

EMERITA RESOURCES CORP.

NI 43-101 TECHNICAL REPORT ON THE IBERIAN BELT WEST PROJECT, SPAIN

April 30, 2025





Wardell Armstrong International (Part of SLR)

Baldhu House, Wheal Jane Earth Science Park, Baldhu, Truro, Cornwall, TR3 6EH, UK Telephone: +44 (0)1872 560738 www.wardell-armstrong.com



DATE ISSUED: 30 April 2025 JOB NUMBER: ZT61-2308

VERSION: V3.0
REPORT NUMBER: MM1830
STATUS: Final

EMERITA RESOURCES CORP.

NI 43-101 TECHNICAL REPORT ON THE IBERIAN BELT WEST PROJECT, SPAIN

Effective Date: February 26, 2025

Signature Date: April 30, 2025

AUTHORED BY:

Frank Browning Principal Resource Geologist ["signed and sealed"]

Alan Clarke Technical Director (Geology) ["signed and sealed"]

James Turner Technical Director (Mineral Processing) ["signed and sealed"]



Wardell Armstrong is the trading name of Wardell Armstrong International Ltd, Registered in England No. 3813172.

WASTE RESOURCE MANAGEMENT

ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES



CONTENTS

1	SU	VIMARY	1
	1.1	Introduction	1
	1.2	Property Description and Ownership	1
	1.3	Geology and Mineralisation	1
	1.4	Exploration and Drilling	2
	1.5	Sample Preparation, Analyses, Security and Data Verification	2
	1.6	Mineral Processing and Metallurgical Testing	3
	1.7	Mineral Resource Estimate	3
	1.8	Conclusions and Recommendations	5
2	INT	RODUCTION	7
	2.1	Background	7
	2.2	Terms of Reference	7
	2.3	Qualified Persons	7
	2.4	Personal Inspections	7
	2.5	WAI Declaration	
	2.6	Units and Currency	
3	REI	IANCE ON OTHER EXPERTS	10
4	PR	OPERTY DESCRIPTION AND LOCATION	
	4.1	Location	
	4.2	Ownership	
	4.3	Mineral Tenure	
	4.4	Royalties	
	4.5	Surface Rights	
	4.6	Permitting Considerations	
	4.7	Environmental Considerations	
	4.8	Existing Environmental Liabilities	
5		CESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	
	5.1	Accessibility and Transportation	
	5.2	Climate	
	5.3	Local Resources and Infrastructure	
	5.4	Physiography	
6		TORY	
	6.1	Ownership History	
	6.2	Exploration History	
	6.3	Production History	
7	GE	OLOGICAL SETTING AND MINERALISATION	
	7.1	Regional Geology	
	7.2	Local Geology	
	7.3	Deposit Geology	
8		POSIT TYPES	
9		PLORATION	
	9.1	Introduction	40



9.2	Geological Mapping	40
9.3	Soil Geochemistry	40
9.4	Geophysics	42
10 DRI	LLING	46
10.1	Type and Extent	46
10.2	Procedures	50
10.3	Interpretation of Relevant Results	52
11 SAI	MPLE PREPARATION, ANALYSES, AND SECURITY	53
11.1	Sampling Methods	53
11.2	Bulk Density	55
11.3	Sample Security	57
11.4	Laboratories	57
11.5	Sample Preparation and Analysis	57
11.6	QAQC Protocol	61
11.7	QAQC Results	63
11.8	Adequacy of Procedures	75
12 DA	TA VERIFICATION	76
12.1	Data Verification by Emerita	76
12.2	Database Cut-Off Dates	76
12.3	Data Verification by The Authors	76
13 MII	NERAL PROCESSING AND METALLURGICAL TESTING	78
13.1	Introduction	78
13.2	Flotation Locked Cycle Test Results	78
13.3	Post-Flotation Process	81
13.4	Summary of Metals Recoveries	84
13.5	Other Input Parameters and Comments	84
14 MII	NERAL RESOURCE ESTIMATES	86
14.1	Introduction	86
14.2	Mineral Resource Estimate Data	86
14.3	Geological Interpretation and Domaining	87
14.4	Boundary Analysis	92
14.5	Compositing	92
14.6	Grade Capping	93
14.7	Metal Correlations	95
14.8	Variography	96
14.9	Block Modelling	98
14.10	Estimation Methodology	99
14.11	Model Validation	101
	Mineral Resource Classification	
14.13	Reasonable Prospects for Eventual Economic Extraction	109
14.14	Mineral Resource Statement	110
14.15	Comparison with Previous Mineral Resource Estimate	112
15 MII	NERAL RESERVE ESTIMATES	114



17 18		OVERY METHODS	116
18			110
	PKC	DJECT INFRASTRUCTURE	117
19	MA	RKET STUDIES AND CONTRACTS	118
20	EN۱	/IRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT	119
21	CAP	PITAL AND OPERATING COSTS	120
22	ECC	NOMIC ANALYSIS	121
23	ADJ	ACENT PROPERTIES	122
24	OTH	HER RELEVANT DATA AND INFORMATION	123
25	INT	ERPRETATION AND CONCLUSIONS	124
25	5.1	Introduction	124
25	5.2	Drilling, Sampling and Analysis	124
25	5.3	Mineral Processing and Metallurgical Testwork	124
25	5.4	Mineral Resource Estimation	125
26	REC	OMMENDATIONS	126
26	5.1	General	126
26	5.2	Mineral Processing and Metallurgical Testwork	126
26	5.3	Exploration, Geology and Mineral Resources	126
27	REF	ERENCES	127
		: Mineral Resource Estimate for the Iberian Belt West Project	
		: IBW Project Exploration Permit Coordinates (ETRS89 Zone 29N)	
		: IBW Project Exploration Permit Coordinates (ETRS89 Zone 29N)	
		: Ownership History of the La Romanera Deposit	
		: Ownership History of the La Infanta Deposit	
		: Ownership History of the El Cura Deposit	
		: Historical Drillhole Database	
		: La Romanera – Major Lithostratigraphic Units	
		: La Infanta – Major Lithostratigraphic Units	
		: El Cura – Major Lithostratigraphic Units	
		1: Summary of DDH Meters per Year and in Total at Each Deposit (MRE Databases)	
		2: Summary of Downhole Survey Tools	
		1: Sample Length Depending on Core Diameter	
		2: Summary Statistics for Density Duplicate Results	
		3: Summary Statistics for Density Duplicate Results By Lithology	
Tabl	e 11.	4: Analytical Laboratories	57
Tabl	e 11.	5 ALS Sevilla Sample Preparation Procedures	58
Table	e 11.	6: Elements and Ranges of Analysis for the ME-ICPORE™ Method from ALS Global	58
		.7: Elements and Range of Analysis for the Au-AA23™ and Au-GRA21™ Methods from the Au-AA23™ and Au-GRA21™ Au-AA23™ and Au-AA	



Table 11.8: Elements and range of analysis for the ME-MS61r™ Method from ALS Global	59
Table 11.9: Elements and range of analysis for the ME-MS61L™ Method from ALS Global	59
Table 11.10: ALS Sevilla Sample Preparation Procedures	59
Table 11.11: Elements and Range of Analysis for the PE-4042 Method from AGQ	60
Table 11.12: Elements and Range of Analysis for the PE-4043 Method from AGQ	60
Table 11.13: Elements and Range of Analysis for the PE-4014 Method from AGQ	60
Table 11.14: Certified Mean Value and Standard Deviation of Emerita CRMs	61
Table 11.15: Emerita Quality Control Rules	62
Table 11.16: Summary of La Romanera Samples Submitted to ALS	63
Table 11.17: Summary of La Romanera CRM Submissions to ALS	64
Table 11.18: Summary Statistics for La Romanera Field Duplicate Submissions to ALS	66
Table 11.19: Summary Statistics for La Romanera Pulp Duplicate Submissions to ALS	66
Table 11.20: Summary of La Romanera Blank Submissions to ALS	67
Table 11.21: Summary of La Infanta Samples Submitted to ALS	67
Table 11.22: Summary of La Infanta CRM Submissions to ALS	68
Table 11.23: Summary Statistics for La Infanta Field Duplicate Submissions to ALS	70
Table 11.24: Summary Statistics for La Infanta Pulp Duplicate Submissions to ALS	70
Table 11.25: Summary of La Infanta Blank Submissions to ALS	71
Table 11.26: Summary of La Infanta Samples Submitted to AGQ	71
Table 11.27: Summary of El Cura Samples Submitted to ALS	71
Table 11.28: Summary of El Cura CRM Submissions to ALS	72
Table 11.29: Summary Statistics for El Cura Field Duplicate Submissions to ALS	74
Table 11.30: Summary Statistics for El Cura Pulp Duplicate Submissions to ALS	74
Table 11.31: Summary of El Cura Blank Submissions to ALS	75
Table 13.1: La Romanera MET-6 Locked Cycle Test Results	
Table 13.2: La Infanta MET-7 Locked Cycle Test Results	79
Table 13.3: El Cura MET-9 Locked Cycle Test Results	79
Table 13.4: Summary of Total Metals Recoveries for MRE	84
Table 14.1: Summary of MRE Drillhole Databases	86
Table 14.2: Sulphur-Density Regressions per Deposit	93
Table 14.3: La Romanera Composite Capping Statistics by Domain	94
Table 14.4: La Infanta Composite Capping Statistics by Domain	94
Table 14.5: El Cura Composite Capping Statistics by Domain	95
Table 14.6: Correlation Matrix for Metals and Density for La Romanera	95
Table 14.7: Correlation Matrix for Metals and Density for La Infanta	95
Table 14.8: Correlation Matrix for Metals and Density for El Cura	95
Table 14.9: La Romanera Variogram Model Parameters	97
Table 14.10: La Infanta Variogram Model Parameters	98
Table 14.11: Block Model Parameters	98
Table 14.12: La Romanera Grade Estimation Parameters	99
Table 14.13: La Infanta Grade Estimation Parameters	100
Table 14.14: El Cura Grade Estimation Parameters	101
Table 14.15: La Romanera Mean Grade Comparison by Domain	105



Table 14.16: La Infanta Mean Grade Comparison by Domain	105
Table 14.17: El Cura Mean Grade Comparison by Domain	105
Table 14.18: Parameters and Equations used to Calculate Block Metal Equivalent Grades	110
Table 14.19: Mineral Resource Estimate for the Iberian Belt West Project	111
FIGURES	
Figure 4.1: Map of Spain Highlighting the Huelva Province of Andalusia	11
Figure 4.2: Location of the IBW Project Within Huelva Province	12
Figure 4.3: IBW Project Exploration Permit Map (ETRS89 Zone 29N)	13
Figure 4.4: Map of Environmentally Protected Areas Relative to the IBW Project Concession	15
Figure 4.5: Historic Surface Workings at La Romanera	16
Figure 5.1: IBW Project Access Map	18
Figure 6.1: La Romanera Historical Drilling	21
Figure 6.2: La Infanta Historical Drilling	22
Figure 6.3: El Cura Historical Drilling	22
Figure 7.1: Regional Geological Map	24
Figure 7.2: Schematic Geological Section of the Suture Zone Between the SPT and the OMZ	
Figure 7.3: General Stratigraphic Column of the IPB	25
Figure 7.4: Geological Map of the IBW Permit and Locations of the La Romanera, El Cura and La Ir	าfanta
Deposits	27
Figure 7.5: La Romanera Geological Map	29
Figure 7.6: La Romanera Geological Cross Section and Schematic Lithostratigraphic Column	29
Figure 7.7: La Infanta Geological Map	31
Figure 7.8: La Infanta Geological Cross Section and Schematic Lithostratigraphic Column	
Figure 7.9: El Cura Geological Map and Schematic Lithostratigraphic Column	33
Figure 7.10: El Cura Geological Cross Section	33
$ \label{thm:continuous} \textbf{Figure 7.11: Examples of La Romanera Upper and Lower Lens Massive Sulphide Mineralisation}. $	35
Figure 7.12: Examples of La Infanta Sulphide Mineralisation	36
Figure 7.13: Examples of La Infanta Sulphide Mineralisation	37
Figure 8.1: Schematic Diagram of a Siliciclastic Felsic VMS Deposit	
Figure 8.2: Different Stages of IPB VMS Mineralisation	
Figure 9.1: IBW Project Soil Geochemical Sample Data for Select Elements	41
Figure 9.2: Comparison of Rb in Soil vs. Geological Map for the La Romanera Area	42
Figure 9.3: IBW Project Bouger Anomaly Map	43
Figure 9.4: IBW Project Enhanced Residual Bouger Gravity Map	43
Figure 9.5: IBW Project Total Magnetic Intensity Map	44
Figure 9.6: Map of IBW Project TEM and Gravimetric Anomalies	45
Figure 10.1: Summary of DDH Meters per Month and in Total at Each Deposit (Entire Project) \dots	46
Figure 10.2: La Romanera Drill Plan	47
Figure 10.3: Representative Drill Section through the La Romanera Deposit (Sampling in Black) .	
Figure 10.4: La Infanta Drill Plan	48
Figure 10.5: Representative Drill Section through the La Infanta Deposit (Sampling in Black)	48



Figure 10.6: El Cura Drill Plan	49
Figure 10.7: Representative Drill Section through the El Cura Deposit (Sampling in Black)	49
Figure 10.8: GyroLogicTM SPT Downhole Survey Tool and Optical Depth Counter	50
Figure 10.9: Procedure for Measuring and Calculating RQD	52
Figure 11.1: Soil Sampling Process	54
Figure 11.2: Olympus Vanta pXRF	54
Figure 11.3: U.S. Solid USS-DBS28-30 Balance Taking a Wet Weight for Bulk Density Calculation	55
Figure 11.4: Scatter Plots – Emerita Density vs. ALS Density Measurements (Coloured by Lithology)	ogy) 56
Figure 11.5: Example CRM Control Charts for OREAS 620 (La Romanera - ALS)	65
Figure 11.6: Example X-Y Scatter Plots for Zn (La Romanera - ALS)	66
Figure 11.7: Example CRM Control Charts for OREAS 623 (La Infanta - ALS)	69
Figure 11.8: Example X-Y Scatter Plots for Zn (La Infanta - ALS)	70
Figure 11.9: Example CRM Control Charts for OREAS 620 (El Cura - ALS)	73
Figure 11.10: Example X-Y Scatter Plots for Cu (El Cura - ALS)	74
Figure 13.1: LCT Testwork Flowsheet for La Romanera	78
Figure 13.2: DST's CLEVR Process®	82
Figure 14.1: Example of Interval Selection (IS_Romanera) Using Leapfrog® Drillhole Correlation	88
Figure 14.2: La Romanera Cross Section – Domain Wireframes vs. Logged Lithology (Left) & Assa	y ZnEq
grade (Right). See Section 14.13 for ZnEq Calculation	89
$ \label{thm:condition} \textbf{Figure 14.3: Isometric View of La Romanera Domain Wireframes and Input Interval Selections} \ .$	89
Figure 14.4: La Infanta Cross Section – Domain Wireframes vs. Logged Lithology (Left) & Assa	
grade (Right). See Section 14.13 for ZnEq Calculation	
Figure 14.5: Isometric View of La Infanta Domain Wireframes and Input Interval Selections	
Figure 14.6: El Cura Cross Section – Domain Wireframes vs. Logged Lithology (Left) & Assay CuEc	
(Right). See Section 14.13 for CuEq Calculation	91
Figure 14.7: Isometric View of El Cura Domain Wireframes and Input Interval Selections	
Figure 14.8: Boundary Analysis for Zn – La Romanera Lower Lens	92
Figure 14.9: Sulphur-Density Scatter Plot and Regression (Red Line and Equation) for La Roman	
Figure 14.10: La Romanera - Zn Normal Score Down-Dip Continuity Maps and Variograms	
Figure 14.11: La Infanta - Zn Normal Score Down-Dip Continuity Maps and Variograms	97
Figure 14.12: La Romanera Cross Section - Zn Estimate vs. Capped 1m Composite Grades	
Figure 14.13: La Romanera Long Sections - Zn Estimate vs. Full Domain Width Composite Grade	es . 102
Figure 14.14: La Infanta Cross Section - Zn Estimate vs. Capped 1m Composite Grades	103
Figure 14.15: La Infanta Long Sections - Zn Estimate vs. Full Domain Width Composite Grades	103
Figure 14.16: El Cura Cross Section - Cu Estimate vs. Capped 1m Composite Grades	104
Figure 14.17: El Cura Long Sections - Cu Estimate vs. Full Domain Width Composite Grades	104
Figure 14.18: Swath Plots for Principal La Romanera Domains (OK Grade Profile in Orange a	
Grade Profile in Dark Red)	
Figure 14.19: Swath Plots for Principal La Infanta Domains (OK Grade Profile in Orange and NN	
Profile in Dark Red)	
Figure 14.20: Swath Plots for El Cura Top Lens (ID2 Grade Profile in Orange and NN Grade Prof	
Dark Red)	
Figure 14.21: La Romanera Mineral Resource Classification vs. Drill Coverage Per Domain	108

EMERITA RESOURCES CORP. NI 43-101 TECHNICAL REPORT ON THE IBERIAN BELT WEST PROJECT, SPAIN



Figure 14.22: La Infanta Mineral Resource Classification vs. Drill Coverage Per Domain	. 108
Figure 14.23: El Cura Mineral Resource Classification vs. Drill Coverage	. 109
Figure 14.24: IBW Project MRE Tonnage – Maiden 2023 vs. Current 2025 Estimate	.112
Figure 14.25: IBW Project MRE Contained Metal – Maiden 2023 vs. Current 2025 Estimate	. 112



1 SUMMARY

1.1 Introduction

Emerita Resources Corporation (Emerita) is an exploration and development 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 TSX Venture Exchange (TSX-V: 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 Iberian Belt West (IBW) Project in Andalusia, Spain. This Technical Report includes updated Mineral Resource estimates for the La Romanera and La Infanta deposits, as well as a maiden Mineral Resource estimate (MRE) for the El Cura deposit.

