broader sulphide lenses, but have limited continuity at the current drill spacing. Surface drilling has so far defined five massive sulphide lenses across the two deposits: the Upper and Lower Lens at La Romanera and the North, South and South 1 Lenses at La Infanta.

The geological interpretation used in the Mineral Resource estimate was informed by drillhole data only. The Leapfrog Geo® drillhole correlation tool was used to select sample intervals belonging to each sulphide lens based on lithology, mineralisation type and assay grades (e.g. Figure 14.1).

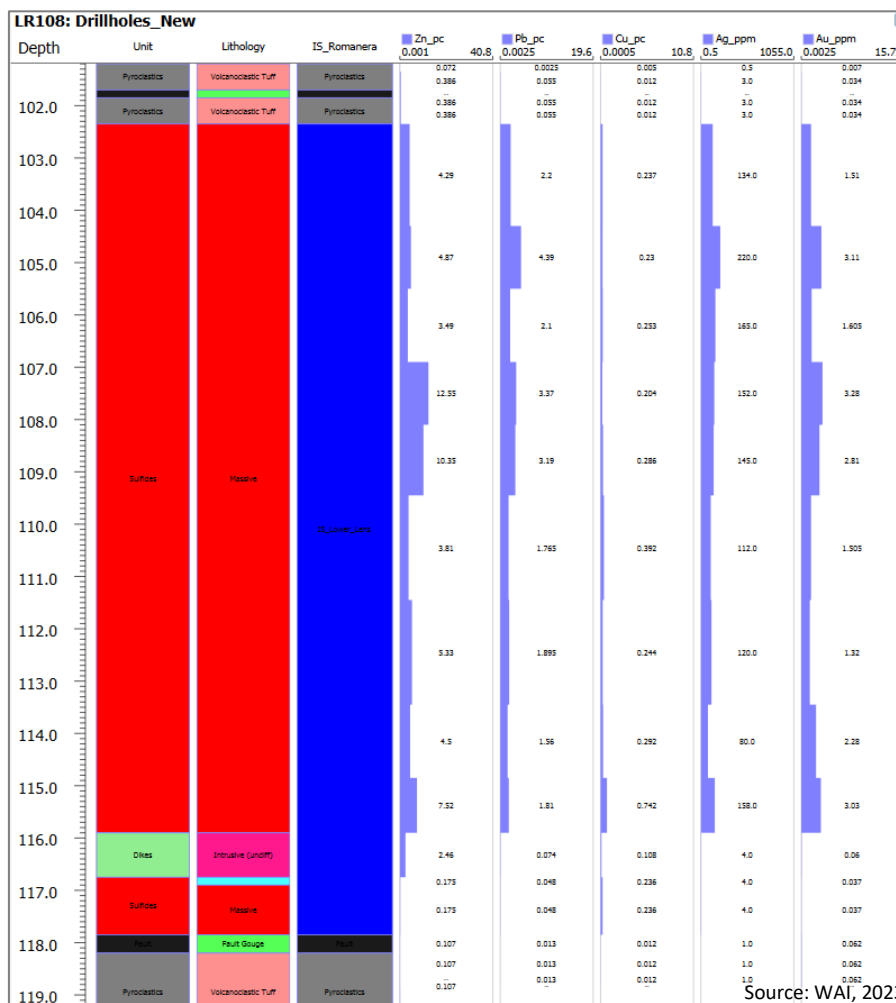
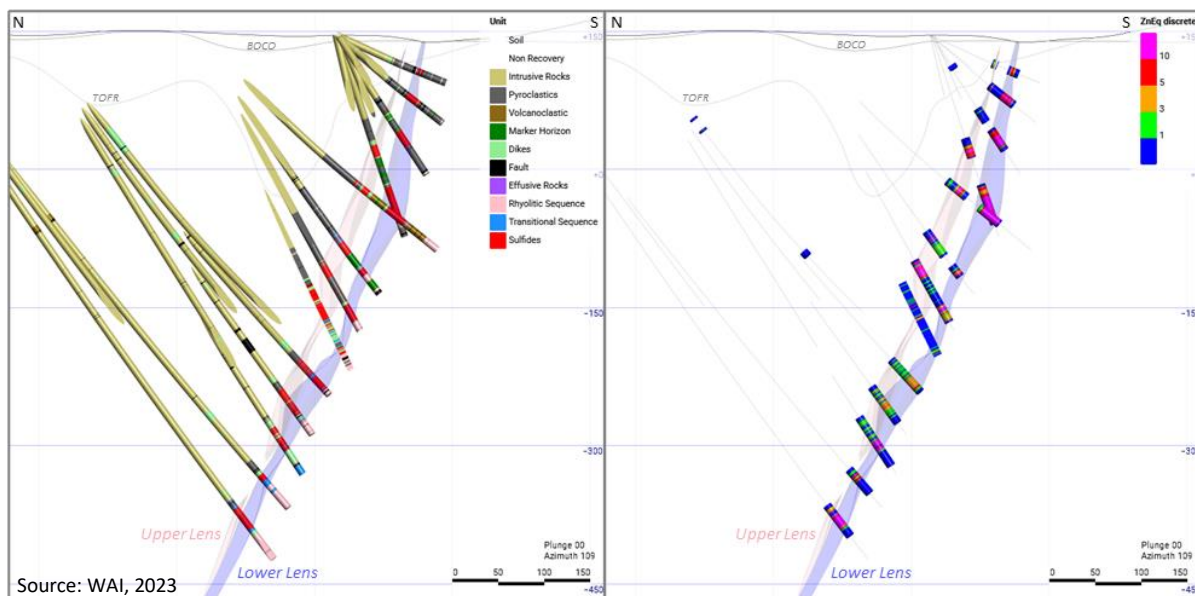


Figure 14.1: Example of Interval Selection (IS\_Romanera) Using Leapfrog® Drillhole Correlation

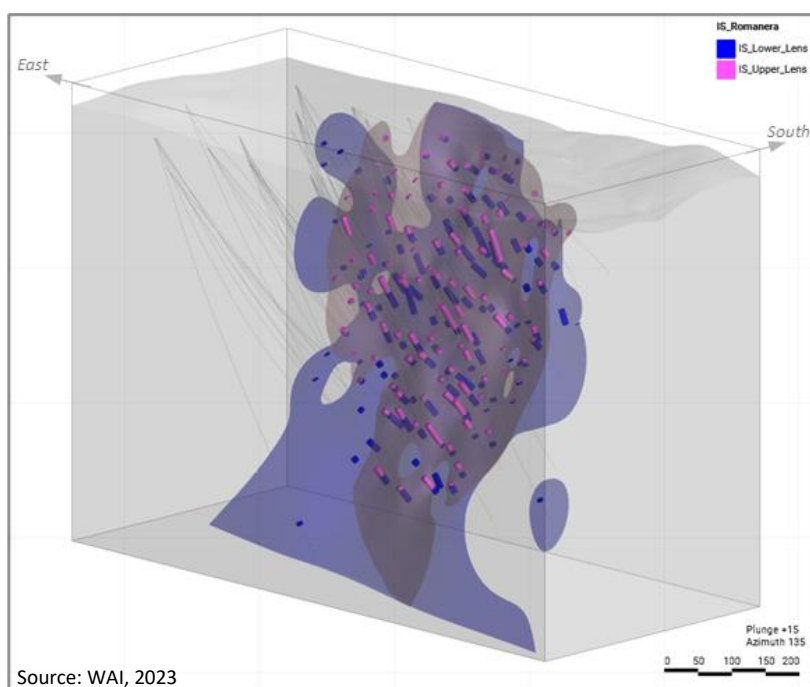
Each lens was modelled implicitly from the interval selections using the Leapfrog Geo® vein modelling tool. Wireframe contacts were snapped to sample boundaries. The modelled sulphide lenses were used as domain wireframes in resource modelling. Drillhole samples were selected and coded by domain prior to further statistical analysis and data processing. The volume outside of the domain wireframes was considered unmineralised.

Weathering surfaces were constructed implicitly as Leapfrog Geo® erosional and deposit surfaces from core logging observations and split the domains into oxide, transition and primary sulphide zones. There is limited drilling within the oxide and transition zones, therefore only the primary sulphide portion of each domain were used in grade estimation.

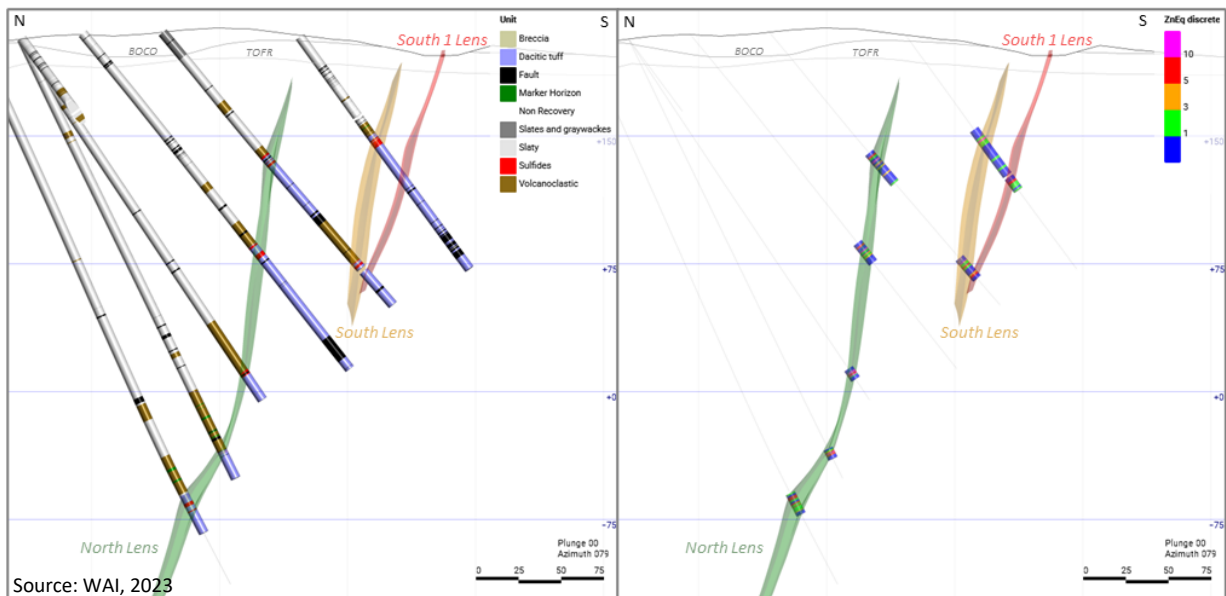
Cross section and isometric views showing the mineralisation and weathering models for each deposit are provided in Figure 14.2 to Figure 14.5.