1.2 Property Description and Ownership

The IBW Project is located in southwest 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.

Emerita holds 100% ownership of the La Romanera Exploration Permit (No. 15029) via its subsidiary Emerita Resources España SLU. The permit is referred to by the Company as the IBW Project and covers some 1,546.6ha, which includes the La Romanera, La Infanta and El Cura polymetallic deposits. It was granted July 12, 2021 for a period of 26 months.

On September 9, 2023, Emerita Resources España SLU applied to the "Delegación Territorial de Energia y Minas in Huelva province, Junta de Andalucia" (the Junta) for an Exploitation License for the IBW Project. Exploitation Licenses in Spain, when granted, have a 30-year term and can be extended for two subsequent 30-year periods. During the time that the IBW Project Exploitation License application is being reviewed by the Junta, Emerita's rights under its current Exploration Permit for the IBW Project are extended, allowing ongoing exploration programmes. Emerita has surface access agreements with local landowners covering the main exploration area.

1.3 Geology and Mineralisation

The La Romanera, La Infanta and El Cura 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 Alignment (PVSA), a division of the Volcano-Sedimentary Complex (VSC).

Mineralisation is classified as Volcanogenic Massive Sulphide (VMS) and occurs primarily as tabular strata-bound lenses of polymetallic (Zn, Pb, Cu, Ag, Au) massive sulphides. Minor amounts of

ZT61-2308/MM1830 Final V3.0 Page 1



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 minerals are pyrite, sphalerite, galena, chalcopyrite, arsenopyrite and members of the tetrahedrite-tennantite solid solution series.

The Emerita geology team has 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. Surface drilling has so far defined six major sulphide lenses across the three deposits: the Upper and Lower Lens at La Romanera, the North, South and South 1 Lenses at La Infanta and the Top Lens at El Cura. All lenses strike approximately east-west and dip steeply to the north.

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. The MRE database includes over 105km of diamond drilling completed by Emerita 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 independent laboratories for preparation and analysis. All La Romanera samples, all El Cura samples and the majority of La Infanta samples (92.5%) 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 samples. Certified reference material, 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

WAI has completed locked cycle tests (LCT) for each deposit, focused on conventional flotation of selective Cu, Pb and Zn concentrates. Emerita is investigating the use of a post-flotation process (PFP) for additional precious and base metal recovery from flotation tails. Laboratory-scale testwork has been conducted using the CLEVR Process® developed by Dundee Sustainable Technologies (DST). The LCT flotation results have been combined with indicative PFP recoveries, to develop overall metal recovery assumptions used in Mineral Resource estimation.

The CLEVR Process® is currently un-commercialised and will require significant additional testwork (already underway), and, ideally, a scoping study from DST, to finalise the conceptual circuit and confirm the indicative PFP recoveries. DST is working towards commercialisation of the CLEVR Process® and has received ISO 14034:2016 certification through the Canadian Environmental Technology Verification Program, providing independent certification of its performance as a cyanide-free gold extraction process. In terms of collaborations, DST has an ongoing agreement with Newmont, while ESGold has reported over 90.9% gold recovery on the Montauban Project stockpiled tailings.

At this stage for the MRE, 100% metals payabilities have been assumed with no allowance for deleterious elements. Various penalties could apply to all three concentrates from all three deposits, although very high mercury levels are of particular concern. This will be fully investigated in the next stage of study and through further optimised testwork programmes.

1.7 Mineral Resource Estimate

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.

Mineral Resources are reported at calculated breakeven cut-off grades of 3.0% ZnEq for La Romanera and La Infanta, and 0.9% CuEq for El Cura. Cut-off grades are based on metal price, metallurgical recovery and preliminary operating cost assumptions, in line with underground mining and two stage mineral processing using selective copper-lead-zinc flotation and a post-flotation process. MRE reporting was further restricted to exclude blocks where equivalent grade fell below cut-off when diluted over a 3m minimum mining width.

The Mineral Resource estimates for the Iberian Belt West Project are classified in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014). The Mineral Resource statement is shown in Table 1.1. The effective date of the Mineral Resource Estimates is February 26, 2025.



	Table 1.1: Mineral Resource Estimate for the Iberian Belt West Project													
		Townso		Average Grade Metal Equivalent				Cor	ntained Metal					
Deposit	Class	Tonnes	Zn	Pb	Cu	Ag	Au	ZnEq	CuEq	Zn	Pb	Cu	Ag	Au
		Mt	%	%	%	g/t	g/t	%	%	Kt	Kt	Kt	Koz	Koz
La Romanera	Indicated	17.34	2.64	1.25	0.43	65.0	1.34	7.89	2.86	458	217	75	36,216	747
La Komanera	Inferred	4.13	3.08	1.27	0.61	49.7	0.82	7.69	2.79	127	52	25	6,589	109
La Infanta	Indicated	1.09	7.38	4.39	1.08	94.6	0.35	16.61	5.42	80	48	12	3,311	12
La Illianta	Inferred	1.91	4.08	2.23	0.66	74.0	0.38	10.22	3.34	78	42	13	4,542	23
El Cura	Indicated	0.53	1.58	0.69	1.45	42.9	1.41	9.57	3.00	8	4	8	735	24
El Cura	Inferred	0.76	2.08	0.91	1.51	48.0	1.46	10.47	3.28	16	7	12	1,180	36
IPW Project	Indicated	18.96	2.88	1.42	0.50	66.0	1.28	8.44	3.01	547	269	94	40,263	783
IBW Project	Inferred	6.80	3.25	1.50	0.73	56.3	0.77	8.72	3.00	221	102	49	12,311	168

Notes:

- 1. Mineral Resources are classified according to the CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines (CIM, 2014);
- 2. The effective date of the Mineral Resource estimate is February 26, 2025;
- 3. Mineral Resources are reported at a cut-off grade of 3.0% zinc equivalent (ZnEq) for La Romanera and La Infanta, and 0.9% copper equivalent (CuEq) for El Cura. Cut-off grades are based on metal price, metallurgical recovery and preliminary operating cost assumptions (total mining, processing and G&A cost of US\$76.6/t, for underground mining and two stage mineral processing using selective copper-lead-zinc flotation and a post-flotation process);
- 4. Block equivalent grade calculations use factors based upon metal prices and metallurgical recoveries where:
 - a. La Romanera ZnEq = ((Zn*28.93)+(Pb*12.01)+(Cu*79.80)+(Ag*0.64)+(Au*45.34)/32))/0.904;
 - b. La Infanta $ZnEq = ((Zn^*28.83) + (Pb^*18.01) + (Cu^*88.35) + (Ag^*0.77) + (Au^*56.51)/32))/0.901;$
 - c. El Cura CuEq = ((Zn*27.39)+(Pb*0)+(Cu*87.40)+(Ag*0.65)+(Au*45.34)/95))/0.92);
- 5. Metal price assumptions used in the equivalent grade calculations are US\$3,200/t Zn, US\$2,300/t Pb, US\$9,500/t Cu, US\$25/oz Ag and US\$2,200/oz Au;
- 6. Metallurgical recovery assumptions based on available testwork results used in the equivalent grade calculations are:
 - a. 90.4% Zn, 52.2% Pb, 84% Cu, 80.1% Ag and 64.1% Au for La Romanera;
 - b. 90.1% Zn, 78.3% Pb, 93% Cu, 95.6% Ag and 79.9% Au for La Infanta; and
 - c. 85.6% Zn, 0% Pb, 92% Cu, 80.6% Ag and 64.1% Au for El Cura;
- 7. All blocks less than the reporting cut-off grades when diluted over a 3m minimum mining width were excluded from the Mineral Resources;
- 8. Only primary sulphide mineralisation is included in the Mineral Resources;
- 9. Metal grade and content are reported in-situ and have not been adjusted for metallurgical recovery or mining dilution;
- 10. Mineral Resources are not Reserves until they have demonstrated economic viability based on a pre-feasibility study or feasibility study;
- 11. Numbers may not add due to rounding; and
- 12. The Qualified Person for the Iberian Belt West Project Mineral Resource estimate is Frank Browning, MSci, MSc, PGCert, FGS, CGeol of WAI (part of SLR).



1.8 Conclusions and Recommendations

Based on the work completed and associated input data, the authors consider the Mineral Resources for the Iberian Belt West Project 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. All deposits are open for extension and drilling is expected to continue through 2025, with four diamond drill rigs currently on site.

The authors make the following recommendations:

1.8.1 General

The authors recommend a preliminary economic assessment (PEA) is completed for the project, to inform the design of more detailed engineering studies (PFS). The cost estimate for a PEA is US\$150,000 to US\$300,000. The following actions are recommended as part of this next phase of study.

1.8.2 Mineral Processing and Metallurgical Testwork

- Continue testwork with Dundee Sustainable Technologies to optimise the parameters for the conceptual filtration, pyrolysis, roasting, acid leaching and CLEVR Process® flowsheet to treat the flotation tailings;
- This should include a scoping level assessment of the conceptual flowsheet, scoping level
 capital and operating cost estimates for the full flowsheet, confirmation of gold, silver, copper
 and zinc recoveries and reagent and consumables consumptions. This should also include the
 assumed SX/EW circuit or otherwise for the production of copper and zinc saleable products
 after the acid leaching stage;
- Investigation into alternative conventional processing methods of the refractory flotation tailings, i.e., filtration, roasting and CIL processing;
- Overall scoping level assessment of the viability of the Post-Flotation Process for gold and silver recovery (plus additional copper and zinc recovery);
- Continue testwork programmes to investigate the reduction of deleterious elements in the three base metals concentrates, either through hydrometallurgical leaching, retorting or other methods; and
- Details of the three base metals concentrates should be sent to prospective smelters to get
 an indication of payability and the impact of the deleterious elements in terms of penalties
 and particularly for mercury in terms of concentrate acceptability. This will also inform on the
 degree of deleterious element reduction required.

1.8.3 Exploration, Geology and Mineral Resources

- Continue resource development drilling at the existing IBW Project deposits;
- Develop project scale fault and lithostratigraphic 3D models;

ZT61-2308/MM1830 Final V3.0 Page 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 routine QAQC protocol for density measurements; and
- Refine metallurgical recovery assumptions and develop payability assumptions based on the results of the recommended metallurgical testwork programmes.



2 INTRODUCTION

2.1 Background

This NI 43-101 Technical Report has been prepared by Wardell Armstrong International Limited (WAI) for Emerita Resources Corp. (Emerita), to disclose recent information about the Iberian Belt West (IBW) Project in Andalusia, Spain. This information includes updated Mineral Resource estimates for the La Romanera and La Infanta deposits, as well as a maiden Mineral Resource estimate (MRE) for the El Cura deposit. The IBW 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, La Infanta and El Cura 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 contributed to this Technical Report are as follows:

- Frank Browning, MSci, MSc, PGCert, FGS, CGeol, Principal Resource Geologist;
- Alan Clarke, EurGeol, CGeol, BSc, MSc, MCSM, FGS, Technical Director (Geology); and
- James Turner, ACSM, MCSM, BSc (Hons), MSc, CEng, MIMMM, Technical Director (Mineral Processing).

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 IBW Project have been undertaken by Frank Browning including:

- March 16, 2023;
- May 3 to 5, 2023; and
- February 10 to 12 2025.



	Table 2.1: Qualified Persons Responsibilities						
No.	Report Section	Report Sub-Sections	Qualified Person				
		1.1, 1.2, 1.8.1	Alan Clarke				
1	Summary	1.3, 1.4, 1.5, 1.7, 1.8.2	Frank Browning				
		1.6, 1.8.3	James Turner				
2	Introduction	Alan Clarke					
3	Reliance on other Ex	perts	Alan Clarke				
4	Property Description	and Location	Alan Clarke				
5	Accessibility, Climate	e, Local Resources, Infrastructure and Physiography	Alan Clarke				
6	History		Alan Clarke				
7	Geological Setting ar	nd Mineralisation	Frank Browning				
8	Deposit Type		Alan Clarke				
9	Exploration		Frank Browning				
10	Drilling		Frank Browning				
11	Sample Preparation,	Frank Browning					
12	Data Verification	Frank Browning					
13	Mineral Processing a	nd Metallurgical Testwork	James Turner				
14	Mineral Resource Es	timates	Frank Browning				
15	Mineral Reserve Esti	mates	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 Studi	es, Permitting and Social or Community Impact	N/A				
21	Capital and Operatin	g Costs	N/A				
22	Economic Analysis		N/A				
23	Adjacent Properties		Alan Clarke				
24	Other Relevant Data	and Information	Alan Clarke				
	Interpretation and	25.1	Alan Clarke				
25	Interpretation and Conclusions	25.3	James Turner				
	Conclusions	25.2, 25.4	Frank Browning				
		26.1	Alan Clarke				
26	Recommendations	26.2	James Turner				
		26.3	Frank Browning				
27	References		Alan Clarke				

2.5 WAI Declaration

WAI is part of SLR Consulting, a global leader in sustainability solutions. The company has over 100 offices in 128 countries, with over 4,000 staff providing expertise in over 145 technical services. WAI provides the mineral industry with specialised geological, mining, processing and environmental expertise from offices around the world. The office in Truro, at the old Wheal Jane mine site, includes an extensive mineral assaying, processing and pilot plant testing facility.

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

ZT61-2308/MM1830 Final V3.0 Page 8
April 2025



• 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 April 3, 2025, regarding the legal status of the rights pertaining to the IBW Project 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 April 3, 2025, 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 holds 100% ownership of the IBW Project. The mineral rights and Exploration Permit of the IBW Project were acquired by its subsidiary Emerita Resources España SLU by public tender. On September 1st, 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 on July 12, 2021, with the option to renew for a further 3 years. On September 9, 2023, Emerita Resources España SLU applied to the "Delegación Territorial de Energia y Minas in Huelva province, Junta de Andalucia" (the Junta) for an Exploitation License for the IBW Project. Exploitation Licenses in Spain, when granted, have a 30-year term and can be extended for two subsequent 30-year periods. During the time that the IBW Project Exploitation License application is being reviewed by the Junta, Emerita's rights under its current Exploration Permit for the IBW Project are extended, allowing ongoing exploration programmes at the La Romanera, La Infanta and El Cura deposits.

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.

ZT61-2308/MM1830 Final V3.0 Page 12



		Table 4.1	: IBW Project Explo	ration Permit C	oordina	tes (ETRS8	9 Zone 29N)	
	Permit Iumber	Tenure	Company	Application Date	Claims	Area (Ha.)	Date Granted	Expiration Date
1	15029	Section C*	Emerita Resources España S.L.U.	01/09/2020	51	1545.6	12/07/2021	(*)

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

^{(*) 2857/1978} of August 25 – General Regulations for the Mining Regime Article 88.1 states "as soon as the investigation sufficiently demonstrates the existence of a resource or resources from Section C, and always within the validity period of the exploration permit, the holder may apply for an exploitation concession over all or part of the land within the exploration perimeter. Exploration permits shall be considered extended for the duration of the processing of the concession granting procedure"

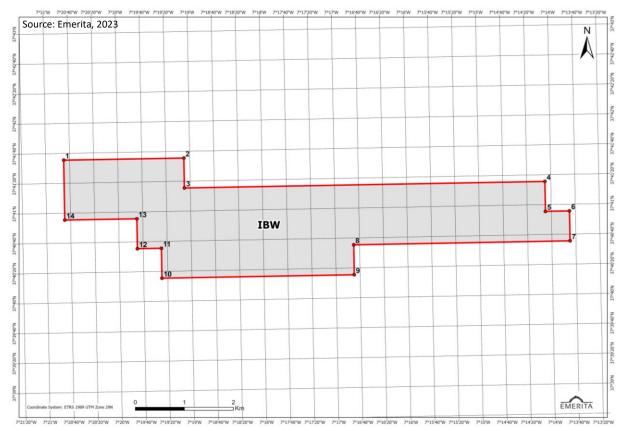


Figure 4.3: IBW Project Exploration Permit Map (ETRS89 Zone 29N)

	Table 4.2: IBW Project Exploration Permit Coordinates (ETRS89 Zone 29N)									
ID Point	Longitude (W)	Latitude (N)	X(UTM)	Y(UTM)	UTM Zone					
1	7° 20' 44.89" 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					

ZT61-2308/MM1830 Final V3.0 Page 13



Table 4.2: IBW Project Exploration Permit Coordinates (ETRS89 Zone 29N)									
ID Point Longitude (W) Latitude (N) X(UTM) Y(UTM) UTM Zone									
13	7° 19' 44.89'' W	37° 40′ 55.5′′ N	647333,742	4171855,871	29				
14	14 7° 20' 44.89" W 37° 40' 55.5003" N 645864,000 4171829,805 29								
Note: The	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. During the time that the IBW Project exploitation licence application is being reviewed by the Junta, Emerita's rights under the current exploration license for the IBW Project Restoration Plan are extended.