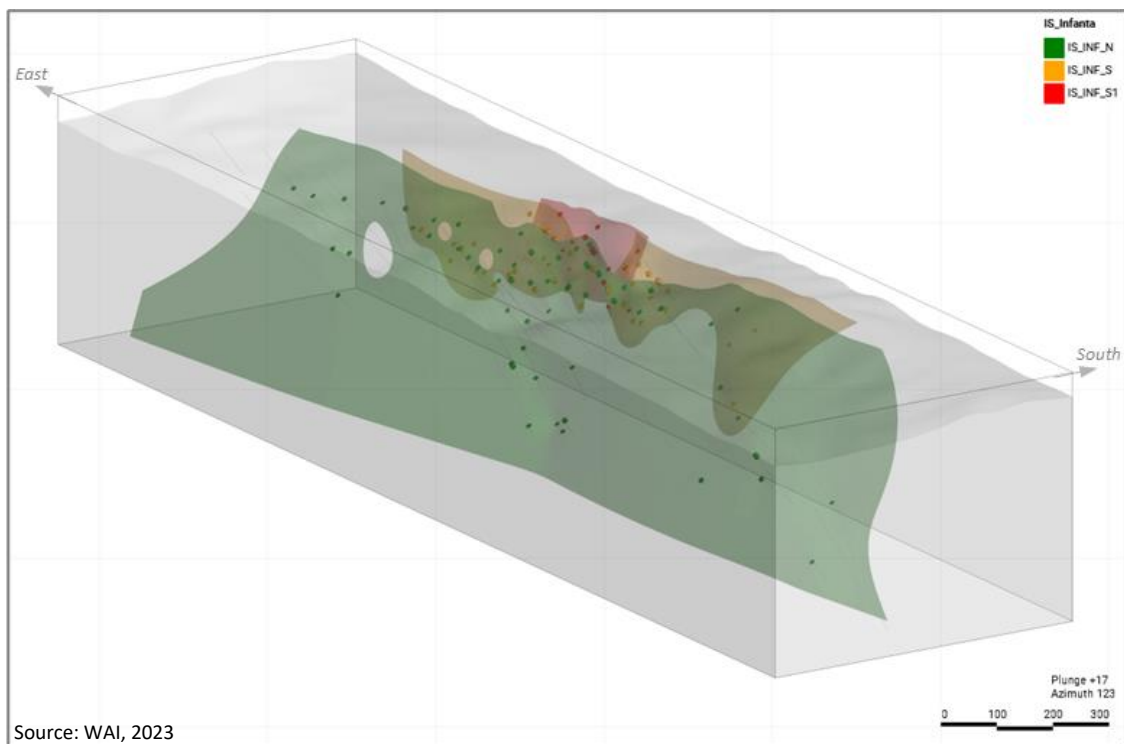
**Figure 14.2: La Romanera Cross Section – Domain Wireframes vs. Logged Lithology (Left) & Assay ZnEq grade (Right). See Section 14.13 for ZnEq Calculation**



**Figure 14.3: Isometric View of La Romanera Domain Wireframes and Input Interval Selections**



**Figure 14.4: La Infanta Cross Section – Domain Wireframes vs. Logged Lithology (Left) & Assay ZnEq grade (Right). See Section 14.13 for ZnEq Calculation**

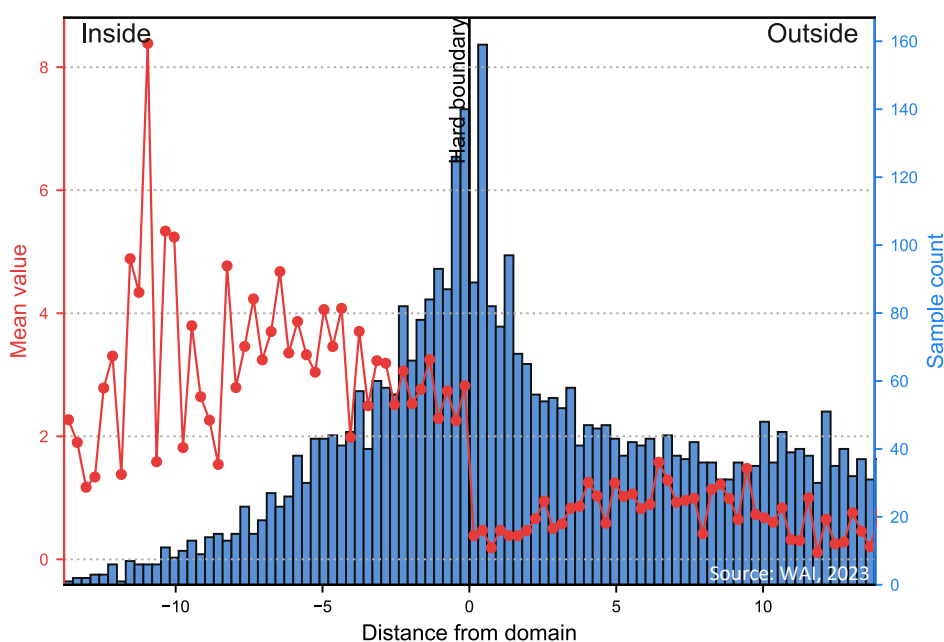


**Figure 14.5: Isometric View of La Infanta Domain Wireframes and Input Interval Selections**

The authors consider the resource domains to be based on extensive geological knowledge and representative of the geology present at the deposits.

## 14.4 Boundary Analysis

Boundary analysis measures the rate of grade change across the contact between two domains. Plots for all metals and domains show a sharp step change consistent with hard boundary conditions. An example of boundary analysis for Zn across the La Romanera Lower Lens domain boundary is provided in Figure 14.6.



**Figure 14.6: Boundary Analysis for Zn – La Romanera Lower Lens**

## 14.5 Compositing

Sampling for economic elements (Zn, Pb, Cu, Ag, Au) is isotopic, with sample coverage and sample length the same for each metal. Downhole compositing of assay samples was completed to avoid bias introduced when interpolating grade from samples of varying length. A 2m downhole composite length was chosen for La Romanera. A 1m downhole composite length was chosen for La Infanta to help retain sufficient composites for variographic analysis. Residual lengths below half the target composite length were distributed evenly throughout a given drillhole. Samples were not composited across domain boundaries. Density is sampled over shorter 10-20cm lengths and density samples were composited to the assay composite intervals.

## 14.6 Grade Capping

Capping was applied to isolated outlier values prior to variography and estimation. The outlier values are not considered to be representative of the general grade population and capping mitigates their impact on block estimation. The presence of outliers was assessed on a domain-by-domain basis using histograms, disintegration analysis and statistical analysis of the composites. A summary of the grade capping thresholds and impact is shown in Table 14.2 and Table 14.3.



**Table 14.2: La Romanera Composite Capping Statistics by Domain**

Domain	Metal	No. Comp.	No. Capped	% Capped	Raw Stats			Capped Stats		
					Max	Mean	CV	Max (Cap)	Mean	CV
Lower	Zn (%)	721	3	0.4	38.59	3.07	1.25	18.70	3.04	1.19
	Pb (%)	721	2	0.3	15.66	1.34	1.17	11.00	1.33	1.14
	Cu (%)	721	6	0.8	5.42	0.45	1.37	4.20	0.44	1.31
	Ag (ppm)	721	4	0.6	828.20	67.64	1.17	490.00	66.56	1.07
	Au (ppm)	721	6	0.8	12.68	1.49	1.14	9.30	1.48	1.10
Upper	Zn (%)	530	3	0.6	21.34	2.28	1.41	15.60	2.27	1.39
	Pb (%)	530	2	0.4	9.21	1.16	1.24	7.30	1.15	1.21
	Cu (%)	530	4	0.8	4.67	0.36	1.04	3.70	0.36	0.97
	Ag (ppm)	530	6	1.1	391.34	67.00	0.91	286.00	66.67	0.89
	Au (ppm)	530	4	0.8	7.55	1.14	0.90	4.60	1.13	0.86

**Table 14.3: La Infanta Composite Capping Statistics by Domain**

Domain	Metal	No. Comp.	No. Capped	% Capped	Raw Stats			Capped Stats		
					Max	Mean	CV	Max (Cap)	Mean	CV
North	Zn (%)	176	6	3.4%	37.42	4.36	1.25	15.00	4.03	1.05
	Pb (%)	176	3	1.7%	20.20	2.57	1.24	11.70	2.48	1.14
	Cu (%)	176	3	1.7%	4.93	0.64	1.25	2.75	0.62	1.16
	Ag (ppm)	176	3	1.7%	612.41	66.44	1.56	428.00	64.65	1.48
	Au (ppm)	176	2	1.1%	3.20	0.35	1.29	2.35	0.34	1.22
South	Zn (%)	152	16	10.5%	34.35	7.91	1.25	26.50	7.43	1.19
	Pb (%)	152	1	0.7%	21.99	4.41	1.23	18.75	4.39	1.22
	Cu (%)	152	0	0.0%	4.61	1.14	1.15	4.61	1.14	1.15
	Ag (ppm)	152	1	0.7%	459.40	98.53	1.19	409.00	98.19	1.19
	Au (ppm)	152	0	0.0%	1.84	0.34	0.94	1.84	0.34	0.94
South 1	Zn (%)	48	11	22.9%	40.80	11.72	1.05	25.10	10.30	0.96
	Pb (%)	48	1	2.1%	20.30	6.72	1.00	18.60	6.69	0.99
	Cu (%)	48	5	10.4%	5.97	1.56	1.04	3.65	1.46	0.97
	Ag (ppm)	48	3	6.3%	724.00	122.19	1.33	377.00	106.13	1.09
	Au (ppm)	48	0	0.0%	2.30	0.47	1.02	2.30	0.47	1.02

## 14.7 Metal Correlations

Correlation statistics were undertaken to identify relationships between estimated variables. Relationships are broadly consistent within a given deposit. Correlation statistics for La Romanera capped composites are presented in Table 14.4 and show moderate positive correlations between all variables except for Cu. Further statistical analysis highlights the presence of a small proportion of composites that are high in Cu and low in other metals. The spatial distribution of these composites is erratic and not considered amenable to sub-domaining. Correlation statistics for La Infanta capped composites are presented in Table 14.5 and exhibit moderate to strong positive correlations between all variables.