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.

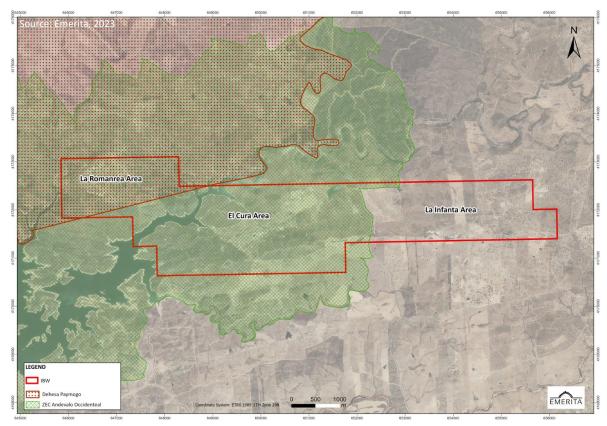


Figure 4.4: Map of Environmentally Protected Areas Relative to the IBW Project Concession

An AAU for La Romanera and El Cura (AAU/HU/075/2021) was approved on May 6, 2023, and remains valid for the duration of exploration activities while they remain permitted. Every six months, the administration is informed by means of a report with evidence of compliance with the obligations established in the AAU.

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. However, other authorizations that are not included in the AAU are necessary. This includes authorization for water concessions, the creation of new access routes and area designations for drilling platforms as well as waste management. 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 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;
- Hydrological and hydrogeological study (water balance) by specialist hydrogeologists;
- Pollutant dispersion study; and
- Environmental noise level study.

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

ZT61-2308/MM1830 Final V3.0 Page 16 April 2025



An estimation of the rock dumps carried out by Emerita indicates an approximate volume of 200,000m³ (La Romanera) 40,000m³ (La Infanta) and 20,000m³ (El Cura), totalling 260,000m³ of oxidised rock dumps. Emerita 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, La Infanta and El Cura 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, Table 6.2 and Table 6.3). Historic records regarding ownership of El Cura are incomplete and Table 6.3 lists an approximate timeline based on the data available.

Table 6.1: Ownership History of the La Romanera Deposit			
Time Period	Ownership		
-	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		
2021-Present	Emerita Resources Corporation		

Table 6.2: Ownership History of the La Infanta Deposit			
Time Period	Ownership		
-	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		
2021-Present	Emerita Resources Corporation		

Table 6.3: Ownership History of the El Cura Deposit			
Time Period	Ownership		
_	Roman and Pre-Roman workings		
1882	Unidentified owner		
1938-1943	Austrian Geological Institute		
Mid 1950s	Unidentified owner		
Early 1980s	Phelps Dodge Española		
Late 1980s to 1990s	Riotinto Minera, SA		
2021-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, La Infanta and El Cura 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 6.4 whilst the holes are shown graphically in Figure 6.1, Figure 6.2 and Figure 6.3.

Table 6.4: 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		
El Cura	Phelps Dodge Española	17	5,078		
	Riotinto Minera, SA	2	1,000		



Figure 6.1: La Romanera Historical Drilling



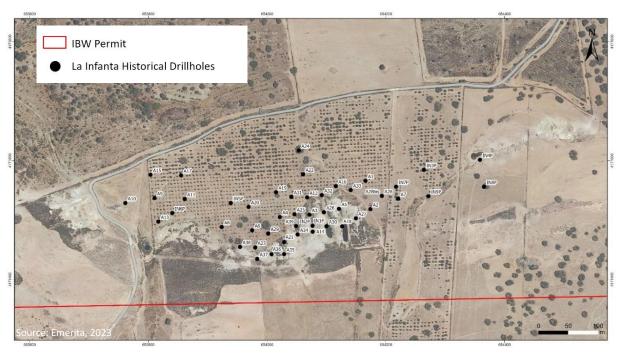


Figure 6.2: La Infanta Historical Drilling

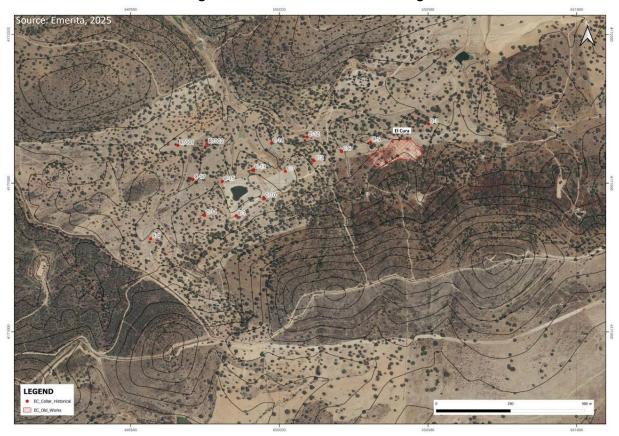


Figure 6.3: El Cura Historical Drilling



Some historical Mineral Resource estimates completed by past owners have been found within the documents compiled from the University of Cantabria and Rio Tinto Foundation holdings. 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. At El Cura, Phelps Dodge in 1979 estimated a resource of 2.98Mt @ 1.48% Cu, 0.52% Pb, 1.89% Zn, 17.6g/t and a reserve of 1.75Mt @ 1.65% Cu, 0.50% Pb, 2.00% Zn, and 16g/t 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 Estimates 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.

The El Cura deposit was first mentioned in the 1888 report by Gonzalo y Tarin wherein he noted the existence of six ancient shafts to depths of between 18m and 24m, presumably of Roman origin. A mining group established in London in 1882 with capital of 200,000 pounds sterling exported 500 tonnes of ore. Later, between 1938 and 1943 research and exploration work was conducted at El Cura consisting of electrical surveying by the Austrian Geological Institute with follow-up underground exploration consisting of a 100m shaft and three north-south drifts at 30m, 60m and 90m from surface. Finally, at some point between this time and the mid-1950's two exploration drives were made to test the potential of manganiferous jaspers in the area.



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 volcanogenic massive sulphide (VMS) deposits, comprising 22% of the known VMS deposits globally (Tornos, 2006). The map in Figure 7.1 shows the location of the project relative to regional geology.

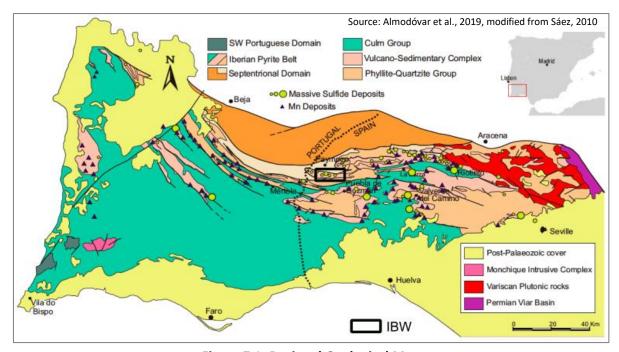


Figure 7.1: Regional Geological Map

The IPB is the southernmost domain of the South Portuguese Terrane (SPT). North of the SPT 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 sinistral transpressional 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 VMS deposits of the IPB, formed within an intracontinental forearc basin from the Upper Devonian to the Lower Carboniferous (Quesada et al., 1998; Tornos, 2006).



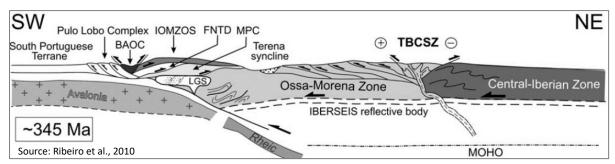
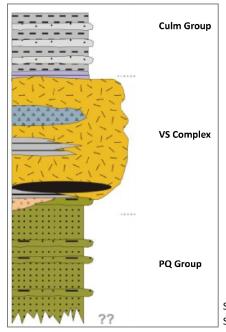


Figure 7.2: Schematic Geological Section of the Suture Zone Between the SPT and the OMZ

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 Visean) 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 Visean 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

ZT61-2308/MM1830 Final V3.0 Page 25 April 2025



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, El Cura, 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 VSC here consists mainly of fine-grained sediments with massive submarine lavas and felsic volcanoclastics. Leistel et al., 1998 interpretated 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 VMS 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, La Infanta and El Cura 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 Alignment (PVSA), a division of the Volcano-Sedimentary Complex (VSC) (Figure 7.4). The Puebla de Guzman anticline is isoclinal and verges to the south. The southern volcanic axis of Paymogo is the most northwestern outcrop of the IPB in Huelva province (Donaire et al., 1998).

Felsic tuffs and black shales within VSC host the VMS mineralisation in different stratigraphic levels, with La Infanta and El Cura located at the footwall and La Romanera at the hanging wall of the sequence. The VMS mineralisation has been dated at 350Ma (Oliveira et al., 2004). 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 Gafo formation is located north of the mineralised horizons in La Romanera, by structural contact with the VSC. U-Pb zircon geochronology determined a depositional age of 369.1 \pm 2.5Ma for the Gafo formation.

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.



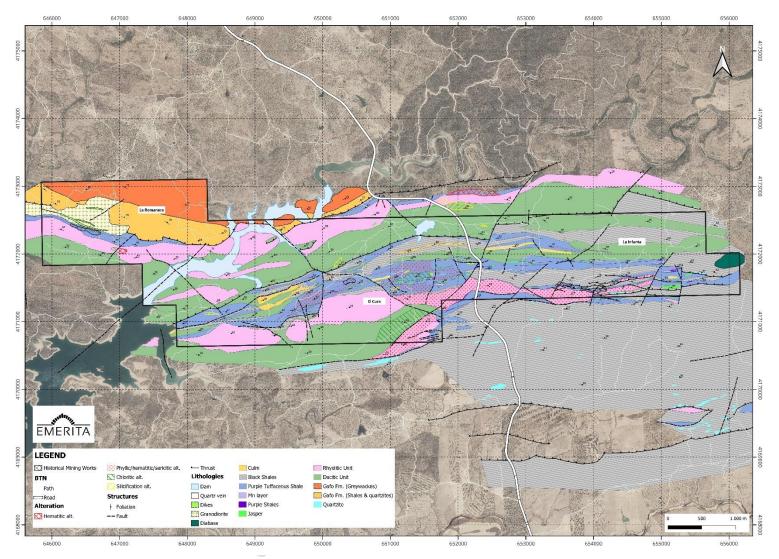


Figure 7.4: Geological Map of the IBW Permit and Locations of the La Romanera, El Cura and La Infanta Deposits



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. The La Romanera, La Infanta and El Cura deposits are classified as VMS deposits and occur primarily as tabular strata-bound lenses of polymetallic (Zn, Pb, Cu, Ag, Au) massive sulphides. Metal association varies between deposits from distinctly Zn-Pb-Ag rich mineralisation at La Infanta, higher Cu-Au grades at El Cura and a more mixed assemblage at La Romanera.

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

7.3.1.4 El Cura

The deposit scale geological interpretation for El Cura is outlined in Figure 7.9 and Figure 7.10. El Cura is situated in a valley between two prominent ridges of volcanic dacite and rhyolite. The host rocks are shales and volcaniclastics of the PTS Group, stratigraphically overlying the volcanics and variably altered by chlorite, sericite and silica. In the structural footwall of the deposit are the rhyolitic lavas and agglomerates of the Buitress Rhyolite, similar in setting to La Romanera. The only surface evidence of the deposit is rare and scattered gossanous cobbles within a zone of phyllic alteration.

Type examples and descriptions of the main lithostratigraphic units at El Cura are provided in Table 7.3.



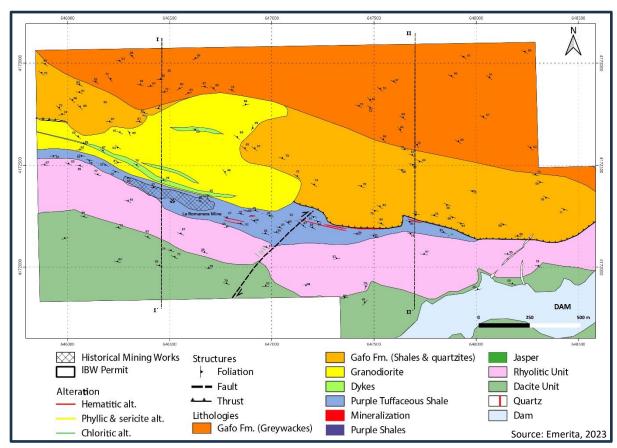


Figure 7.5: La Romanera Geological Map

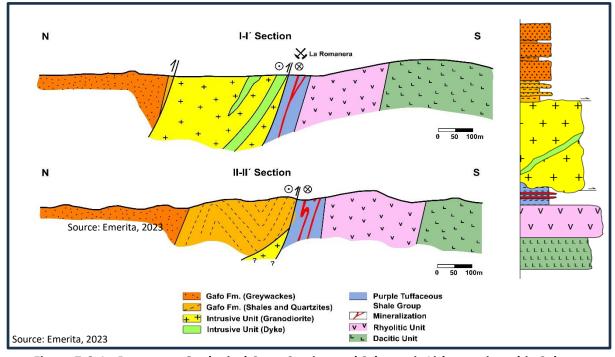


Figure 7.6: La Romanera Geological Cross Section and Schematic Lithostratigraphic Column



Table 7.1: La Romanera – Major Lithostratigraphic Units				
Name	Type Example	Description		
Gafo Formation Shales and Quartzites	0.5m	Characterised by flysch facies turbiditic sedimentary rocks including greywackes and interbedded shales-quartzites with minor tuffite intercalations.		
Granodiorite	36 n	Granodiorite texture, grain size and alteration varies spatially. Shown here is a melanocratic granodiorite with a coarse grained phaneritic texture.		
Purple Tuffaceous Shale Group	3cm	Reddish to purple fine-grained sediment. Colour related to pervasive hematite alteration. Used as a mapping guide at project to regional scale.		
Rhyolitic Unit	<u>3cm</u>	Combination of massive rhyolites, rhyolitic breccia and agglomerates. Strong silicification is common.		
Dacitic Unit	0.5m	Combination of porphyritic massive dacite and dacitic tuffs. Porphyritic dacite is plagioclase-phyric with frequent microgranular enclaves and strong chlorite alteration.		
ZT61-2308/MM1	830 Final V3.0	Page 30		

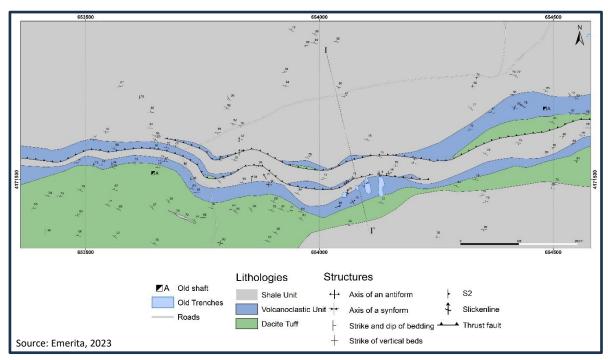


Figure 7.7: La Infanta Geological Map

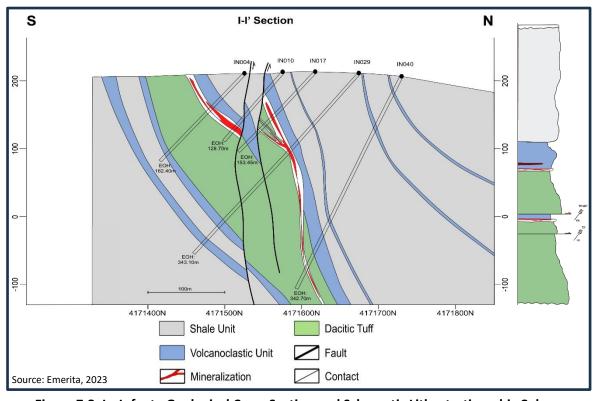


Figure 7.8: La Infanta Geological Cross Section and Schematic Lithostratigraphic Column



	Table 7.2: La Infanta – Major Lithostratigraphic Units				
Name	Type Example	Description			
Shale Unit	0 10 20 30 40mm	Grey to black color due to organic content. Laminated to massive textures. Quartz veins parallel to a strong penetrative foliation.			
Volcanoclastic Unit	0 10 20 30 40mm	Unit is differentiated into volcanoclastic tuffs, sandstones and conglomerate according to grain size and texture.			
Marker Horizon	0 10 20 30 40mm	Mixture of Jasper and purple shales. Jasper more abundant than in La Romanera, forming marker horizon outcrops due to associated silicification.			
Dacitic Tuff	0 10 20 30 40mm	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.			



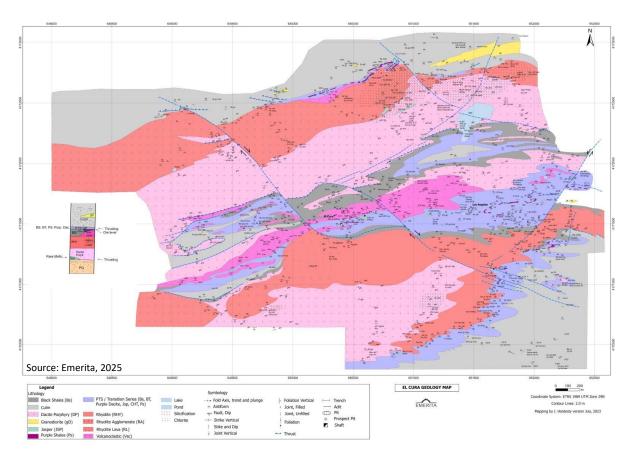


Figure 7.9: El Cura Geological Map and Schematic Lithostratigraphic Column

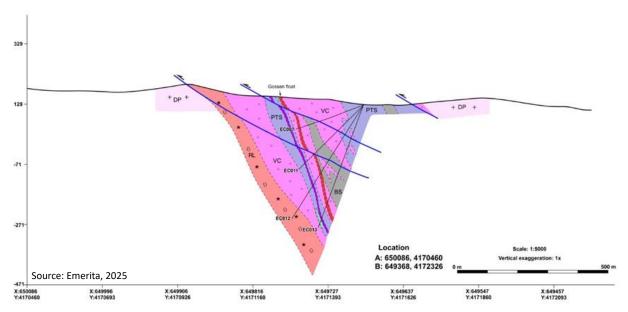


Figure 7.10: El Cura Geological Cross Section



	Table 7.3: El Cura – Major Lithostratigraphic Units				
Name	Type Example	Description			
Culm Shales		Impure shales and siltstones.			
PTS Group		Black shales; volcaniclastics; cherts & jaspers; thin rhyodacites; purple shales and green tuffs.			
	211/0				
Rhyolite Lava & Agglomerate	36'40 1	Dark purple to grey cryptocrystalline lava with fine felsic phenocryts; agglomeratic rinds of such eruptives.			
Dacite		Equigranular to porphyritic felsite +/-quartz (rare).			
PQ Sediments		Sandstones and shales. Local meter-scale quartzite beds.			



7.3.2 **Significant Mineralised Zones**

7.3.2.1 La Romanera

Two major sulphide lenses have so far been defined at La Romanera. 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. Four minor parallel lenses have been defined that have limited continuity and extent. 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 7.11.

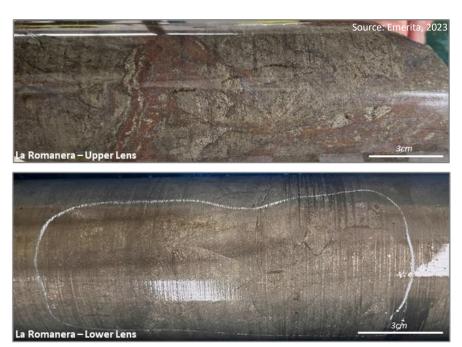


Figure 7.11: Examples of La Romanera Upper and Lower Lens Massive Sulphide Mineralisation

The Upper Lens is a continuous mineralised horizon which varies approximately from 2 to 32m in true thickness and averages 10m overall, with a strike length of 650m.

The Lower Lens is a continuous mineralised horizon which varies approximately from 2 to 30m in true thickness and averages 13m overall, with a strike length of 800m.

The Upper Lens and the underlying Lower Lens are locally both separated and in contact with one another throughout the deposit. The Upper Lens occurs approximately 2 to 30m in the hanging wall above the Lower Lens. The lenses get closer and merge at depth.

The deposit dips at approximately 70° to the north from surface, for a down-dip length of approximately 720m (Upper Lens) and 800m (Lower Lens) so far tested by drilling.

ZT61-2308/MM1830 Final V3.0 Page 35



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 VMS 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 stockworkstyle 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 7.12.

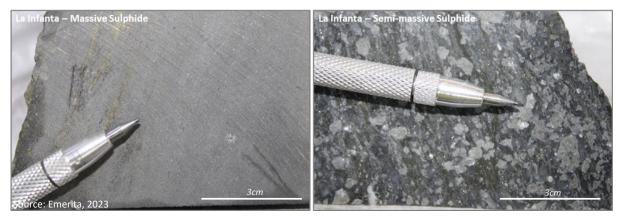


Figure 7.12: Examples of La Infanta Sulphide Mineralisation

The North Lens is a continuous mineralised horizon which varies approximately from 1 to 10m in true thickness and averages 3m overall, with a strike length of 1900m.

The South Lens is a continuous mineralised horizon which varies approximately from 1 to 9m in true thickness and averages 3m overall, with a strike length of 1090m.

The South Lens 1 is a continuous mineralised horizon which varies approximately from 1 m to 7m in true thickness and averages 2.6m overall, with a strike length of 325m.

The North Lens and the underlying South Lens are generally separated throughout the Deposit by around 30m. The South Lens and the underlying South Lens 1 are generally separated throughout the deposit by about 15.0m.

The deposit dips at 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) so far tested by drilling.



7.3.2.3 El Cura

Two sulphide lenses have so far been defined at El Cura. The Top Lens is dominated by massive sulphide, with lesser amounts of semi-massive typically with shale and chlorite interstitial material. Local overprinting by copper-rich veining can significantly enrich grades. Nine drillholes have been extended deeper into the footwall of the Top Lens, with four intersecting a potential Bottom Lens, so far characterised by disseminated to banded sulphides and lower grade zinc-dominant mineralisation. The Bottom Lens is not well defined by the current drill grid and is not included in the MRE. No significant stockwork-style mineralised zone is recognised in the deposit.

The main mineralogy of the deposit is pyrite, chalcopyrite, sphalerite, galena, and members of tetrahedrite-tennantite solid solution series. Examples of El Cura mineralisation are shown in Figure 7.13.



Figure 7.13: Examples of La Infanta Sulphide Mineralisation

The Top Lens is a continuous mineralised horizon which varies approximately from 1 to 8.5m in true thickness and averages 2.5m overall, with a strike length of 800m. The Bottom Lens true thickness varies approximately from 1 to 7.4m and averages 3.6m overall, with a strike length of 400m. The Top Lens and Bottom Lens are generally separated throughout the deposit by around 60m.

The deposit dips at approximately 70° to the north from surface, for a down-dip length of approximately 450m (Top Lens) so far tested by drilling. The current spatial distribution of significant intersections indicates a westerly plunge to mineralisation.



8 **DEPOSIT TYPES**

The polymetallic deposits of the IBW Project are classified as volcanogenic massive sulphide (VMS) deposits. VMS deposits are stratabound concentrations of sulphide minerals precipitated from hydrothermal fluids in extensional seafloor environments. They are also known as volcanic hosted massive sulphide (VHMS) 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 VMS 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 volcaniclastic 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).

VMS 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.

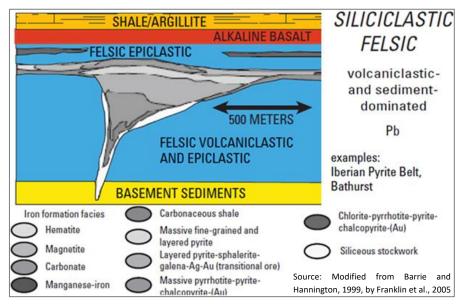


Figure 8.1: Schematic Diagram of a Siliciclastic Felsic VMS Deposit

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.

ZT61-2308/MM1830 Final V3.0 Page 38



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.

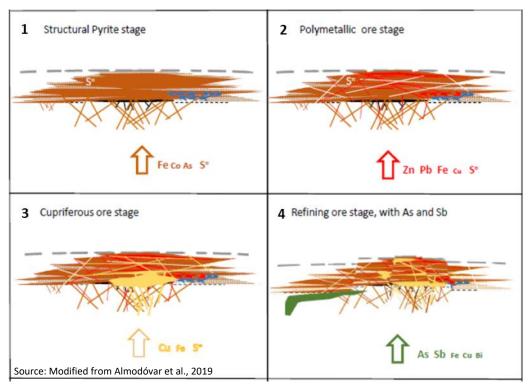


Figure 8.2: Different Stages of IPB VMS Mineralisation



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, La Infanta and El Cura deposits as presented in Figure 7.4 to Figure 7.9. Mapping helped constrain the surface distribution of lithology, alteration, structure and mineralisation.

9.3 Soil Geochemistry

Emerita completed a geochemical soil sampling campaign comprising 2,975 samples, analysed for 38 elements via pXRF. The campaign was laid out along 52 lines with a 200mE x 25mN sample spacing. The primary purpose of the programme was to find additional drill targets, by detecting potential geochemical indicators/pathfinders including As, Ba, Cu, Hg, Pb, Sb, Sn, Zn. A secondary purpose was to locate changes in soil geochemistry that mark lithological contacts and inform geological mapping. The distribution of samples and sampling lines along with selected results are shown in Figure 9.1.

Review of the soils campaign shows that anomalous values in indicator and pathfinder elements occur in the PTS Group, which is the host of VMS mineralisation at the IBW Project. Anomalous geochemistry is concentrated largely over the known deposits and secondarily over on-trend extensions of these areas. As has been noted in the exploration literature of the area, it is difficult to parse out in-situ geochemical anomalies from contamination resulting from centuries of open-air ore processing.

Emerita is investigating the use of soil vapor geochemistry as a method for detection of geochemical signatures from deeper sources. A preliminary survey is in progress for a selection of lines in the existing IBW Project soil sampling grid.



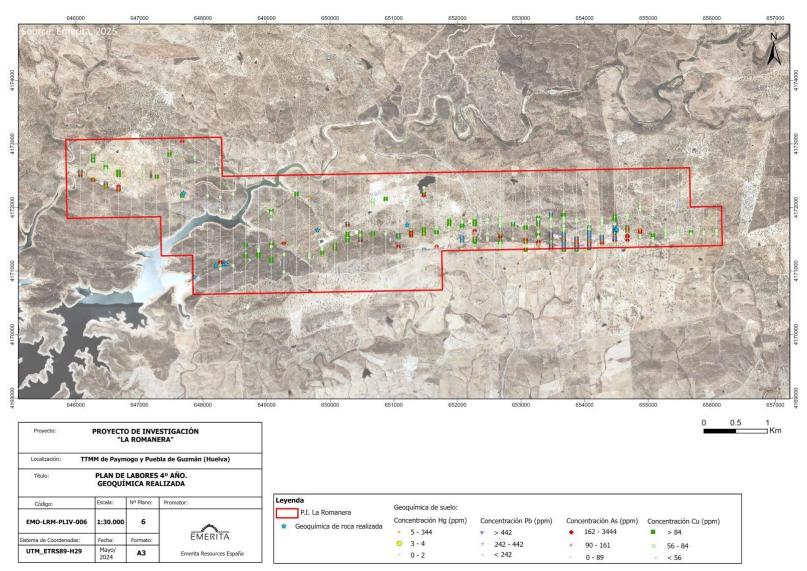


Figure 9.1: IBW Project Soil Geochemical Sample Data for Select Elements



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.

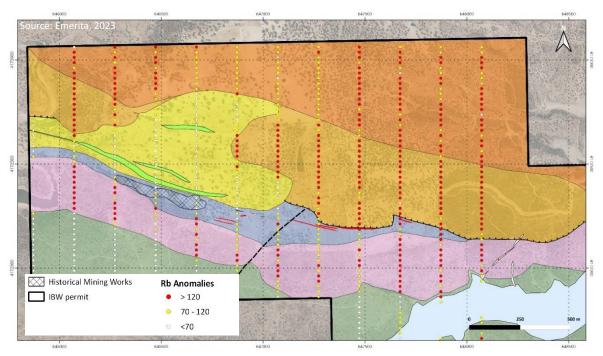


Figure 9.2: Comparison of Rb in Soil vs. Geological Map for the La Romanera Area

9.4 Geophysics

Emerita has compiled and analysed historical gravimetric and magnetic data, alongside completing its own geophysical surveys (June 2021 onwards), which included ground gravimetrics, surface transient electromagnetics (TEM), induced polarisation (IP) - resistivity and downhole electromagnetics (DHEM).

9.4.1 Gravity

The historical gravimetric data was provided by the Geophysics Branch of the Spanish Geological and Mining Survey (IGME). Using a common bouguer gravity value of 2.67 g/cc, a residual gravity grid was calculated and is shown in Figure 9.3. 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.



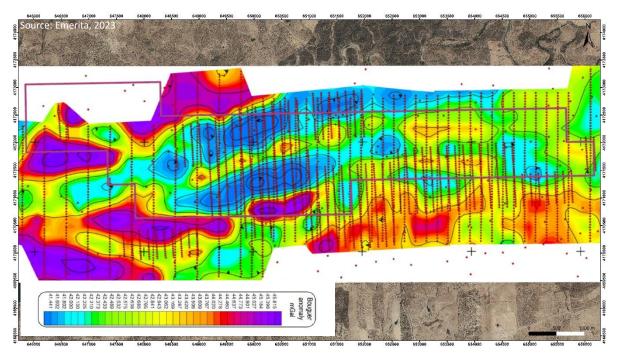


Figure 9.3: IBW Project Bouger Anomaly Map

Emerita completed additional gravity testing over La Romanera, La Infanta and El Cura between late 2023 and early 2024, utilizing Scintrex CG-5 and CG-6, as well as Romberg Models D and G instrumentation. Stationing was at 50m intervals along north-south lines spaced every 200m over the central and eastern parts of the property and along 100m-spaced lines at La Romanera. An enhanced residual bouguer gravity map is shown in Figure 9.4, exhibiting good correlation between La Romanera and the gravity high, whereas El Cura and Infanta are located along the edges of gravity anomalies.

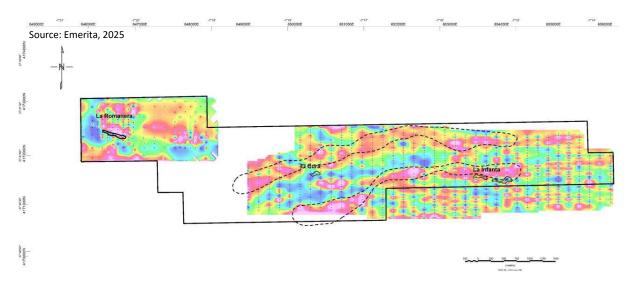


Figure 9.4: IBW Project Enhanced Residual Bouger Gravity Map



9.4.2 Magnetics

Historical magnetic data was generated by a regional airborne magnetometer survey conducted by Sander Geophysics from November 1996 to March 1997. This survey utilised a Geometrics G-822A Cesium Magnetometer Sensor system to measure Total Magnetic Field Intensity (TMI), configured on a fixed-wing (Cessna 208B Grand Caravan) aircraft. North-south lines spaced every 250m were completed from an average 80m height above ground, sampling every 0.1 seconds. A TMI plot over the IBW permit was generated from the results of this survey (Figure 9.5). The trend of the volcanics is clearly indicated as a magnetic high, as is the diversity of deposit settings in relation thereto.

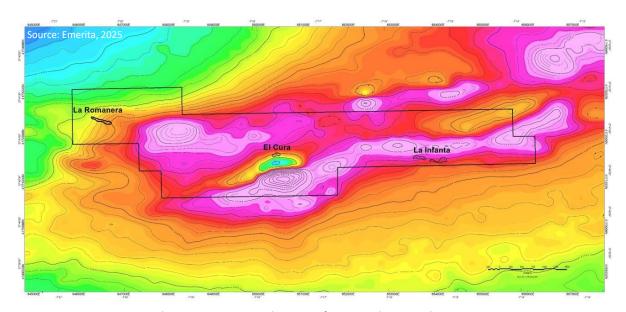


Figure 9.5: IBW Project Total Magnetic Intensity Map

9.4.3 Surface TEM

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 VMS mineralisation (Figure 9.6).

9.4.4 IP-Resistivity

In September 2023, Emerita completed three lines of dipole-dipole IP-Resistivity over the La Infanta deposit, coincident with previously surveyed lines of fixed-loop TEM. A resistivity low and chargeability high was recognised, coincident with the known La Infanta deposit. Subsequent interpretation has posited additional potential at depth to be tested with pole-dipole configuration.