**Table 14.4: Correlation Matrix for Metals and Density for La Romanera**

	Zn	Pb	Cu	Ag	Au	Density
Zn	1.00	0.77	-0.13	0.38	0.20	0.33
Pb	0.77	1.00	-0.12	0.65	0.39	0.33
Cu	-0.13	-0.12	1.00	-0.05	-0.10	0.00
Ag	0.38	0.65	-0.05	1.00	0.53	0.37
Au	0.20	0.39	-0.10	0.53	1.00	0.33
Density	0.33	0.33	0.00	0.37	0.33	1.00

**Table 14.5: Correlation Matrix for Metals and Density for La Infanta**

	Zn	Pb	Cu	Ag	Au	Density
Zn	1.00	0.96	0.90	0.79	0.44	0.77
Pb	0.96	1.00	0.88	0.79	0.45	0.79
Cu	0.90	0.88	1.00	0.86	0.51	0.70
Ag	0.79	0.79	0.86	1.00	0.59	0.65
Au	0.44	0.45	0.51	0.59	1.00	0.44
Density	0.77	0.79	0.70	0.65	0.44	1.00

## 14.8 Variography

Continuity analysis and variogram modelling was conducted using normal score transformed capped composites for each domain. Variograms were modelled for Zn, Pb, Cu, Ag, Au and density.

Continuity analysis was undertaken prior to variography to determine the major, semi-major and minor axis of continuity based on spatial correlation between sample pairs. Down-dip continuity maps were aligned with the domain wireframes, then examined alongside their underlying variograms to determine the plunge of the major axis.

Directional variograms were created in the orientations defined by the continuity analysis. Variogram modelling was undertaken for all domains except La Infanta South 1 where insufficient sample pairs were available. Nugget variances were derived from a down hole variogram. Variogram models typically comprised of a nugget and 2 spherical structures.

Examples of the continuity analysis and modelled variograms for Zn in each domain are provided in Figure 14.7 for La Romanera and Figure 14.8 for La Infanta.

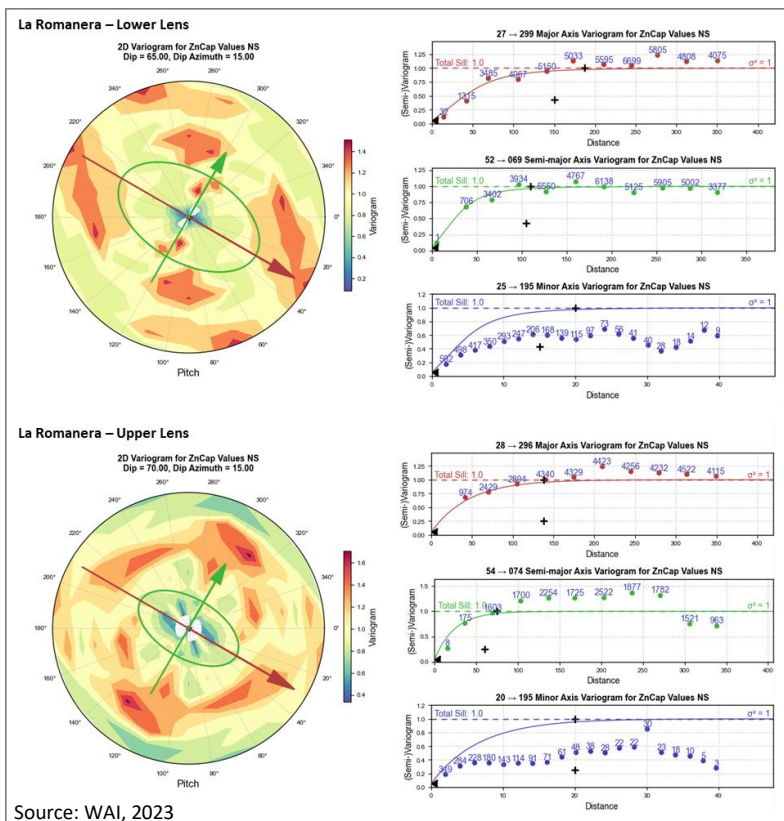


Figure 14.7: La Romanera - Zn Normal Score Down-Dip Continuity Maps and Variograms

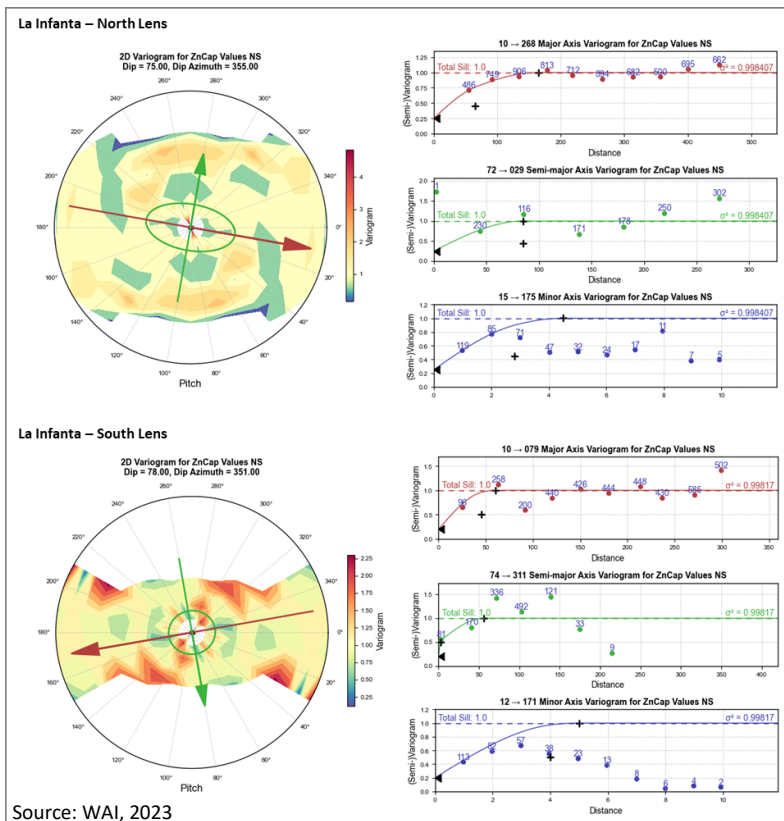


Figure 14.8: La Infanta - Zn Normal Score Down-Dip Continuity Maps and Variograms

Normal score variogram model parameters are back-transformed for use in estimation. The resulting model parameters for all variables are listed in Table 14.6 and Table 14.7.

**Table 14.6: La Romanera Variogram Model Parameters**

Domain	Element	Rotation (Degrees) (Dip/Dip Dir/Pitch)	Nugget Effect	Structure 1				Structure 2			
				Sill	Axis Distance (m)			Sill	Axis Distance (m)		
					Major	Semi- Major	Minor		Major	Semi- Major	Minor
Lower Lens	Zn	65 / 15 / 30	0.06	0.71	150	105	15	0.22	187	110	20
	Cu	65 / 15 / 48	0.05	0.51	66	53	12	0.44	265	120	23
	Pb	65 / 15 / 0	0.18	0.71	76	45	14	0.10	162	61	26
	Ag	65 / 15 / 50	0.05	0.79	150	134	14	0.16	212	134	26
	Au	65 / 15 / 50	0.05	0.45	80	120	16	0.50	221	120	23
	Density	65 / 15 / 20	0.27	0.09	102	8	2.5	0.64	102	43	25
Upper Lens	Zn	70 / 15 / 30	0.07	0.20	138	60	20	0.74	138	75	20
	Cu	70 / 15 / 30	0.12	0.39	15	55	20	0.50	106	55	21
	Pb	70 / 15 / 61	0.22	0.37	41	100	5	0.41	106	100	17
	Ag	70 / 15 / 30	0.05	0.65	70	45	21	0.30	104	92	27
	Au	70 / 15 / 45	0.14	0.50	97	90	14	0.36	173	90	18
	Density	70 / 15 / 60	0.31	0.21	38	40	14	0.48	116	68	18

**Table 14.7: La Infanta Variogram Model Parameters**

Domain	Element	Rotation ZXY (Degrees) (Direction 1/2/3)	Nugget Effect	Structure 1				Structure 2			
				Sill	Axis Distance (m)			Sill	Axis Distance (m)		
					Major	Semi- Major	Minor		Major	Semi- Major	Minor
North	Zn	75 / 355 / 10	0.31	0.23	65	85	2.8	0.46	165	85	4.5
	Cu	75 / 355 / 10	0.19	0.39	120	75	2.1	0.42	120	105	6
	Pb	75 / 355 / 10	0.11	0.68	90	62	3	0.21	165	90	4
	Ag	75 / 355 / 10	0.21	0.41	75	5	2.8	0.38	100	50	2.8
	Au	75 / 355 / 10	0.07	0.49	75	80	4.5	0.44	260	250	5
	Density	75 / 355 / 10	0.30	0.49	60	50	1.2	0.21	70	50	3
South	Zn	78 / 351 / 170	0.28	0.34	45	3	4	0.37	60	56	5
	Cu	78 / 351 / 170	0.38	0.43	32	5	5	0.19	55	50	5
	Pb	78 / 351 / 170	0.19	0.56	52	11	6	0.25	190	50	6
	Ag	78 / 351 / 170	0.25	0.23	20	5	4	0.52	120	70	6
	Au	78 / 351 / 160	0.23	0.44	130	4	5	0.34	130	40	5
	Density	79 / 351 / 170	0.29	0.28	45	4	2	0.42	45	45	4

The authors consider the overall quality of the experimental variograms are acceptable and are generally based on a significant number of sample pairs which have been sufficiently dominated. At La Romanera, confidence in the modelled variograms is high due to the clearly defined continuity displayed by the experimental variograms. Variogram structure is less clear for La Infanta and confidence is therefore lower.