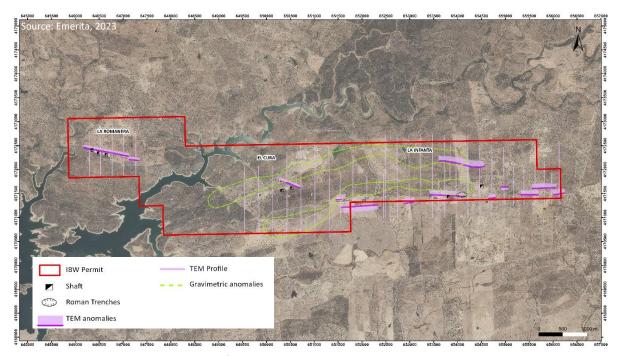


Figure 9.6: Map of IBW Project TEM and Gravimetric Anomalies

9.4.5 Downhole EM

To date, 15 drill holes have been surveyed with downhole-EM across the IBW Project deposits. Of these, one was completed at El Cura, one was completed at La Infanta, and the remainder were completed at La Romanera. Drillholes located on the edges of the mineralised zones were surveyed to investigate potential extensions. 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 lenses like the La Romanera deposit. For La Infanta and El Cura the responses are more subtle.



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 100,000m (Table 10.1 and Figure 10.1) of diamond drilling has been carried out since 2021 in three broad phases:

- From July 2021 to June 2022 most of the exploration was carried out in the La Infanta area;
- From June 2022 to January 2024 diamond drilling increased substantially when drilling began
 in the La Romanera area; and
- From January 2024 to present the drilling focus shifted to El Cura.

Table 10.1: Summary of DDH Meters per Year and in Total at Each Deposit (MRE Databases)						
Area	2021	2022	2023	2024	2025 to date	Total
La Infanta	4,511.3	10,796.9	5,666.8			20,974.9
La Romanera	-	34,779.1	31,863.1	3,702.1		70,344.3
El Cura			2,118.8	9,896.2	2,220.1	14,235.0
Total	4,511.3	45,576.0	39,648.7	13,598.3	2,220.1	105,554.2

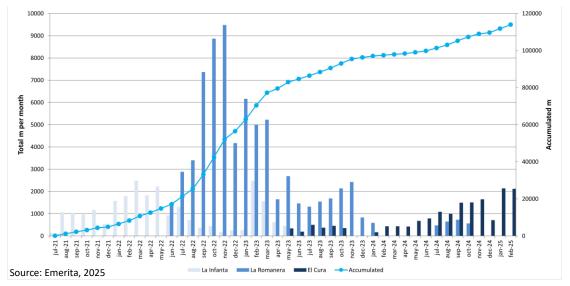


Figure 10.1: Summary of DDH Meters per Month and in Total at Each Deposit (Entire Project)

ZT61-2308/MM1830 Final V3.0 Page 46 April 2025



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.

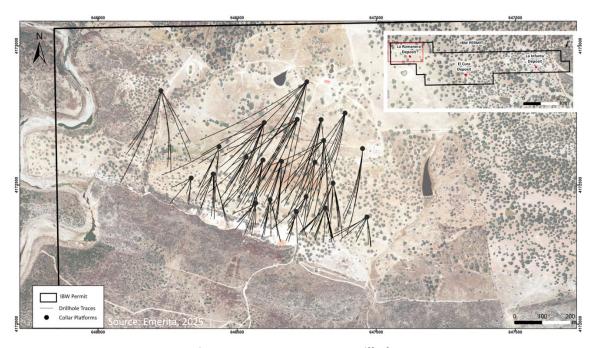


Figure 10.2: La Romanera Drill Plan

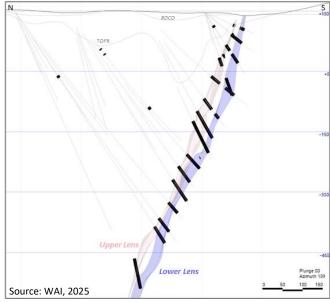


Figure 10.3: Representative Drill Section through the La Romanera Deposit (Sampling in Black)

ZT61-2308/MM1830 Final V3.0 Page 47 April 2025



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 10.5 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.

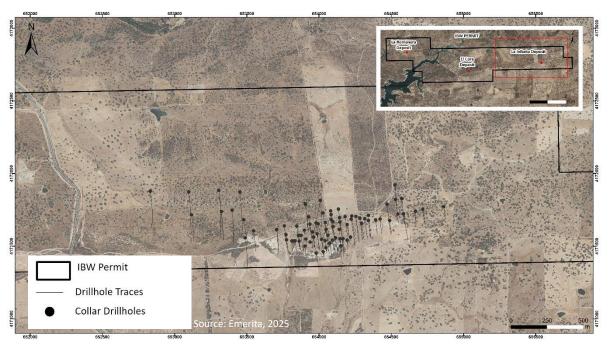


Figure 10.4: La Infanta Drill Plan

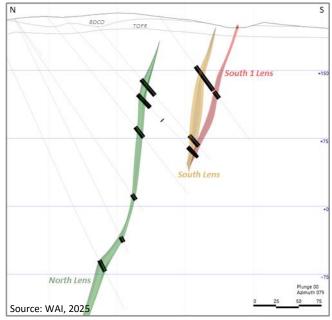


Figure 10.5: Representative Drill Section through the La Infanta Deposit (Sampling in Black)

ZT61-2308/MM1830 Final V3.0 Page 48 April 2025



10.1.2.4 El Cura

A map of El Cura is provided in Figure 10.6 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 (140-200° typical) and dip (40-80° typical) are varied to cover a coherent panel of the ore body in long section. The drilling cross section in Figure 10.7 shows the typical sample coverage and range of dip orientations. This drillhole configuration means downhole widths typically vary from 70% to 90% of true width. Nominal drill spacing is locally 50m x 50m in the current core of the deposit, increasing to >100m x 100m in the dip and strike extensions.

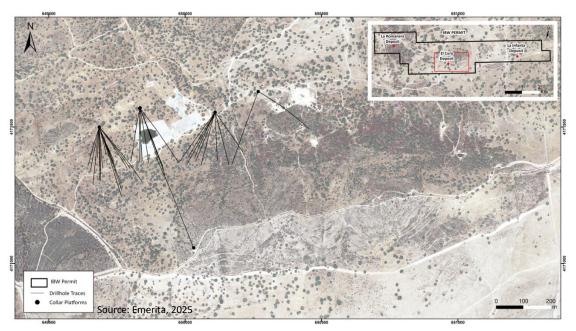


Figure 10.6: El Cura Drill Plan

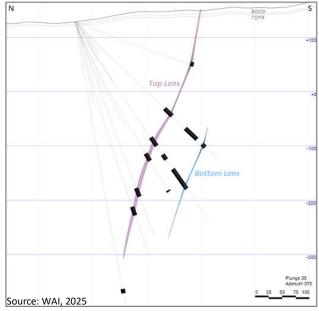


Figure 10.7: Representative Drill Section through the El Cura Deposit (Sampling in Black)

ZT61-2308/MM1830 Final V3.0 Page 49 April 2025



10.2 Procedures

10.2.1 Drilling Method

All drill holes at La Romanera, La Infanta and El Cura 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 Geoavance, 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.

Table 10.2: Summary of Downhole Survey Tools					
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 SPT MagCruiser with an optical depth counter (Figure 10.8).



Figure 10.8: GyroLogicTM SPT Downhole Survey Tool and Optical Depth Counter

ZT61-2308/MM1830 Final V3.0 Page 50 April 2025



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® 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 98.9%, at La Infanta is 95.4% and at El Cura is 97%. 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 10.9). 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 88.9%, indicating that rock quality is good according to the Deere & Deere, 1988 classification scheme. Mean RQD for La Infanta is 72.6%, indicating the rock quality is fair according to the Deere & Deere, 1988 classification scheme. Mean RQD for El Cura is 66.7%, indicating the rock quality is fair according to the Deere & Deere, 1988 classification scheme.



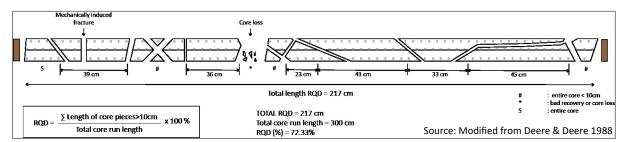


Figure 10.9: Procedure for Measuring and Calculating RQD

10.3 Interpretation of Relevant Results

Relevant drill sections showing the geological interpretation of the La Romanera, La Infanta and El Cura deposits are contained in Section 7.3. The drill assay results, geological logging and geological interpretation, have enabled the three-dimensional delineation of the VMS 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):

Table 11.1: Sample Length Depending on Core Diameter					
Core Diameter	Core Diameter Minimum Length Maximum Length				
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).

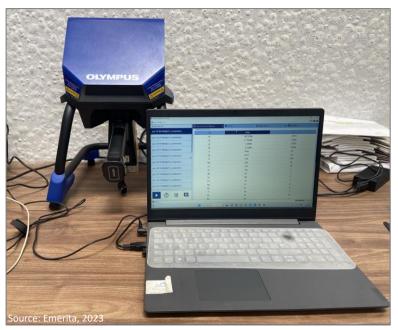


Figure 11.2: Olympus Vanta pXRF



11.2 Bulk Density

Bulk density measurements are performed on barren and mineralised 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:

$$ho = rac{x}{x-y}$$
 where x represents the dry weight and y the immersed (wet) weight

Emerita use a 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

A subset of bulk density measurements completed by Emerita have been repeated by ALS Global using the water displacement method (OA-GRA09). This included 112 samples from La Infanta and 100 samples from the El Cura deposit.

ZT61-2308/MM1830 Final V3.0 Page 55



Summary statistics for the duplicate density measurements are listed in Table 11.2. Scatter plots for each deposit are presented in Figure 11.4. Results indicate strong measurement precision for El Cura and reasonable measurement precision for La Infanta. The scatter plots are colour coded by lithology and a comparison of mean density by lithology is provided in Table 11.3. Both show a potential weak bias towards higher semi-massive and massive sulphide densities in ALS measurements. Whilst this is not considered material, investigations are in progress to identify and resolve any issues. The authors also recommend development of a routine QAQC protocol to monitor density data collection.

Table 11.2: Summary Statistics for Density Duplicate Results							
Deposit	Deposit Number EMO Mean ALS Mean EMO ALS Correlation % of Pairs of Pairs (g/cm³) (g/cm³) CV CV Coefficient <10% HARD						
La Infanta	112	3.23	3.21	0.21	0.21	0.86	94.6
El Cura	100	3.35	3.4	0.24	0.23	0.92	98

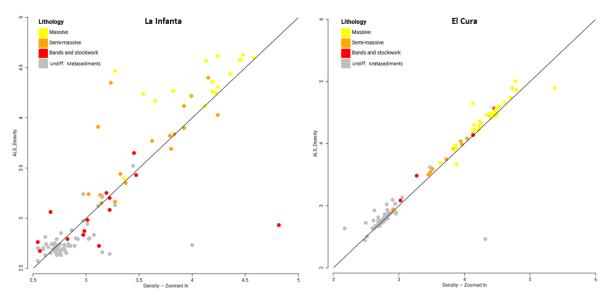


Figure 11.4: Scatter Plots – Emerita Density vs. ALS Density Measurements (Coloured by Lithology)

	Table 11.3: Summary Statistics for Density Duplicate Results By Lithology					
Deposit	Lithology	Number of Pairs	EMO Mean	ALS Mean	Difference	% Change
	All	112	(g/cm³) 3.23	(g/cm³) 3.21	-0.02	-0.6%
	Massive Sulphide	20	4.24	4.39	0.15	3.5%
La Infanta	Semi-Massive Sulphide	17	3.56	3.70	0.13	3.8%
	Banded and Stockwork	15	3.21	2.98	-0.23	-7.1%
	Undiff. Wall Rocks	60	2.77	2.83	0.05	1.9%
	All	100	3.35	3.40	0.06	1.7%
	Massive Sulphide	31	4.26	4.39	0.13	3.1%
El Cura	Semi-Massive Sulphide	9	3.65	3.70	0.06	1.5%
	Banded and Stockwork	3	3.47	3.57	0.09	2.7%
	Undiff. Wall Rocks	57	2.83	2.81	-0.03	-0.9%

ZT61-2308/MM1830 Final V3.0 Page 56



11.3 Sample Security

The project core shed is located in Puebla de Guzman, 22km from La Romanera, 16km from El Cura 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 11.4. Only ALS Global was used for La Romanera core samples, El Cura 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. These laboratories are independent of Emerita.

Table 11.4: Analytical Laboratories				
Laboratory Certification				
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 11.5.



Table 11.5 ALS Sevilla Sample Preparation Procedures					
Laboratory	Sample Preparation	Description			
	WEI-21	Received Sample Weight			
	LOG-22	Sample login – Rcd w/o Barcode			
	CRU-QC	Crushing QC Test			
ALS Global	PUL-QC	Pulverizing QC Test			
ALS Global	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 11.6).

Table 11.6: Elements and Ranges of Analysis for the ME-ICPORE™ Method from ALS Global					
Method Code		Analytes and R	anges (%)		
	Ag	1-1500 ppm	Mn	0.005-50	
	As	0.005-30	Мо	0.001-10	
	Bi	0.005-30	Ni	0.001-30	
	Ca	0.01-50	Р	0.01-20	
ME-ICPORE	Cd	0.001-10	Pb	0.005-30	
WIL-ICF OILE	Со	0.001-20	S	0.05-50	
	Cu	0.001-40	Sb	0.005-100	
	Fe	0.01-100	TI	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 11.7).

Table 11.7: Elements and Range of Analysis for the Au-AA23™ and Au-GRA21™ Methods from					
ALS Global					
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 11.8). Some REE's are only partially recovered with a four-acid digestion.



Table 11.8: Elements and range of analysis for the ME-MS61r™ Method from ALS Global								
Method Code		Analytes and Ranges (ppm)						
	Dy	0.05-1000	Nd	0.01-1000				
	Er	0.03-1000	Pr	0.03-1000				
ME- MS61r	Eu	0.03-1000	Sm	0.03-1000				
IVIE- IVI3011	Gd	0.05-1000	Tb	0.01-1000				
	Но	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 $^{\text{TM}}$, which consists of a four-acid super trace analysis with lower detection limits (Table 11.9).

Table 11.9: Elements and range of analysis for the ME-MS61L™ Method from ALS Global									
Method Code	Analytes and Ranges (ppm)								
	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	Та	0.01-500	
	As	0.02-10000	Ga	0.05-10000	Ni	0.08-10000	Te	0.005-500	
	Ва	1-10000	Ge	0.05-500	Р	0.001-1 %	Th	0.004-10000	
	Ве	0.02-1000	Hf	0.004-500	Pb	0.01-10000	Ti	0.001-10 %	
ME-MS61L	Bi	0.002-10000	In	0.005-500	Rb	0.02-10000	TI	0.002-10000	
IVIL-IVISOIL	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 %	٧	0.1-10000	
	Ce	0.01-10000	Li	0.2-10000	Sb	0.02-10000	W	0.008-10000	
	Со	0.005-10000	Mg	0.01-50 %	Sc	0.01-10000	Υ	0.01-500	
	Cr	0.3-10000	Mn	0.2-100000	Se	0.006-1000	Zn	0.2-10000	
	Cs	0.01-10000	Мо	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 11.10.

Table 11.10: ALS Sevilla Sample Preparation Procedures				
Laboratory Description				
	Oven drying at 105°C			
AGQ Mining and Bioenergy S.L.	Fine crushing – 70% < 2mm			
AGQ Mining and Bioenergy S.L.	Split Sample – Riffle Splitter			
	Pulverize 250 gr to 85% < 75um			

ZT61-2308/MM1830 Final V3.0 Page 59



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 11.11 and Table 11.12).

Table 11.11: Elements and Range of Analysis for the PE-4042 Method from AGQ							
Method Code	Analytes and Ranges (mg/kg)						
	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	
	В	10.0-10,000	K	500-200,000	Sn	10.0-10,000	
	Ва	5.00-10,000	Li	5.00-1000	Sr	5.00-10,000	
PE-4042	Be	5.00-500	Mg	500-200,000	Ti	100-5000	
	Bi	10.0-10,000	Mn	5.00-10,000	TI	5.00-10,000	
	Ca	500-200,000	Мо	10.0-1000	V	10.0-10,000	
	Cd	5.00-1000	Na	500-200,000	W	5.00-10,000	
	Со	5.00-1000	Ni	5.00-1000	Zn	100-10,000	
	Cr	10.0-1000	Р	200-10000			
	Cu	5.00-10,000	Pb	5.00-10,000			

Table 11.12: Elements and Range of Analysis for the PE-4043 Method from AGQ							
Method Code	Analytes and Ranges (mg/kg)						
	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	
	В	10.0-10,000	K	500-200,000	Se	10.0-500	
	Ва	50.00-10,000	La	50.0-10,000	Sn	10.0-10,000	
PE-4043	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	TI	5.00-10,000	
	Cd	5.00-2500	Мо	5.00-10,000	V	5.0-10,000	
	Со	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	Р	500-50,000			

PE-4014 is used to analyse for gold via a Fire Assay method (Table 11.13):

Table 11.13: Elements and Range of Analysis for the PE-4014 Method from AGQ					
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 11.14.

Ta	Table 11.14: Certified Mean Value and Standard Deviation of Emerita CRMs								
CRM	Cu	Pb	Zn	Au	Ag				
OREAS 620	0.175% ±	0.774% ±	3.12% ±	0.685ppm ±	38.4ppm ±				
OREAS 620	0.005%	0.024%	0.086%	0.021ppm	1.31ppm				
OREAS 622	0.484% ±	2.19% ±	10.01% ±	1.85ppm ±	101ppm ±				
OREAS 622	0.013%	0.06%	0.258%	0.066ppm	4ppm				
OREAS 623	1.72% ±	0.252% ±	1.01% ±	0.827ppm ±	20.4ppm ±				
OREAS 025	0.066%	0.01%	0.038%	0.039ppm	1.15ppm				
OREAS	523ppm ±	0.408% ±	1.10% ±	0.358ppm ±	19.1ppm ±				
630b	20ppm	0.021%	0.033%	0.013ppm	0.72ppm				
CDN-ME-	0.257% ±	1.11% ±	2.41% ±	1.013ppm ±	78ppm ±				
2204	0.012ppm	0.04%	0.12%	0.092ppm	7ppm				

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

ZT61-2308/MM1830 Final V3.0 Page 61



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.

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 11.15).

	Table 11.15: Emerita Quality Control Rules							
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 8,265 samples assayed by ALS. 6,816 samples were original drill core samples and the remaining 1,449 were QC samples (Table 11.16). 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.

Table 11.16: Summary of La Romanera Samples Submitted to ALS						
Sam	ple Type	Number of Samples	% Total			
Oi	riginal	6,816	82.5			
Control		1,449	17.5			
	Duplicates	255	3.1			
	CRMs	421	5.1			
	Blanks	773	9.5			
1	Total .	8,265	100			

11.7.1.2 Certified Reference Materials

La Romanera CRM results for ALS are outlined in Table 11.17 and example CRM control charts are shown in Figure 11.5. Failure rates for each CRM (i.e. results outside \pm 3 standard deviations), were typically low for a given element and no material bias is evident in CRM control charts.



_	Number	Samples O Standard D		•	Outside ± 3 Deviations	Certified	Results	Bias
CRM	Samples	Number	%	Number	%	Mean	Mean	(%)
		Samples	Samples	Samples	Samples			
				Zinc (%)	•			
OREAS 620	191	11	5.8	1	0.5	3.12	3.16	1.4
OREAS 622	15	0	0.0	0	0.0	10.01	10.02	0.1
OREAS 623	23	0	0.0	0	0.0	1.01	1.03	1.5
OREAS 630b	191	29	15.2	5	2.6	1.10	1.14	3.6
CDN ME-2204	1	0	0.0	0	0.0	2.41	2.41	0.0
				Lead (%)				
OREAS 620	191	1	0.5	0	0.0	0.77	0.78	0.8
OREAS 622	15	0	0.0	0	0.0	2.19	2.18	-0.0
OREAS 623	23	0	0.0	0	0.0	0.25	0.25	-1.3
OREAS 630b	191	1	0.5	0	0.0	0.41	0.43	4.5
CDN ME-2204	1	0	0.0	0	0.0	1.11	1.11	0.0
			C	opper (%)				
OREAS 620	191	2	1.0	0	0.0	0.18	0.18	0.4
OREAS 622	15	1	6.7	1	6.7	0.48	0.50	2.6
OREAS 623	23	0	0.0	0	0.0	1.72	1.74	1.0
OREAS 630b	191	4	2.1	1	0.5	0.05	0.05	1.8
CDN ME-2204	1	0	0.0	0	0.0	0.26	0.26	0.8
			Si	lver (ppm)				
OREAS 620	191	1	0.5	0	0.0	38.4	38.9	1.4
OREAS 622	15	0	0.0	0	0.0	101.0	103.3	2.3
OREAS 623	23	0	0.0	0	0.0	20.4	20.8	2.1
OREAS 630b	191	33	17.3	11	5.8	19.1	19.5	2.1
CDN ME-2204	1	0	0.0	0	0.0	78.0	83.0	6.4
			G	old (ppm)				
OREAS 620	191	19	9.9	1	0.5	0.69	0.67	-1.
OREAS 622	15	0	0.0	0	0.0	1.85	1.84	-0.0
OREAS 623	23	1	4.3	1	4.3	0.83	0.78	-5.2
OREAS 630b	191	11	5.8	5	2.6	0.36	0.35	-2.2
CDN ME-2204	1	0	0.0	0	0.0	1.01	1.03	1.2



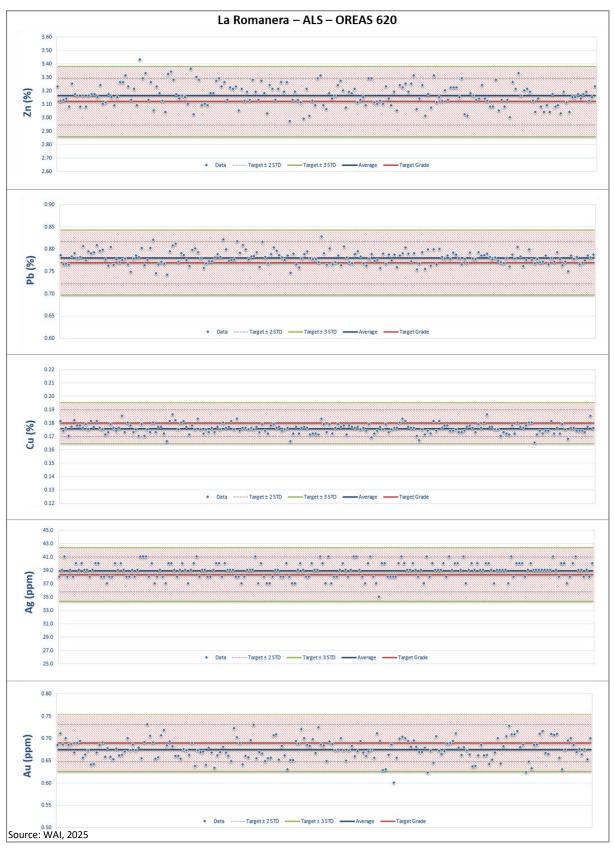


Figure 11.5: Example CRM Control Charts for OREAS 620 (La Romanera - ALS)



11.7.1.3 Duplicates

La Romanera duplicate results for ALS are outlined in Table 11.18 and Table 11.19, whilst example scatter plots for each duplicate type are shown in Figure 11.6. Plots show strong correlation between sample pairs and results are considered to demonstrate acceptable precision for sampling, sample preparation and analysis.

Table	Table 11.18: Summary Statistics for La Romanera Field Duplicate Submissions to ALS									
Element	Number	Mean	Mean	CV	CV	Correlation	% of Pairs			
Liement	of Pairs	Primary	Duplicates	Primary	Duplicates	Coefficient	<20% HARD			
Zn (%)	140	2.15	2.21	1.60	1.60	0.99	92.1			
Pb (%)	140	1.02	1.03	1.55	1.49	0.98	85.7			
Cu (%)	140	0.40	0.42	1.36	1.44	0.94	88.6			
Ag (ppm)	140	46.63	46.25	1.21	1.18	0.99	86.4			
Au (ppm)	140	1.05	1.04	1.50	1.52	0.99	87.9			

Table	Table 11.19: Summary Statistics for La Romanera Pulp Duplicate Submissions to ALS									
Element	Number	Mean	Mean	CV	CV	Correlation	% of Pairs			
	of Pairs	Primary	Duplicates	Primary	Duplicates	Coefficient	<10% HARD			
Zn (%)	115	1.93	1.93	2.13	2.13	1.00	96.5			
Pb (%)	115	0.86	0.86	1.86	1.86	1.00	97.4			
Cu (%)	115	0.27	0.27	2.31	2.34	1.00	93.9			
Ag (ppm)	115	39.13	39.53	1.79	1.79	1.00	82.6			
Au (ppm)	115	0.98	0.97	2.03	1.99	1.00	96.5			

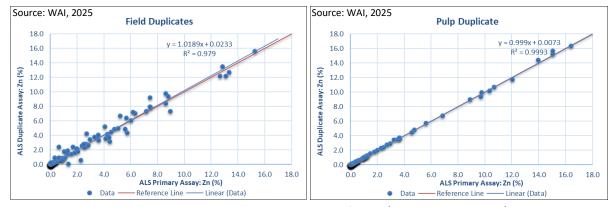


Figure 11.6: Example X-Y Scatter Plots for Zn (La Romanera - ALS)

11.7.1.4 Blanks

Results for La Romanera blank samples analysed at ALS are presented in Table 11.20. Whilst some failures occurred, their frequency and values do not indicate any material issues with sample contamination.



	Table 11.	20: Su	mmary of La Romane	era Blank S	ubmissions to ALS	
Blank Type	Element	Unit	Number of Samples	5* Mean	Number of failures	Failure %
	Zn	%	261	0.023	2	0.8
	Pb %		261	0.015	2	0.8
BLANK	Cu	%	261	0.006	2	0.8
Ag ppn		ppm	261	3.228	0	0.0
	Au ppm		261	0.019	2	0.8
	Zn	%	512	0.019	0	0.0
	Pb	%	512	0.013	1	0.2
BLANK F	Cu	%	512	0.006	10	2.0
	Ag	ppm	512	3.066	0	0.0
	Au	ppm	512	0.041	17	3.3

11.7.2 La Infanta (ALS)

11.7.2.1 Introduction

The La Infanta MRE database includes a total of 2,465 samples assayed by ALS. 2,062 samples were original drill core samples and the remaining 403 were QC samples (Table 11.21). 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.

Table 11.21: Summary of La Infanta Samples Submitted to ALS							
Sam	ple Type	Number of Samples	% Total				
Oı	riginal	2,062	83.7				
Co	ontrol	403	16.3				
	Duplicates	47	1.9				
	CRMs	139	5.6				
	Blanks	217	8.8				
٦	Total Total	2,465	100				

11.7.2.2 Certified Reference Materials

La Infanta CRM results for ALS are outlined in Table 11.22 and example CRM control charts are shown in Figure 11.7. Failure rates for each CRM (i.e. results outside \pm 3 standard deviations), were typically low for a given element and no material bias is evident in CRM control charts.



	Table	11.22: Su	mmary of I	La Infanta (CRM Subm	issions to	ALS			
0014	Number	Samples Outside ± 2 Number Standard Deviations			Outside ± 3 Deviations	Certified	Results	D: (0/)		
CRM	Samples	Number	%	Number	%	Mean	Mean	Bias (%)		
		Samples	Samples	Samples	Samples					
Zinc (%)										
OREAS 620	53	2	3.8	2	3.8	3.12	3.18	1.9		
OREAS 622	33	2	6.1	2	6.1	10.01	9.97	-0.4		
OREAS 623	43	1	2.3	0	0.0	1.01	1.03	2.1		
OREAS 630b	10	1	10.0	0	0.0	1.10	1.12	2.2		
				Lead (%)						
OREAS 620	53	0	0.0	0	0.0	0.77	0.78	0.6		
OREAS 622	33	2	6.1	0	0.0	2.19	2.20	0.2		
OREAS 623	43	0	0.0	0	0.0	0.25	0.25	-1.2		
OREAS 630b	10	0	0.0	0	0.0	0.41	0.43	4.4		
				Copper (%)						
OREAS 620	53	0	0.0	0	0.0	0.18	0.18	0.7		
OREAS 622	33	6	18.2	3	9.1	0.48	0.50	3.0		
OREAS 623	43	1	2.3	0	0.0	1.72	1.74	1.3		
OREAS 630b	10	1	10.0	1	10.0	0.05	0.05	2.7		
			S	Silver (ppm)						
OREAS 620	53	1	1.9	0	0.0	38.4	39.0	1.5		
OREAS 622	33	1	3.0	0	0.0	101.0	103.5	2.5		
OREAS 623	43	1	2.3	0	0.0	20.4	20.8	1.9		
OREAS 630b	10	4	40.0	2	20.0	19.1	20.2	5.8		
				Gold (ppm)						
OREAS 620	50	3	6.0	2	4.0	0.69	0.67	-1.6		
OREAS 622	28	2	7.1	0	0.0	1.85	1.82	-1.5		
OREAS 623	37	4	10.8	4	10.8	0.83	0.79	-4.4		
OREAS 630b	10	1	10.0	1	10.0	0.36	0.36	1.4		



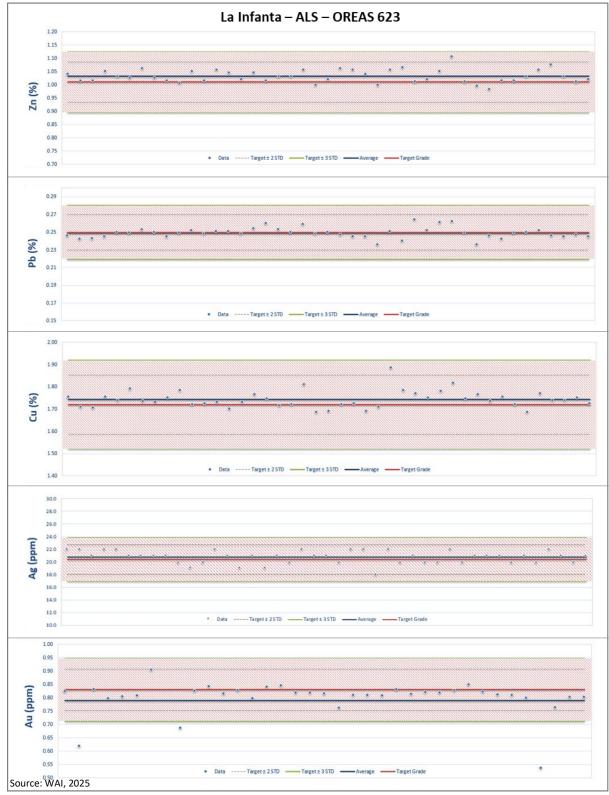


Figure 11.7: Example CRM Control Charts for OREAS 623 (La Infanta - ALS)



11.7.2.3 Duplicates

La Infanta duplicate results for ALS are outlined in Table 11.23 and Table 11.24, whilst example scatter plots for each duplicate type are shown in Figure 11.8. Plots show strong correlation between sample pairs and results are considered to demonstrate acceptable precision for sampling, sample preparation and analysis. The lower percentage of pulp duplicate pairs <10% half absolute relative difference (HARD) for Ag, reflects reduced relative precision at very low sample grades close to the analytical detection limit.

Tab	Table 11.23: Summary Statistics for La Infanta Field Duplicate Submissions to ALS									
Element	Number of Pairs	Mean Primary	Mean Duplicates	CV Primary	CV Duplicates	Correlation Coefficient	% of Pairs <20% HARD			
Zn (%)	30	4.74	4.37	1.83	1.86	0.99	70.0			
Pb (%)	30	2.60	2.28	1.97	1.94	1.00	76.7			
Cu (%)	30	0.45	0.41	2.19	2.21	0.98	63.3			
Ag (ppm)	30	56.77	48.63	2.65	2.37	0.99	60.0			
Au (ppm)	30	0.19	0.18	1.88	1.81	1.00	96.7			

Tab	Table 11.24: Summary Statistics for La Infanta Pulp Duplicate Submissions to ALS									
Element	Number	Mean	Mean	CV	CV	Correlation	% of Pairs			
	of Pairs	Primary	Duplicates	Primary	Duplicates	Coefficient	<10% HARD			
Zn (%)	17	2.31	2.30	2.88	2.89	1.00	88.2			
Pb (%)	17	1.22	1.20	2.59	2.58	1.00	88.2			
Cu (%)	17	0.19	0.18	2.59	2.59	1.00	88.2			
Ag (ppm)	17	22.53	22.47	2.41	2.44	1.00	52.9			
Au (ppm)	17	0.12	0.12	1.70	1.67	1.00	94.1			

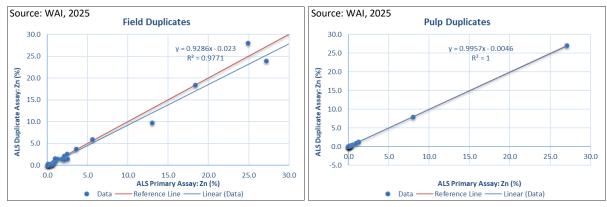


Figure 11.8: Example X-Y Scatter Plots for Zn (La Infanta - ALS)

11.7.2.4 Blanks

Results for La Infanta blank samples analysed at ALS are presented in Table 11.25. Whilst some failures occurred, their frequency and values do not indicate any material issues with sample contamination.



	Table 11.25: Summary of La Infanta Blank Submissions to ALS									
Blank Type	Element	Unit	Number of Samples	5* Mean	Number of failures	Failure %				
	Zn	%	133	0.022	1	0.8				
	Pb %		133	0.016	1	0.8				
BLANK	Cu	%	133	0.005	0	0.0				
	Ag	ppm	133	3.289	0	0.0				
	Au ppm		133	0.017	0	0.0				
	Zn	%	84	0.021	0	0.0				
	Pb	%	84	0.016	0	0.0				
BLANK F	Cu	%	84	0.006	0	0.0				
	Ag	ppm	84	3.125	0	0.0				
	Au	ppm	84	0.034	3	3.6				

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 11.26). AGQ samples represent 7.5% of the La Infanta database. QC results are in line with those returned from ALS.