## 14.9 Block Modelling

Block models defining the mineralised zones were constructed in Leapfrog Edge® using the domain wireframes to define the block model domains. The upper limit of the block model was restricted by a topographic surface. A parent block size of 20m x 20m x 5m was used for both deposits. To effectively represent domain volume, sub-cell splitting was enabled at domain boundaries. The models were rotated to align with the general strike and dip of the deposits. Full block model parameters are outlined in Table 14.8 and Table 14.9.

Parameter	X (m)	Y (m)	Z (m)
Parent Block Size	20	20	5
Sub-Block Count	8	8	8
Minimum Sub-Block Size	2.5	2.5	0.625
Base Point	645780	4172623	440
<b>Rotation (Degrees)</b>			
Azimuth	16		
Dip	70		
Pitch	0		

Parameter	X (m)	Y (m)	Z (m)
Parent Block Size	20	20	5
Sub-Block Count	16	16	16
Minimum Sub-Block Size	1.25	1.25	0.3125
Base Point	652663	4171567	425
<b>Rotation (Degrees)</b>			
Azimuth	352		
Dip	78		
Pitch	0		

#### 14.10 Estimation Methodology

Estimation for Zn, Pb, Cu, Ag, Au and density was undertaken on the blocks defined within each domain. The domains were treated as hard boundaries and as such composites from an adjacent domain could not be used in the grade estimation of another domain. Ordinary kriging (OK) was used as the principal estimation method for all domains except for La Infanta South 1. Inverse distance weighting squared (IDW2) was used for La Infanta South 1 as no suitable variogram could be derived.

Grade estimation was mainly run in a three-pass plan, the second and third passes using progressively larger search radii to enable the estimation of blocks unestimated on the previous pass. Search radii were guided by the variography and data spacing. For a given domain, the first pass search corresponded to the variogram range at a consistent fraction of the sill, the second pass search corresponded to the variogram range and the third pass search to a consistent multiple of the variogram range. Search distances for La Infanta South 1 were based on the general drillhole spacing. Dynamic anisotropy was employed to align search orientation to local domain orientation.

Minimum and maximum sample numbers in the first estimation pass were guided by Quantitative Kriging Neighbourhood Analysis (QKNA). First pass block estimates were required to be informed by a minimum of 2 drillholes. Minimum sample and drillhole requirements were relaxed in higher estimation passes and distance-based capping applied to limit grade extrapolation.

Sample weighting during grade estimation was determined by the variogram model parameters for the OK method. Any blocks containing negative grade estimates due to negative kriging weights, were set to the analysis detection limit for that element. Discretisation was set at 3 x 3 x 3 for all variables and domains.

A summary of the estimation parameters is shown for La Romanera in Table 14.10 and La Infanta in Table 14.11.

Table 14.10: La Romanera Grade Estimation Parameters											
Domain	Interpolant	Variable	Pass	Ellipsoid Ranges (m)			Number of Samples			Distance Based Cap	
				Max.	Int.	Min.	Min.	Max.	Max. per Hole	Cap	Distance (% of Ellipsoid)
Lower	OK	Zn	1	70	40	11	8	26	4		
			2	187	110	20	4	24		13	13
			3	280.5	165	30	1	24		13	13
		Pb	1	100	50	10	8	26	4		
			2	265	120	23	4	24			
			3	397.5	180	34.5	1	24			
		Cu	1	65	35	12	8	26	4	2.3	2.3
			2	162	61	26	4	24		2.3	2.3
			3	243	91.5	39	1	24		2.3	2.3
		Ag	1	80	60	10	8	26	4		
			2	212	134	26	4	24			
			3	318	201	39	1	24			
		Au	1	100	60	10	8	26	4		
			2	221	120	23	4	24		6.5	6.5
			3	331.5	180	34.5	1	24		6.5	6.5
		Density	1	70	30	16	8	26	4		
			2	102	43	25	4	24			
			3	204	86	40	1	24			
Upper	OK	Zn	1	70	38	10	8	26	4	10	10
			2	138	75	20	4	24		10	10
			3	207	112.5	30	1	24		10	10
		Pb	1	70	38	15	8	26	4		
			2	106	55	21	4	24			
			3	159	82.5	31.5	1	24			
		Cu	1	50	50	8	8	26	4		
			2	106	100	17	4	24			
			3	159	150	25.5	1	24			
		Ag	1	58	50	17.5	8	26	4		
			2	104	92	27	4	24			
			3	156	138	40.5	1	24			
		Au	1	65	50	8	8	26	4		
			2	173	90	18	4	24			
			3	259.5	135	27	1	24			
		Density	1	75	44	8	8	26	4		
			2	116	68	18	4	24			
			3	174	102	27	1	24			

**Table 14.11: La Infanta Grade Estimation Parameters**

Domain	Interpolant	Variable	Pass	Ellipsoid Ranges (m)			Number of Samples			Distance Based Cap	
				Max.	Int.	Min.	Min.	Max.	Max. per Hole	Cap	Distance (% of Ellipsoid)
North	OK	Zn	1	100	60	20	6	12	5		
			2	165	85	30	6	18		6.6	50
			3	330	170	60	1	18		6.6	25
		Pb	1	80	60	20	6	22	5		
			2	120	105	30	6	18		3.2	50
			3	180	157.5	60	1	18		3.2	25
		Cu	1	80	45	20	6	22	5		
			2	165	90	30	6	18			
			3	330	180	60	1	18			
		Ag	1	100	50	20	6	22	5		
			2	100	50	30	6	18		318	50
			3	200	100	60	1	18		318	25
		Au	1	85	80	20	6	22	5		
			2	260	250	30	6	18		1.35	25
			3	260	250	60	1	18		1.35	25
		Density	1	70	50	20	6	22	5		
			2	70	50	30	6	18			
			3	240	210	60	1	18			
South	OK	Zn	1	60	56	20	6	22	5		
			2	120	112	30	6	18		16	50
			3	240	224	60	1	18		5	25
		Pb	1	55	50	20	6	22	5		
			2	110	100	30	6	18		11.7	50
			3	220	200	60	1	18		11.7	25
		Cu	1	190	50	20	6	22	5		
			2	285	75	30	6	18		2.7	25
			3	570	150	60	1	18		2.7	12.5
		Ag	1	120	70	20	6	22	5		
			2	240	140	30	6	18		270	50
			3	480	280	60	1	18		270	25
		Au	1	130	40	20	6	22	5		
			2	260	80	30	6	18		1	50
			3	520	160	60	1	18		1	25
		Density	1	45	45	20	6	22	5		
			2	90	90	30	6	18			
			3	180	180	60	1	18			
South	IDW2	Zn	1	50	50	50	6	22	5		
			2	100	100	100	2	18		7.5	25
		Pb	1	50	50	50	6	22	5		
			2	100	100	100	2	18		5.2	25
		Cu	1	50	50	50	6	22	5		
			2	100	100	100	2	18		1.75	25
		Ag	1	50	50	50	6	22	5		
			2	100	100	100	2	18		80	25
		Au	1	50	50	50	6	22	5	0.75	50
			2	100	100	100	2	18		0.5	25
		Density	1	50	50	50	6	22	5		
			2	100	100	100	2	18			

## 14.11 Model Validation

### 14.11.1 Introduction

Model validation was carried out for all variables and domains. Validation included a visual comparison of composite and estimated block model grades. Nearest neighbour (NN) grades were interpolated

for validation purposes and used for global statistical and swath plot comparison against estimated block model grades.

### 14.11.2 Visual Comparison

Visual validation was conducted by comparing input drillhole composite and estimated grades in cross section, long section and level plan. The checks showed good agreement between drill hole composite values and block model values. Hard boundaries have constrained grades to their respective estimation domains, distance-based capping has minimized grade extrapolation in regions of sparse data, whilst search and block model configuration have enabled grade stratification. Representative cross and long sections are provided for La Romanera (Figure 14.9 and Figure 14.10) and La Infanta (Figure 14.11 and Figure 14.12).

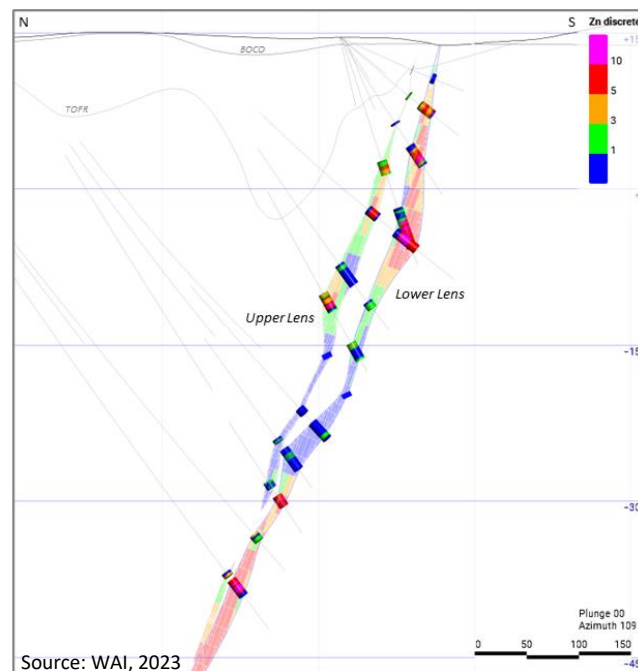
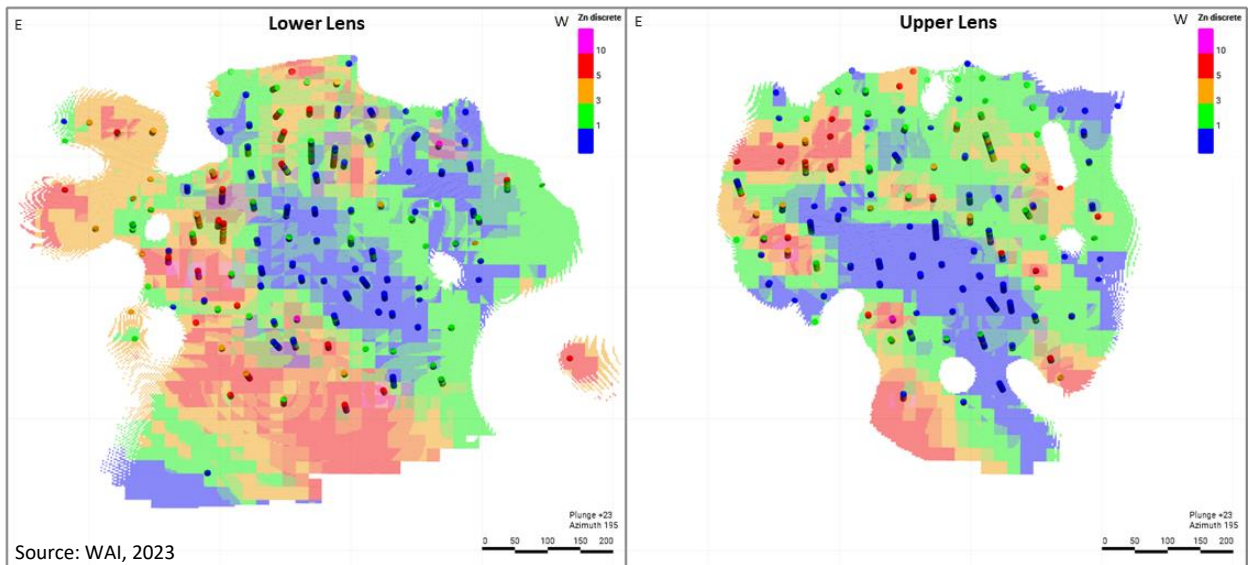
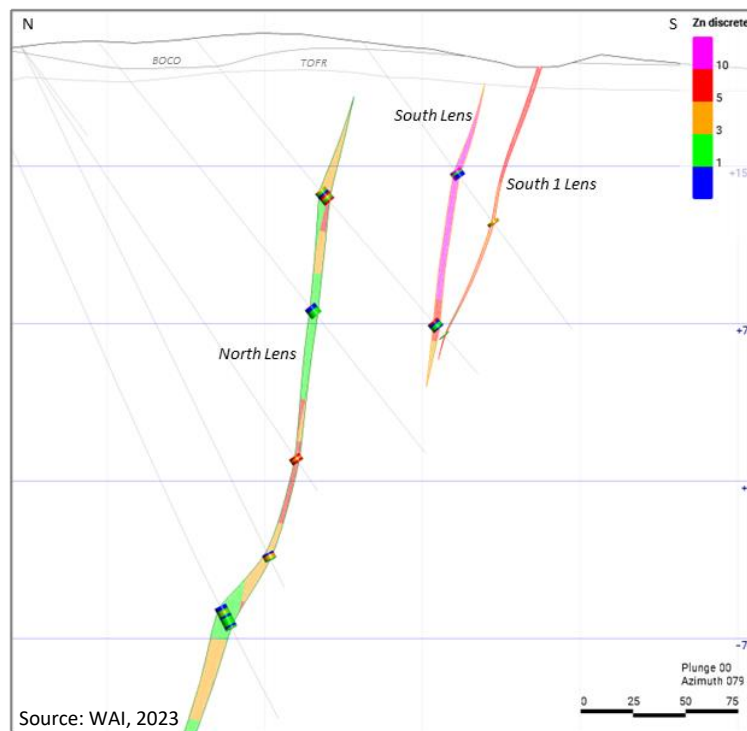


Figure 14.9: La Romanera Cross Section - Zn Estimate vs. 2m Capped Composite Grades

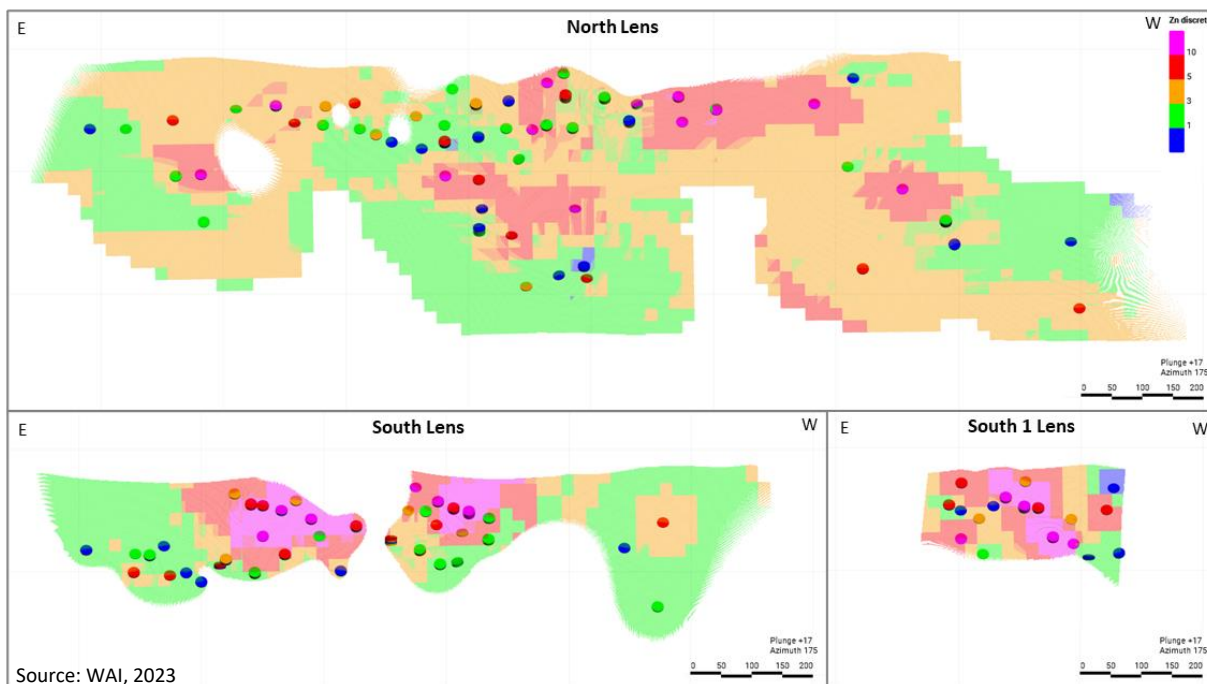




**Figure 14.10: La Romanera Long Sections - Zn Estimate vs. 2m Capped Composite Grades**



**Figure 14.11: La Infanta Cross Section Comparing Zn Estimate with 1m Capped Composite Grades**



**Figure 14.12: La Infanta Long Sections Comparing Zn Estimates with 1m Capped Composite Grades for Each Lens**

### 14.11.3 Statistical Comparison

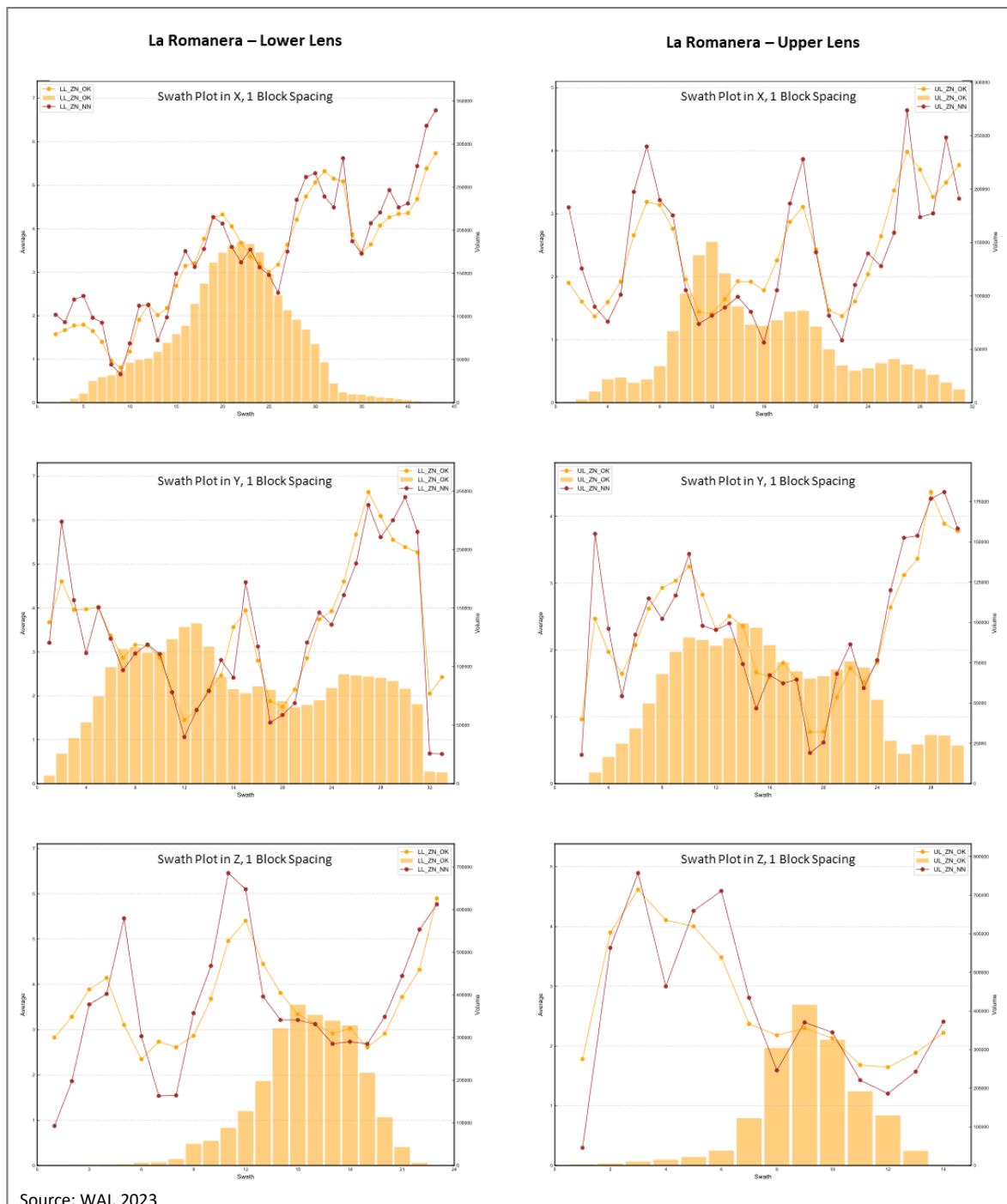
WAI checked the block model estimates for global bias by comparing the average grades from the block model estimates with average grades from NN estimates. The NN estimator declusters the data and produces a theoretically unbiased estimate of the average value when no cut-off grade is applied. Results summarised in Table 14.12 and Table 14.13 show no material global bias.