Table 11.26: Summary of La Infanta Samples Submitted to AGQ							
Samı	ole Type	Number of Samples	% Total				
Or	iginal	164	81.6				
Co	ontrol	37	18.4				
	Duplicates	0	0.0				
	CRMs	10	5.0				
	Blanks	27	13.4				
Т	otal	201	100				

11.7.4 El Cura (ALS)

11.7.4.1 Introduction

The El Cura MRE database includes a total of 2,465 samples assayed by ALS. 2,062 samples were original drill core samples and the remaining 403 were QC samples (Table 11.27). 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.

Table 11.27: Summary of El Cura Samples Submitted to ALS								
Samı	ple Type	Number of Samples	% Total					
Or	riginal	804	83.6					
Co	ontrol	158	16.4					
	Duplicates	56	5.8					
	CRMs	58	6.0					
	Blanks	44	4.6					
Т	otal	962	100					



11.7.4.2 Certified Reference Materials

El Cura CRM results for ALS are outlined in Table 11.28 and example CRM control charts are shown in Figure 11.9. Failure rates for each CRM (i.e. results outside ± 3 standard deviations), were typically low for a given element and no material bias is evident in CRM control charts.

	Та	ble 11.28: S	Summary o	f El Cura CR	M Submis	sions to ALS		
CRM	Number	Samples O Standard I		Samples Ou Standard D		Certified	Results	Bias
CKIVI	Samples	Number	%	Number	%	Mean	Mean	(%)
		Samples	Samples	Samples	Samples			<u> </u>
				Zinc (%)				
OREAS 620	35	1	2.9	0	0.0	3.12	3.15	0.9
OREAS 630b	11	0	0.0	0	0.0	1.10	1.12	1.4
CDN ME-2204	12	0	0.0	0	0.0	2.41	2.42	0.5
				Lead (%)				
OREAS 620	35	0	0.0	0	0.0	0.77	0.78	0.2
OREAS 630b	11	0	0.0	0	0.0	0.41	0.42	2.9
CDN ME-2204	12	0	0.0	0	0.0	1.11	1.11	-0.1
				Copper (%)				
OREAS 620	35	0	0.0	0	0.0	0.18	0.18	0.1
OREAS 630b	11	0	0.0	0	0.0	0.05	0.05	1.3
CDN ME-2204	12	0	0.0	0	0.0	0.26	0.26	1.0
				Silver (ppm)				
OREAS 620	35	1	2.9	1	2.9	38.4	38.8	1.0
OREAS 630b	11	4	36.4	0	0.0	19.1	19.4	1.4
CDN ME-2204	12	0	0.0	0	0.0	78.0	78.4	0.5
	•			Gold (ppm)	•			
OREAS 620	35	3	8.6	2	5.7	0.69	0.69	0.1
OREAS 630b	11	1	9.1	0	0.0	0.36	0.35	-0.9
CDN ME-2204	12	0	0.0	0	0.0	1.01	1.04	2.2



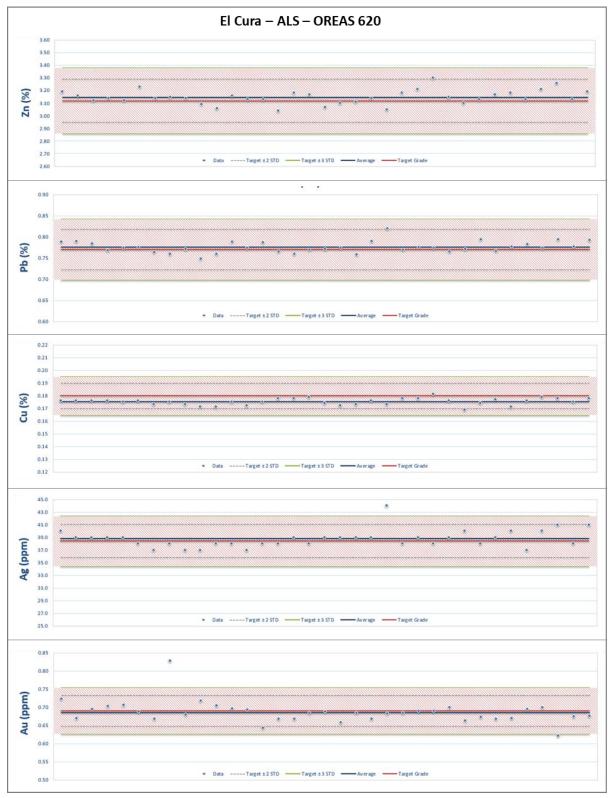


Figure 11.9: Example CRM Control Charts for OREAS 620 (El Cura - ALS)



11.7.4.3 Duplicates

El Cura duplicate results for ALS are outlined in Table 11.29 and Table 11.30 and example scatter plots for each duplicate type are shown in Figure 11.10. Plots show strong correlation between sample pairs and results are considered to demonstrate acceptable precision for sampling, sample preparation and analysis. The lower percentage of pulp duplicate pairs <10% half absolute relative difference (HARD) for Zn, Ag and Au, reflects reduced relative precision at very low sample grades close to the analytical detection limit.

Та	ble 11.29: S	ummary Sta	tistics for El	Cura Field Du	uplicate Subr	missions to A	LS
Element	Number of Pairs	Mean Primary	Mean Duplicates	CV Primary	CV Duplicates	Correlation Coefficient	% of Pairs <20% HARD
Zn (%)	21	3.56	3.65	1.02	1.02	0.98	95.2
Pb (%)	21	1.47	1.56	0.86	0.88	0.97	95.2
Cu (%)	21	2.22	2.18	0.75	0.74	0.99	100
Ag (ppm)	21	86.10	86.86	0.57	0.64	0.96	95.2
Au (ppm)	21	2.31	2.34	0.76	0.77	0.99	100

Та	ble 11.30: S	Summary Sta	tistics for El	Cura Pulp Di	uplicate Subr	nissions to A	LS
Element	Number of Pairs	Mean Primary	Mean Duplicates	CV Primary	CV Duplicates	Correlation Coefficient	% of Pairs <10% HARD
Zn (%)	35	0.12	0.12	2.23	2.25	1.00	80
Pb (%)	35	0.06	0.06	2.43	2.44	1.00	91.43
Cu (%)	35	0.21	0.21	2.48	2.49	1.00	91.43
Ag (ppm)	35	4.46	4.36	1.88	1.92	0.99	65.71
Au (ppm)	35	0.21	0.21	2.15	2.13	1.00	82.86

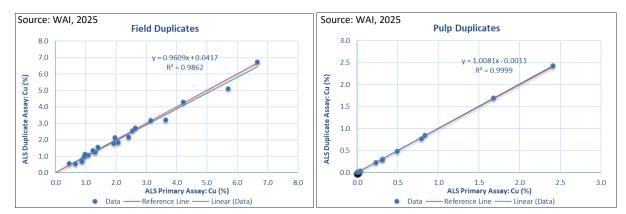


Figure 11.10: Example X-Y Scatter Plots for Cu (El Cura - ALS)

11.7.4.4 Blanks

Results for El Cura blank samples analysed at ALS are presented in Table 11.31. Whilst some failures occurred, their frequency and values do not indicate any material issues with sample contamination.



	Table :	11.31:	Summary of El Cura	Blank Subi	missions to ALS	
Blank Type	Element	Unit	Number of Samples	5* Mean	Number of failures	Failure %
	Zn	%	18	0.013	0	0.0
	Pb	%	18	0.013	0	0.0
BLANK	Cu	%	18	0.003	0	0.0
	Ag	ppm	18	3.611	0	0.0
	Au	ppm	18	0.015	0	0.0
	Zn	%	26	0.012	0	0.0
	Pb	%	26	0.013	0	0.0
BLANK F	Cu	%	26	0.004	0	0.0
	Ag	ppm	26	3.846	1	3.8
	Au	ppm	26	0.016	0	0.0

11.7.5 Summary and Recommendations

In the La Romanera, La Infanta and El Cura MRE databases, the total QC sample insertion rates exceed the industry standard of 15% of the sample population. Since introducing duplicate samples in January 2023, the proportion of different QC sample types has been optimised such that CRM, blank and duplicate samples have individual insertion rates around 5%. The CRMs used by Emerita have been appropriate for the deposit grade distribution and mineralisation type. The authors recommend 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 sampling, 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 QAQC 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. The cut-off date used to close the databases prior to Mineral Resource estimation was February 26, 2025.

12.3 Data Verification by The Authors

12.3.1 Site Visit

Three site visits have been undertaken by Frank Browning on (March 16 2023, May 3-5 2023, February 10-12 2025) and included the following inspections:

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

12.3.2 Database Review

A review of the La Romanera, La Infanta and El Cura 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 and have been reported to the expected accuracy;



- 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 QAQC procedures and results (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 QAQC 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

Introduction 13.1

WAI has completed two phases of testwork programmes for the La Romanera and La Infanta deposits, namely Phase I and Phase II. Whereas the Phase I testwork generally involved production of a bulk Cu/Pb concentrate and a Zn concentrate, the Phase II testwork, as per Emerita's directive, focused on selective Cu, Pb and Zn concentrates. Locked Cycle Tests (LCTs) were conducted for both phases of testwork. Most recently, WAI conducted additional testwork, including LCTs, on samples from the El Cura deposit to be included in the MRE.

The results of the three respective LCTs for each of the three deposits has been used as the basis for estimation of the various metals recoveries and concentrate grades used for the MRE. At this stage for the MRE, 100% metals payabilities have been assumed with no allowance for deleterious elements (see later comments).

Figure 13.1 shows the LCT testwork flowsheet used for the La Romanera deposit, which contributes by far the majority of the overall resource tonnes for the IBW Project. Relatively conventional flotation reagents and conditions were used for a selective Cu-Pb-Zn flotation circuit. The primary grind size required was fine at 80% passing 38 microns. The Cu and Pb rougher concentrates were reground to 80% passing 15 microns and 80% passing 10 microns for the Zn rougher concentrate.

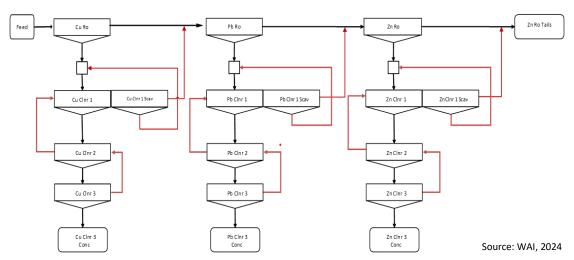


Figure 13.1: LCT Testwork Flowsheet for La Romanera

Additional gold, silver and base metals recovery has been allowed for via additional processing of the flotation tailings (named by Emerita as the Post-Flotation Process or PFP). This is based on Dundee Sustainable Technologies' CLEVR Process®, described in more detail in Section 13.3.

13.2 **Flotation Locked Cycle Test Results**

The LCT results for each of the three deposits based on selective Cu-Pb-Zn flotation are summarised in the following tables (Table 13.1, Table 13.2 and Table 13.3).

ZT61-2308/MM1830 Final V3.0 Page 78 April 2025



				Table 1	L3.1: La	Roman	era ME	Γ-6 Lock	ed Cycl	e Test R	esults						
Test	Concentrate			1	Assay (%) *(ppm))						Recove	ry (%)			
rest	Concentrate	Cu	Pb	Zn	Fe	As	Au*	Ag*	Stot	Cu	Pb	Zn	Fe	As	Au	Ag	Stot
	Cu	20.43	11.14	5.39	23.22	0.60	7.72	986.8	34.58	41.5	7.3	1.5	0.7	0.8	4.1	14.2	0.7
LCT1	Pb	2.88	26.76	4.09	25.55	0.90	2.88	493.6	38.00	17.4	52.2	3.4	2.3	3.4	4.5	21.0	2.4
	Zn	0.72	1.16	50.10	9.65	0.52	1.25	137.8	36.98	8.3	4.3	78.7	1.7	3.7	3.7	11.2	4.4

				Table	13.2: L	a Infant	а МЕТ-	7 Locke	d Cycle	Test Re	sults						
Test	Concentrate				Assay (%) *(ppm)							Recove	ry (%)			
rest	Concentrate	Cu	Pb	Zn	Fe	As	Au*	Ag*	S _{tot}	Cu	Pb	Zn	Fe	As	Au	Ag	S _{tot}
	Cu	20.18	21.09	6.64	11.94	0.95	4.01	1522.8	25.37	42.4	10.6	1.8	5.9	17.3	22.5	33.6	5.9
LCT1	Pb	5.79	47.89	16.59	3.24	0.52	0.92	639.7	22.06	39.7	78.3	14.7	5.2	31.1	16.8	46.1	16.7
	Zn	0.56	1.84	57.50	1.45	0.08	0.41	76.7	31.42	5.9	4.6	78.0	3.6	7.4	11.6	8.5	36.4

	Table 13.3: El Cura MET-9 Locked Cycle Test Results																
Test	Concentrate			-	Assay (%) *(ppm)							Recove	ry (%)			
rest	Concentrate	Cu	Pb	Zn	Fe	As	Au*	Ag*	Stot	Cu	Pb	Zn	Fe	As	Au	Ag	Stot
	Cu	22.89	5.52	2.46	29.81	0.16	2.35	198.8	36.83	79.4	53.0	13.3	5.7	3.0	9.8	33.1	6.3
LCT2	Pb	7.85	4.19	3.45	34.11	0.37	2.90	643.4	44.90	4.0	5.9	2.7	1.0	1.0	1.8	15.6	1.1
	Zn	2.92	1.02	45.20	13.84	0.16	2.17	316.4	36.79	2.8	2.7	67.9	0.7	0.8	2.5	14.7	1.8



13.2.1 La Romanera

The **copper** concentrate graded 20.4% Cu at 41.5% recovery. Copper recovery to the lead concentrate at 17.4% is assumed as payable (see later comments on payability) and included for a total copper recovery of **58.9%**. Copper in the zinc concentrate is assumed as unpayable and therefore not included.

The **lead** concentrate graded 26.8% Pb at **52.2%** recovery. Lead recovery to the copper and zinc concentrates is assumed as unpayable and therefore not included. It is noted that the lead concentrate grade at 26.8% is less than conventional minimum saleable grades of circa 50% Pb. This will be investigated through further testwork in the next stage of study, which may result in lower lead recovery.

The **zinc** concentrate graded 50.1% Zn at **78.7%** recovery. Zinc recovery to the copper and lead concentrates is assumed as unpayable and therefore not included.

Total **gold** recovery to the Cu, Pb and Zn concentrates is **12.3%** (see later comments on payability).

Total silver recovery to the Cu, Pb and Zn concentrates is 46.4% (see later comments on payability).

13.2.2 La Infanta

The **copper** concentrate graded 20.2% Cu at 42.4% recovery. Copper recovery to the lead concentrate at 39.7% is assumed as payable and included for a total copper recovery of **82.1%.** Copper in the zinc concentrate is assumed as unpayable and therefore not included.

The **lead** concentrate graded 47.9% Pb at **78.3%** recovery. Lead recovery to the copper and zinc concentrates is assumed as unpayable and therefore not included.

The **zinc** concentrate graded 57.5% Zn at **78.0%** recovery. Zinc recovery to the copper and lead concentrates is assumed as unpayable and therefore not included.

Total gold recovery to the Cu, Pb and Zn concentrates is 50.9%.

Total **silver** recovery to the Cu, Pb and Zn concentrates is **88.2%**.

13.2.3 El Cura

The **copper** concentrate graded 22.9% Cu at **79.4%** recovery. Copper recovery to the lead and zinc concentrate has been ignored.

The **lead** concentrate graded only 4.2% Pb at 5.9% recovery. This is at a very low grade and recovery and therefore not included as a saleable concentrate, i.e. **no lead concentrate is produced**.



The zinc concentrate graded 45.2% Zn at 67.9% recovery. Zinc recovery to the copper and lead concentrates is assumed as unpayable and therefore not included.

Total **gold** recovery to the Cu and Zn concentrates is **12.3%**.

Total **silver** recovery to the Cu and Zn concentrates is **47.8%**.

13.3 **Post-Flotation Process**

Due to the poor gold and silver recoveries achieved through conventional selective flotation, Emerita has pursued testwork to investigate the potential for additional gold and silver recovery from the flotation tailings but without the use of conventional cyanide leaching, with the aim of reducing environmental impact. However, it should be noted that a cyanide-based process has not been discounted and conventional cyanide leaching testwork is being scheduled. The gold and silver in the flotation tailings is considered to be refractory.

In the meantime, laboratory-scale testwork has, and is, being conducted using the CLEVR Process® developed by Dundee Sustainable Technologies (DST), based in Canada. It should be noted that this process is not currently commercialised. It is based on using sodium hypochlorite with a catalytic amount of sodium hypobromite in acidic conditions to leach the gold into solution resulting in a very short leach residence time, with the process operating in a fully closed loop.