Domain	Statistic	Zn (%)		Pb (%)		Cu (%)		Ag (g/t)		Au (g/t)		Bulk Density (g/cm <sup>3</sup> )	
		OK	NN	OK	NN	OK	NN	OK	NN	OK	NN	OK	NN
		Lower Lens	Mean	3.43	3.35	1.50	1.57	0.44	0.42	69.07	68.17	1.40	1.44
	% Diff.	2.4%		-4.5%		4.0%		1.3%		-2.8%		-0.3%	
Upper Lens	Mean	2.20	2.11	1.21	1.19	0.39	0.41	63.59	64.14	1.14	1.11	4.20	4.21
	% Diff.	4.1%		2.0%		-5.9%		-0.8%		3.3%		-0.3%	

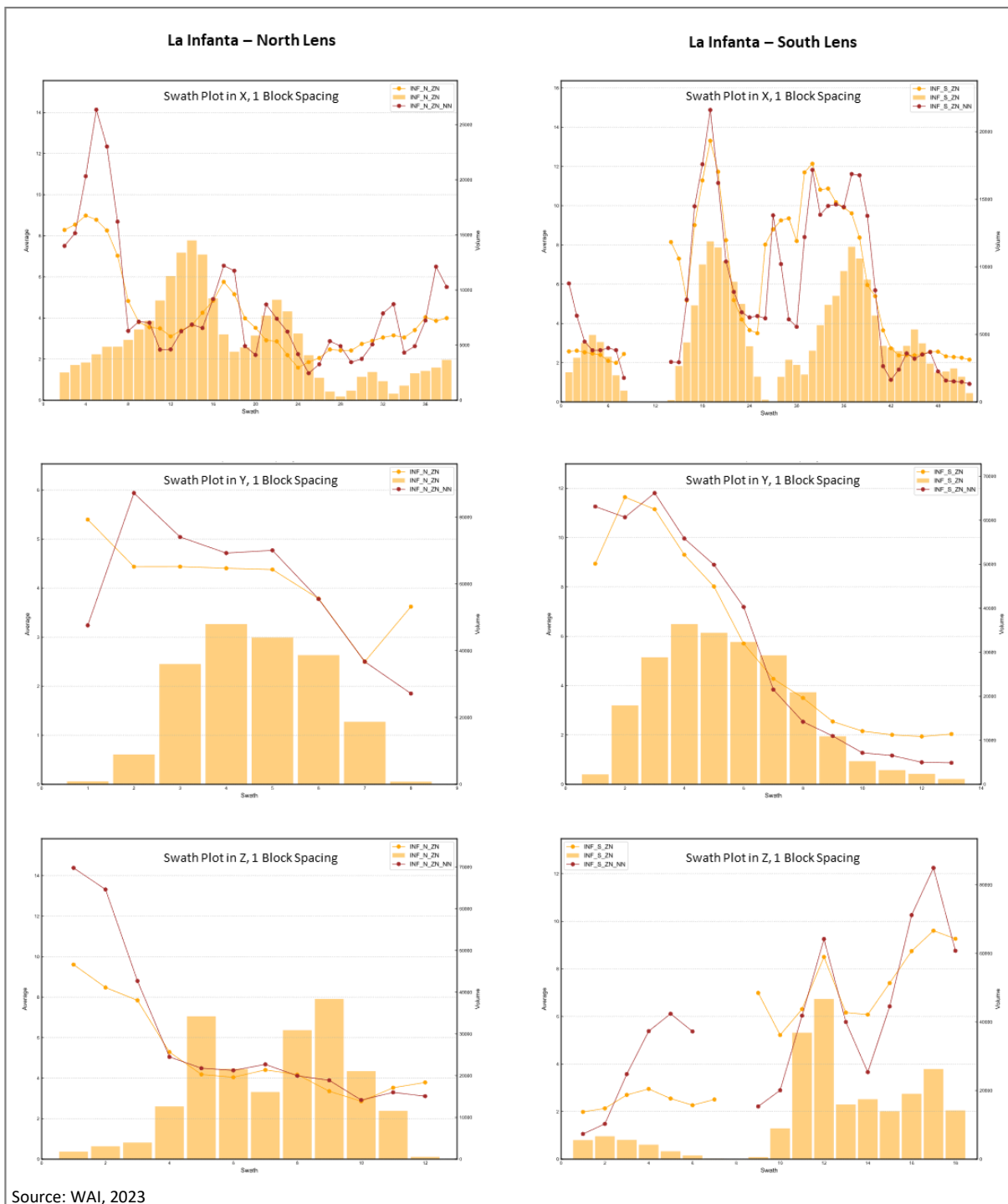
Domain	Statistic	Zn (%)		Pb (%)		Cu (%)		Ag (g/t)		Au (g/t)		Bulk Density (g/cm <sup>3</sup> )	
		OK	NN	OK	NN	OK	NN	OK	NN	OK	NN	OK	NN
		North Lens	Mean	4.10	4.43	2.51	2.43	0.62	0.70	59.65	69.38	0.26	0.27
	% Diff.	-7.3%		3.3%		-10.9%		-14.0%		-3.1%		-1.5%	
South Lens	Mean	7.10	7.38	4.19	4.41	1.04	1.02	92.01	88.09	0.34	0.35	3.07	3.08
	% Diff.	-3.8%		-4.9%		1.7%		4.5%		-4.7%		-0.3%	
South 1 Lens	Mean	8.69	8.31	5.44	5.51	1.25	1.24	88.64	80.57	0.34	0.35	3.17	3.08
	% Diff.	4.6%		-1.3%		1.3%		10.0%		-1.8%		2.7%	

### 14.11.4 Swath Plots

Swath plots provide a spatial comparison of average grades from the block model estimates with average grades from NN estimates (e.g. Figure 14.13 and Figure 14.14). The model estimate should be smoother than the NN estimate. The observed grade profiles behave as expected and show no significant local bias.



**Figure 14.13: Swath Plots for La Romanera Domains (OK Grade Profile in Orange and NN Grade Profile in Dark Red)**

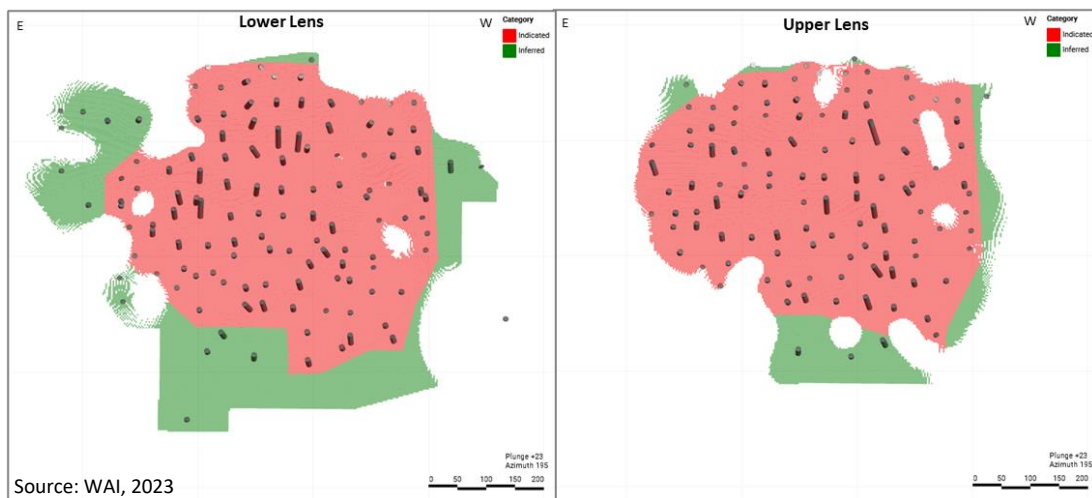


Source: WAI, 2023

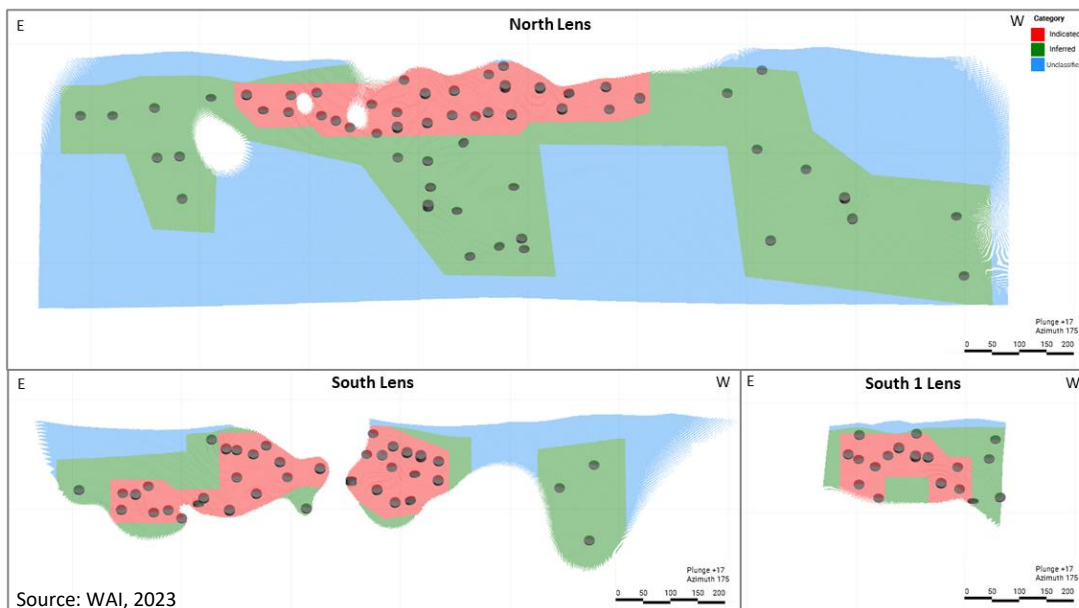
**Figure 14.14: Swath Plots for Principal La Infanta Domains (OK Grade Profile in Orange and NN Grade Profile in Dark Red)**

### 14.12 Mineral Resource Classification

The approach to Mineral Resource classification is underpinned by confidence in the drillhole data, the geological interpretation, geological continuity, data density and orientation, spatial grade continuity and confidence in the Mineral Resource estimation. Classification was set in the block models using wireframes that define contiguous regions that meet specific drill spacing and estimation pass criteria. For Indicated Resources nominal drill spacing is 50m or less and blocks are mainly estimated in the first pass (i.e. informed by a minimum of two drillholes). For Inferred Resources nominal drill spacing is 100m or less. The Mineral Resource classification relative to input drillhole data is shown for La Romanera in Figure 14.15 and La Infanta in Figure 14.16.



**Figure 14.15: La Romanera Mineral Resource Classification vs. Drill Coverage Per Domain (Indicated Resources in Red and Inferred Resources in Green)**



**Figure 14.16: La Romanera Mineral Resource Classification vs. Drill Coverage Per Domain (Indicated Resources in Red, Inferred Resources in Green and Unclassified Blocks in Blue)**

### 14.13 Reasonable Prospects for Eventual Economic Extraction

Mining, processing and long-term price assumptions were used to evaluate the proportion of the block models that could reasonably be expected to be economically mined.

A 3.0% zinc equivalent (ZnEq) cut-off was selected for reporting in line with extraction via conventional underground mining methods. The ZnEq formula is:

- $$\text{ZnEq} = \frac{[(\text{Zn grade} * \text{Zn recovery} * \text{Zn price}) + (\text{Pb grade} * \text{Pb recovery} * \text{Pb price}) + (\text{Cu grade} * \text{Cu recovery} * \text{Cu price}) + (\text{Ag grade} * \text{Ag recovery} * \text{Ag price}) + (\text{Au grade} * \text{Au recovery} * \text{Au price})]}{(\text{Zn recovery} * \text{Zn price})}$$

The ZnEq calculation includes the following metallurgical recovery and long-term price assumptions for each metal:

- Long term price forecast - US\$3,000/t Zn, US\$2,300/t Pb, US\$9,500/t Cu, US\$25/oz Ag and US\$1,800/oz Au;
- Metallurgical recoveries - 100% Zn, 80% Pb, 80% Cu, 80% Ag and 20% Au. 100% Zn recovery ensures ZnEq grade > Zn grade for all blocks.

Initial metallurgical test-work is commencing, and WAI has used recoveries within the range of other Iberian Pyrite Belt deposits and informed by review of petrographic studies. WAI cautions that changes in metallurgical recovery and/or payability assumptions could significantly impact the MRE.

Thinner zones of mineralisation are present at La Infanta and reporting was further restricted to exclude blocks below 3.0% ZnEq when diluted over a 3m minimum mining width. Thickness at La Romanera typically exceeds 3m.

### 14.14 Mineral Resource Statement

The Mineral Resource estimates for the La Romanera and La Infanta polymetallic deposits are classified in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014). The Mineral Resource statement is shown in Table 14.14. The effective date of the Mineral Resource Estimate for La Romanera is May 4, 2023. The effective date of the Mineral Resource Estimate for La Infanta is April 30, 2023.

The stated Mineral Resources are not materially affected by any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues, to the best knowledge of the authors. There are no known mining, metallurgical, infrastructure, or other factors that materially affect this Mineral Resource estimate, at this time.

**Table 14.14: Mineral Resource Estimate for the Iberian Belt West Project**

Deposit	Class	Tonnes	Average Grade						Metal Content					
			Zn	Pb	Cu	Ag	Au	ZnEq	Zn	Pb	Cu	Ag	Au	ZnEq
			Mt	%	%	%	g/t	g/t	%	kt	kt	kt	koz	koz
La Romanera	Indicated	13.00	2.98	1.45	0.42	74.1	1.48	7.08	387	188	54	30,979	617	920
	Inferred	3.14	4.85	1.96	0.45	71.3	1.16	9.16	153	62	14	7,205	117	288
La Infanta	Indicated	1.07	7.10	4.24	1.03	88.5	0.32	14.32	76	45	11	3,051	11	154
	Inferred	1.56	4.41	2.49	0.74	74.7	0.38	9.55	69	39	12	3,758	19	149
IBW Project	<b>Indicated</b>	<b>14.07</b>	<b>3.29</b>	<b>1.66</b>	<b>0.46</b>	<b>75.2</b>	<b>1.39</b>	<b>7.63</b>	<b>463</b>	<b>233</b>	<b>65</b>	<b>34,030</b>	<b>629</b>	<b>1,074</b>
	<b>Inferred</b>	<b>4.71</b>	<b>4.70</b>	<b>2.14</b>	<b>0.54</b>	<b>72.4</b>	<b>0.90</b>	<b>9.29</b>	<b>222</b>	<b>101</b>	<b>26</b>	<b>10,963</b>	<b>137</b>	<b>438</b>

- Mineral Resources are classified according to definitions outlined in CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines (CIM, 2014);
- The effective date of the Mineral Resource Estimate for La Romanera is May 4, 2023 and the effective date of the Mineral Resource Estimate for La Infanta is April 30, 2023;
- Mineral Resources are reported at a cut-off grade of 3.0% zinc equivalent (ZnEq) where;
  - $ZnEq = [(Zn \text{ grade} * Zn \text{ recovery} * Zn \text{ price}) + (Pb \text{ grade} * Pb \text{ recovery} * Pb \text{ price}) + (Cu \text{ grade} * Cu \text{ recovery} * Cu \text{ price}) + (Ag \text{ grade} * Ag \text{ recovery} * Ag \text{ price}) + (Au \text{ grade} * Au \text{ recovery} * Au \text{ price})] / (Zn \text{ recovery} * Zn \text{ price})$ ;
  - Long term price assumptions are US\$3,000/t Zn, US\$2,300/t Pb, US\$9,500/t Cu, US\$25/oz Ag and US\$1,800/oz Au;
  - Metallurgical recovery assumptions are 100% Zn, 80% Pb, 80% Cu, 80% Ag and 20% Au. 100% Zn recovery ensures ZnEq grade > Zn grade for all blocks;
- At La Infanta, blocks less than 3.0% ZnEq when diluted over a 3m minimum mining width were excluded from the Mineral Resource. Thickness at La Romanera typically exceeds 3m;
- Only primary sulphide mineralisation is included in the Mineral Resources;
- Metal grade and content represents contained metal in the ground and have not been adjusted for metallurgical recovery or mining dilution;
- Mineral Resources are not Reserves until they have demonstrated economic viability based on a pre-feasibility study or feasibility study;
- Numbers may not add due to rounding.
- The Qualified Person for the La Romanera and La Infanta Mineral Resource Estimates is Dr. Phil Newall, BSc (ARSM), PhD (ACSM), CEng, FIMMM of WAI, a Qualified Person as defined by NI 43-101.

#### 14.15 Mineral Resource Sensitivity

IBW Project Mineral Resource Estimates are reported at a cut-off grade of 3.0% ZnEq in the above Mineral Resource Statement. Table 14.15 shows the sensitivity of estimated grade and tonnage to the selection of cut-off grade. Sensitivity analysis across a range of cut-off grades is only intended to provide additional context and should not be considered Mineral Resources.

Cut-off Grade	Indicated			Inferred		
	ZnEq	Tonnes	ZnEq Metal	Tonnes	ZnEq	ZnEq Metal
%	Mt	%	kt	Mt	%	kt
0.5	15.88	7.03	1116	4.84	9.11	441
1.0	15.82	7.05	1116	4.84	9.11	441
1.5	15.70	7.10	1114	4.84	9.11	441
2.0	15.43	7.19	1109	4.83	9.12	441
2.5	15.01	7.33	1100	4.81	9.16	440
<b>3.0</b>	<b>14.07</b>	<b>7.63</b>	<b>1074</b>	<b>4.71</b>	<b>9.29</b>	<b>438</b>
3.5	13.19	7.92	1045	4.57	9.47	433
4.0	12.04	8.32	1002	4.36	9.75	425
4.5	10.74	8.81	947	4.17	10.00	417
5.0	9.79	9.21	902	4.03	10.18	410
5.5	8.71	9.70	845	3.86	10.41	401
6.0	7.85	10.13	795	3.68	10.63	391

The Mineral Resource Estimates are also sensitive to the metallurgical recovery assumptions adopted in the ZnEq calculation. Table 14.16 shows estimated grade and tonnage above 3.0% ZnEq, prior to the application of metallurgical recovery factors. This is only intended to provide additional insight into the impact of metallurgical recovery and should not be considered Mineral Resources.

Deposit	Class	Tonnes	Average Grade						Metal Content					
			Zn	Pb	Cu	Ag	Au	ZnEq	Zn	Pb	Cu	Ag	Au	ZnEq
			Mt	%	%	%	g/t	g/t	%	kt	kt	kt	koz	koz
La Romanera	Indicated	14.38	2.74	1.35	0.41	69.7	1.40	9.66	394	193	60	32,215	648	1,389
	Inferred	3.26	4.71	1.91	0.44	69.6	1.14	11.65	153	62	14	7,289	119	379
La Infanta	Indicated	1.11	6.96	4.16	1.01	87.1	0.32	16.30	77	46	11	3,103	11	181
	Inferred	1.68	4.32	2.43	0.73	73.9	0.39	11.22	72	41	12	3,979	21	188
IBW Project	Indicated	<b>15.49</b>	<b>3.04</b>	<b>1.55</b>	<b>0.46</b>	<b>70.9</b>	<b>1.33</b>	<b>10.13</b>	<b>471</b>	<b>240</b>	<b>71</b>	<b>35,318</b>	<b>660</b>	<b>1,569</b>
	Inferred	<b>4.93</b>	<b>4.58</b>	<b>2.09</b>	<b>0.54</b>	<b>71.1</b>	<b>0.89</b>	<b>11.50</b>	<b>226</b>	<b>103</b>	<b>27</b>	<b>11,269</b>	<b>141</b>	<b>567</b>



## **15 MINERAL RESERVE ESTIMATES**

There are no Mineral Reserve Estimates for the La Romanera or La Infanta deposits.

## **16 MINING METHODS**

This section does not apply to the Technical Report.

## **17 RECOVERY METHODS**

This section does not apply to the Technical Report.

## **18 PROJECT INFRASTRUCTURE**

This section does not apply to the Technical Report.

## **19 MARKET STUDIES AND CONTRACTS**

This section does not apply to the Technical Report.

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

This section does not apply to the Technical Report.

## **21 CAPITAL AND OPERATING COSTS**

This section does not apply to the Technical Report.

## **22 ECONOMIC ANALYSIS**

This section does not apply to the Technical Report.



## **23 ADJACENT PROPERTIES**

There is no information regarding adjacent properties applicable to the La Romanera and La Infanta deposits for disclosure in this Technical Report.

## **24 OTHER RELEVANT DATA AND INFORMATION**

There are no other relevant data or information to report in this Technical Report about the La Romanera and La Infanta deposits.

## 25 INTERPRETATION AND CONCLUSIONS

The maiden Mineral Resource estimates for the La Romanera and La Infanta polymetallic deposits, are based on drill results from the 2022-23 resource delineation drilling programme at Emerita's wholly owned IBW project. The IBW project hosts three previously identified VHMS deposits: La Infanta, La Romanera and El Cura. Initial exploration work has recently commenced at El Cura and all deposits are open for expansion along strike and at depth. Drilling is expected to continue at IBW through 2023 and into 2024 targeting continued expansion of the IBW Mineral Resource.

Mineral Resource estimation was completed by WAI using drillhole databases and geological models developed by the Emerita geology team and subsequently verified and refined in collaboration with WAI. The drilling, logging, sampling, analysis and QA/QC procedures used are considered suitable for the purposes of Mineral Resource estimation.

Grades were estimated into a block model representing each mineralised domain. Grade estimation was carried out by ordinary kriging or inverse distance weighting. Estimated grades were validated globally, locally and visually. Mining, processing and long-term price assumptions were used to evaluate the proportion of the block models that could reasonably be expected to be economically mined. A 3.0% ZnEq cut-off was selected in line with extraction via conventional underground mining methods.

As of May 4, 2023, the Indicated Mineral Resources for the La Romanera Deposit are estimated to be 13Mt with average grades of 2.98% Zn, 1.45% Pb, 0.42% Cu, 74.1g/t Ag, 1.48g/t Au, for 7.08% ZnEq. Inferred Mineral Resources are estimated to be 3.14Mt with average grades of 4.85% Zn, 4.24% Pb, 0.45% Cu, 71.3g/t Ag, 1.16g/t Au, for 9.16% ZnEq.

As of April 30, 2023, the Indicated Mineral Resources for the La Infanta Deposit are estimated to be 1.07Mt with average grades of 7.10% Zn, 4.24% Pb, 1.03% Cu, 88.5g/t Ag, 0.32g/t Au, for 14.32% ZnEq. Inferred Mineral Resources are estimated to be 1.56Mt with average grades of 4.41% Zn, 2.49% Pb, 0.74% Cu, 74.7g/t Ag, 0.38g/t Au, for 9.55% ZnEq.

As of May 4, 2023, the Indicated Mineral Resources for the Iberian Belt West Project are estimated to be 14.07Mt with average grades of 3.29% Zn, 1.66% Pb, 0.46% Cu, 75.2g/t Ag, 1.39g/t Au, for 7.63% ZnEq. Inferred Mineral Resources are estimated to be 4.71Mt with average grades of 4.70% Zn, 2.14% Pb, 0.54% Cu, 72.4g/t Ag, 0.90g/t Au, for 9.29% ZnEq.

## 26 RECOMMENDATIONS

### 26.1 General

The authors recommend a preliminary economic assessment (PEA) is completed for the project. The cost estimate for a PEA is US\$250,000 to US\$400,000. The following actions are recommended as part of this next phase of study.

### 26.2 Exploration, Geology and Mineral Resources

- Continue extensional drilling at depth at La Romanera and complete first pass drill testing at El Cura. Approximately US\$4.5M is budgeted for drilling in 2023;
- Investigate the use of wedge holes to reduce drilling costs at depth;
- Complete a simulation-based drill spacing study to test the existing classification approach and optimise drill spacing requirements at depth;
- Develop project scale fault and lithostratigraphic models;
- Optimise QAQC insertion rates such that CRM, blank and duplicate samples have individual insertion rates around 5%;
- Expand duplicate sample types to include a coarse duplicate submitted to the primary laboratory and a pulp duplicate submitted to an umpire laboratory;
- Implement a QAQC protocol for density measurements;
- Complete QAQC, model and estimate potential deleterious elements (Hg, As, Sb, Cd, Bi);
- On completion of metallurgical test-work, use results to develop an NSR cut-off value for reporting Mineral Resources; and
- Update Mineral Resource estimates based on findings from the above work.

### 26.3 Mineral Processing and Metallurgical Testwork

It is recommended that a programme of metallurgical testing is completed to provide sufficient data pertaining to the processing characteristics of material from the La Romanera and La Infanta deposits to support the delivery of a PEA. The cost estimate for this metallurgical testwork is US\$90,000 to US\$120,000.

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### CERTIFICATE OF QUALIFIED PERSON

I, Phil Newall, BSc, ARSM, PhD, ACSM, CEng, FIMMM, QMR, as an author of this report titled “NI 43-101 Technical Report on the La Romanera and La Infanta Polymetallic Deposits, Spain” dated July 5, 2023, and with an effective date of May 4, 2023, do hereby certify that:

- I am a Consultant, but up until 31<sup>st</sup> March, 2023, I was Managing Director with Wardell Armstrong International, with a business address at Baldhu House, Wheal Jane Earth Science Park, Baldhu, Truro, Cornwall, United Kingdom, TR3 6EH.
- I am a graduate of Imperial College, London in the United Kingdom (BSc (Hons) Geology, 1983) and Camborne School of Mines in the United Kingdom (PhD, 1991). I have practiced my profession continuously since 1983 in a variety of countries and commodities including the evaluation of volcanogenic massive sulphide deposits.
- I have read the definition of “Qualified Person” set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements of a “Qualified Person” for the purposes of NI 43-101.
- I am a registered member in good standing of the Institution of Materials, Minerals and Mining as a Fellow and Chartered Engineer (# 48891).
- I last personally inspected the La Romanera and La Infanta deposits on March 16, 2023.
- I am the co-author of this report and responsible for Sections: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7 1.9, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 23, 24, 25, 26 and 27.
- I am independent of the issuer, Emerita Resources Corporation, as defined by Section 1.5 of NI 43-101.
- I have had no prior involvement with the La Romanera and La Infanta deposits that are the subject of the Technical Report.
- I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- At the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 5th day of July, 2023.

**(Signed & Sealed) Phil Newall**

Phil Newall BSc, ARSM, PhD, ACSM, CEng, FIMMM, QMR

**CERTIFICATE OF QUALIFIED PERSON**

I, Frank Browning, MSci, MSc, MCSM, PGCert, FGS, CGeol as an author of this report titled “NI 43-101 Technical Report on the La Romanera and La Infanta Polymetallic Deposits, Spain” dated July 5, 2023, and with an effective date of May 4, 2023, do hereby certify that:

- I am a Principal Resource Geologist with Wardell Armstrong International, with a business address at Baldhu House, Wheal Jane Earth Science Park, Baldhu, Truro, Cornwall, United Kingdom, TR3 6EH.
- I am a graduate of the University College London in the United Kingdom (Msi Earth Sciences, 2011), Camborne School of Mines (University of Exeter) in the United Kingdom (MSc Mining Geology, 2016) and Edith Cowan University in Australia (PGCert Geostatistics, 2019). I have practiced my profession continuously since 2011 and have estimated and audited Mineral Resources for a variety of commodities, including polymetallic massive sulphide deposits.
- I have read the definition of “Qualified Person” set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements of a “Qualified Person” for the purposes of NI 43-101.
- I am a registered member in good standing of the Geological Society of London as a Fellow and Chartered Geologist (# 1031973).
- I last personally inspected the La Romanera and La Infanta deposits on May 3 to May 5, 2023.
- I am the co-author of this report and responsible for Sections: 1.8 and 14.
- I am independent of the issuer, Emerita Resources Corporation, as defined by Section 1.5 of NI 43-101.
- I have had no prior involvement with the La Romanera and La Infanta deposits that are the subject of the Technical Report.
- I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- At the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 5th day of July, 2023.

**(Signed & Sealed) Frank Browning**

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