DST is working towards commercialisation of the CLEVR Process® and has received ISO 14034:2016 certification through the Canadian Environmental Technology Verification Program, providing independent certification of its performance as a cyanide-free gold extraction process. In terms of collaborations, DST has an ongoing agreement with Newmont, while ESGold has reported over 90.9% gold recovery on the Montauban Project stockpiled tailings. While providing preliminary insights into the use of this technology at the Montauban Project, further studies are required to confirm economic feasibility. ESGold and DST are now working towards process optimisation and refining engineering parameters to support the integration of the CLEVR Process™ at the Montauban Project.

DST issued a report to Emerita in November 2024 titled "Laboratory Test Program – Arsenic Removal and Gold Extraction using the Glasslock and CLEVR Processes®".

The sample provided by Emerita was the flotation tailings from the Phase I testwork from the MET-1 LCT for La Romanera (based on production of bulk Cu/Pb and Zn concentrates). DST analysed the sample to contain 3.16 g/t Au, 19.2 g/t Ag, 1.06% As, 0.13% Cu, 0.48% Zn and 46.4% St. After the required testwork to determine the optimal processing route, it was determined that three additional stages of processing were required prior to the CLEVR Process®, namely:

- Pyrolysis (to remove arsenic);
- Oxidative Thermal Pre-Treatment (to remove sulphur);
- Acid Leaching (to remove and recover additional copper and zinc); and

ZT61-2308/MM1830 Final V3.0 Page 81 April 2025



CLEVER Process[™]

The acid leaching stage extracted 71.9% of the zinc, 69.8% of the copper and 70.6% of the arsenic.

After the preceding three stages of pyrolysis, roasting and acid leaching, the CLEVR Process® recovered **86.2%** of the gold and **54.9%** of the silver. The overall mass loss was 28%. The filtered CLEVR tailings solids were considered to be sterile and non-hazardous. Gold bullion is produced after treatment of the solution with ferrous sulphate and silica absorption.

The schematic diagram for the CLEVR Process® itself is shown in Figure 13.2 below, taken from DST's website, and illustrates the closed-loop aspect of the process.



Figure 13.2: DST's CLEVR Process®

As noted, this process is currently un-commercialised and the testwork has been conducted at a laboratory-scale only. In addition, the sample characteristics required three preceding stages prior to the CLEVR Process®, namely pyrolysis, roasting and acid leaching. Further investigations will be required regarding the disposal of the arsenic trisulphide product from pyrolysis and the recovery of the acid-leached copper and zinc (e.g., using SX/EW).

As the flotation tailings will have to be filtered in any case prior to the PFP process, conventional roasting and CIL is available as an alternative processing route, which has not been discounted by Emerita, although the testwork focus remains on a cyanide-free method via the CLEVR process®.



13.3.1 PFP & Total Gold and Silver Recoveries

13.3.1.1 La Romanera

The gold and silver recoveries obtained by DST on the flotation tailings sample were 86.2% and 54.9% respectively. However, this was for the MET-1 tailings sample which assayed 3.16 g/t Au and 19.2 g/t Ag. The MET-6 LCT tailings samples for La Romana assayed circa 1.65 g/t Au and 37.1 g/t Ag. Assuming the same mass and metal losses and calculating based on the nominal flotation tailings of the MET-6 La Romanera sample, the gold and silver recoveries re-calculate as **59.1%** and **62.9%** respectively. Applied to ROM ore (allowing for the metals recoveries to the base metals concentrates), the gold and silver recoveries calculate as **51.8%** and **33.7%** respectively. These recoveries can then be added to the total Au and Ag recoveries to the three base metals concentrates, giving a total gold and silver recovery of **64.1%** and **80.1%** respectively.

13.3.1.2 La Infanta

No PFP testwork has been conducted on samples from La Infanta and therefore the same gold and silver stage recoveries from tailings have been assumed as for La Romana tailings, namely **59.1%** and **62.9%** respectively. Applied to the MET-7 LCT results, the stage PFP gold and silver recoveries calculate as **29.0%** and **7.4%** respectively, giving a total gold and silver recovery of **79.9%** and **95.6%** respectively.

13.3.1.3 El Cura

No PFP testwork has been conducted on samples from El Cura and therefore the same gold and silver stage recoveries from tailings have been assumed as for La Romana tailings, namely **59.1%** and **62.9%** respectively. Applied to the MET-9 LCT2 results, the stage PFP gold and silver recoveries are **51.8%** and **32.8%** respectively, giving a total gold and silver recovery of **64.1%** and **80.6%** respectively.

13.3.2 PFP & Total Copper and Zinc Recoveries

13.3.2.1 La Romanera

The acid leaching stage extracted **71.9%** of the zinc and **69.8%** of the copper into solution prior to the CLEVR Process®. Using the same estimation techniques as for the gold and silver recoveries applied to the MET-6 tailings samples for La Romanera, the stage recoveries of copper and zinc from the tailings calculate as **61.1%** and **54.9%** respectively, or **25.1%** and **11.7%** respectively based on ROM ore. This results in total Cu and Zn recoveries, including recoveries to concentrate, of **84.0%** and **90.4%** respectively.



13.3.2.2 La Infanta

No PFP testwork has been conducted on samples from La Infanta and therefore the same copper and zinc stage recoveries from tailings have been assumed as for La Romanera tailings, namely **61.1%** and **54.9%** respectively. Applied to the MET-7 LCT results, the stage PFP copper and zinc recoveries are **10.9%** and **12.1%** respectively, giving a total copper and zinc recovery of **93.0%** and **90.1%** respectively.

13.3.2.3 El Cura

No PFP testwork has been conducted on samples from El Cura and therefore the same copper and zinc stage recoveries from tailings have been assumed as for La Romanera tailings, namely **61.1%** and **54.9%** respectively. Applied to the MET-9 LCT2 results, the stage PFP copper and zinc recoveries are **12.6%** and **17.6%** respectively, giving a total copper and zinc recovery of **92.0%** and **85.6%** respectively.

13.4 Summary of Metals Recoveries

Table 13.4 below summarises the total metals recoveries to be used in the IBW Project MRE for each of the three deposits, based on the information described previously.

	Table 13.4: 9	Summary of Tota	l Metals Recove	ries for MRE									
Deposit % Zn % Pb % Cu % Au % Ag													
La Romana 90.4 52.2 84.0 64.1 80.1													
La Infanta	90.1	78.3	93.0	79.9	95.6								
El Cura	El Cura 85.6 0 92.0 64.1 80.6												

13.5 Other Input Parameters and Comments

A treatment cost of **US\$ 160/t of zinc concentrate** has been assumed.

A process operating cost for the conventional three-product flotation plant, based on CostMine data and from benchmarked similar projects, has been estimated as **US\$20/t ROM ore**, based on a ROM throughput of circa 1.2Mtpa.

For the additional PFP process, no operating cost data is available from DST except on their website where they indicate operating costs of circa US\$20/t for a 10,000tpd leach operation (3.65Mtpa). This is just for the CLEVR Process®, so does not include the required tailings filtration, pyrolysis, roasting and acid leaching stages, as well as arsenic trisulphide product handling and additional processing to recover the copper and zinc into saleable products.

Overall, it is clear that the PFP process as currently envisaged is complex and will require significant additional testwork (already underway) and, ideally, a scoping study from DST to finalise the conceptual circuit and confirm the indicative metals recoveries.



Therefore, with regards to an alternative but conventional filtration, roasting and CIL process, which is assumed could achieve similar metals recoveries, a process operating cost of **US\$30/t of tailings** has been estimated (approximately 1.1Mtpa of flotation tailings to be produced with circa 8% total mass split to the combined base metals concentrates).

For the current MRE, 100% payabilities have been assumed.

It should be noted that gold and silver payabilities are excellent in copper and lead concentrates but lower in zinc concentrates. In addition, the payability of copper in lead concentrates is lower and can be based on using the lead price only or as a percentage of the copper price. This will be fully investigated in the next stage of study.

Potential penalty elements variously include combined lead and zinc, fluorine, arsenic, mercury and antimony and the impact of these has not been fully explored at this stage of the project. Various penalties could apply to all three concentrates from all three deposits, although very high mercury levels are of particular concern. This will be fully investigated in the next stage of study and through further optimised testwork programmes. Emerita are conducting leaching testwork at present to reduce the levels of impurities. Two cleaning methods are being explored: sulphate leaching, and alkaline leaching (Emerita, 2024).



14 MINERAL RESOURCE ESTIMATES

14.1 Introduction

The Mineral Resource estimates discussed in this Technical Report are located within Emerita's IBW Project, contained in the La Romanera, La Infanta and El Cura 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 date for the databases is detailed in Section 12.2. Historic drilling exists at all deposits, 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.

	Tabl	e 14.1: Sun	nmary of M	RE Drillho	ole Databases		
Deposit	Year	Diamond	Drill	Drill	Drill Sample	Density	Density
Deposit	Teal	Drillholes	Metres	Samples	Metres	Samples	Metres
	2022	92	34,779.1	4120	3802.1	3818	550.2
La Damanara	2023	71	31,863.1	2402	2432.3	2112	308.4
La Romanera	2024	6	3,702.1	276	321.5	236	34.6
	Sub-Total	169	70,344.3	6798	6556.0	6166	893.2
	2021	31	4,511.3	896	939.9	803	116.8
l a lufanta	2022	38	10,796.9	894	875.9	795	120.1
La Infanta	2023	22	5,666.8	449	450.8	395	56.3
	Sub-Total	91	20,974.9	2239	2266.6	1993	293.2
	2023	6	2,118.8	82	85.7	56	8.1
El Coma	2024	26	9,896.2	605	684.7	444	62.9
El Cura	2025	7	2,220.1	117	136.6	84	12.4
	Sub-Total	39	14,235.0	804	907.0	584	83.4
IBW MRE	Total	299	105,554.2	9841	9729.5	8743	1269.8

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, La Infanta and El Cura are classified as VMS 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 six major sulphide lenses across the three deposits: the Upper and Lower Lens at La Romanera, the North, South and South 1 Lenses at La Infanta and the Top Lens at El Cura. Four minor parallel lenses at La Romanera, capture significant intersections with interpreted continuity that sit outboard of the main mineralised zones.

The Bottom Lens at El Cura is at a preliminary stage of exploration. Thus far, the number and grade of intersections do not support the definition of Mineral Resources for this domain and it has been excluded from resource estimation.

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).

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 14.7.

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

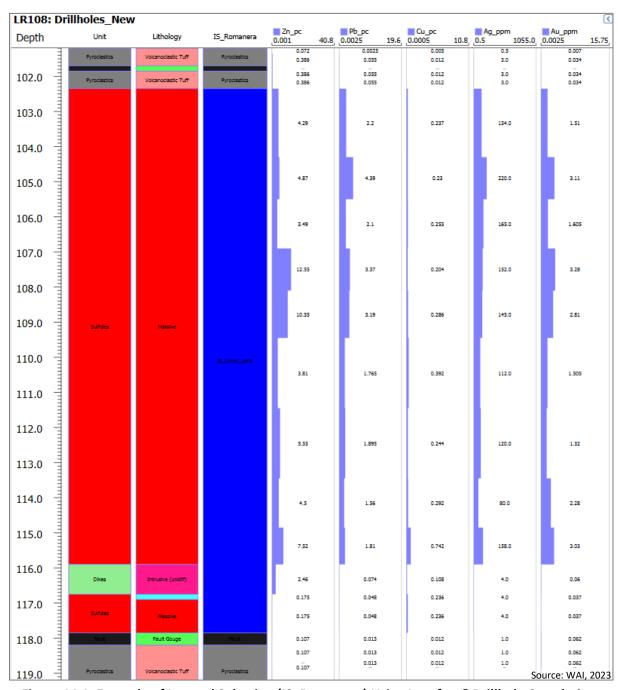


Figure 14.1: Example of Interval Selection (IS_Romanera) Using Leapfrog® Drillhole Correlation

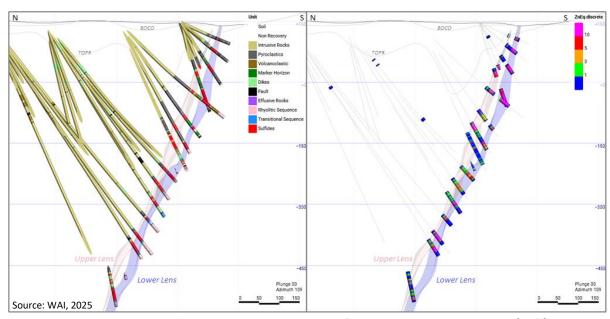


Figure 14.2: La Romanera Cross Section – Domain Wireframes vs. Logged Lithology (Left) & Assay ZnEq grade (Right). See Section 14.13 for ZnEq Calculation

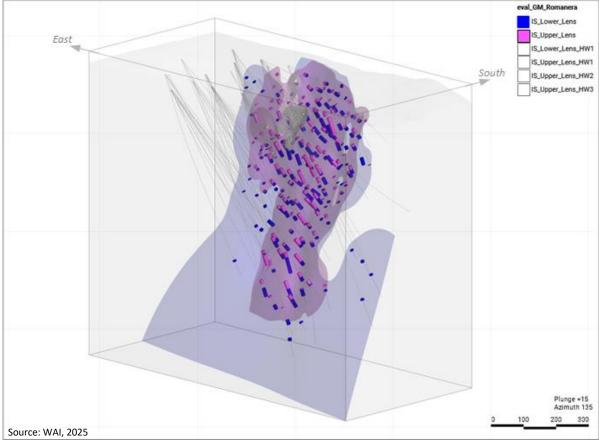


Figure 14.3: Isometric View of La Romanera Domain Wireframes and Input Interval Selections

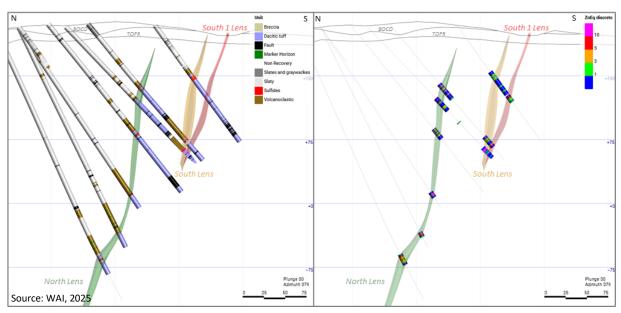


Figure 14.4: La Infanta Cross Section – Domain Wireframes vs. Logged Lithology (Left) & Assay ZnEq grade (Right). See Section 14.13 for ZnEq Calculation



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

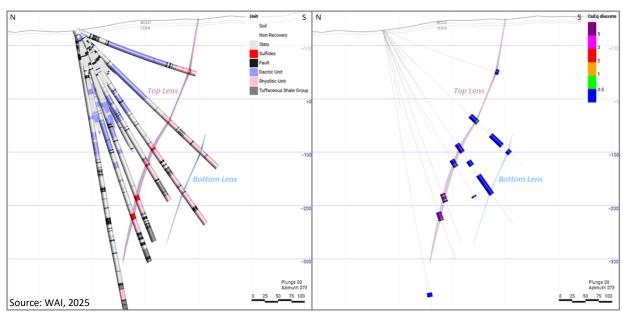


Figure 14.6: El Cura Cross Section – Domain Wireframes vs. Logged Lithology (Left) & Assay CuEq grade (Right). See Section 14.13 for CuEq Calculation

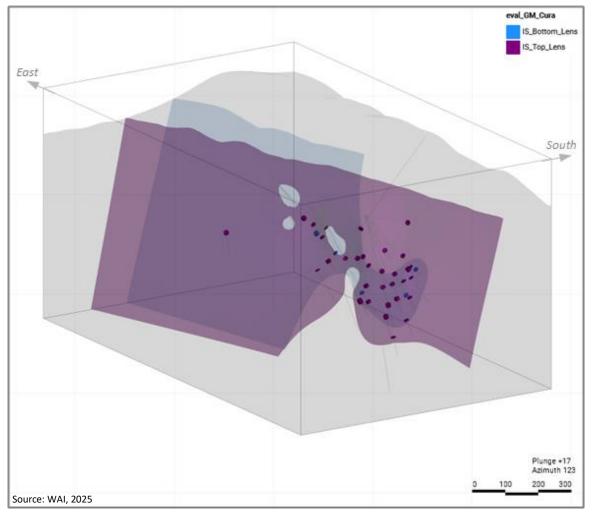


Figure 14.7: Isometric View of El Cura Domain Wireframes and Input Interval Selections



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 14.8.

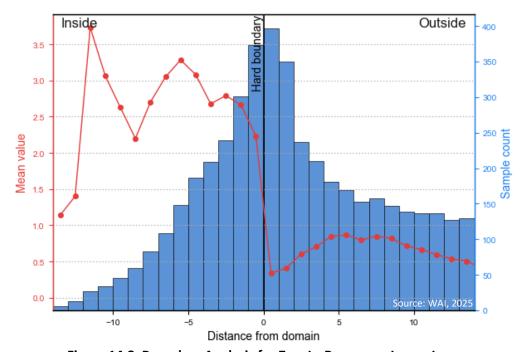


Figure 14.8: Boundary Analysis for Zn – La Romanera Lower Lens

14.5 Compositing

Sample coverage and sample length is 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 1m downhole composite length was chosen for all deposits, in line with modal assay sample length. Residual lengths below half the target composite length were added to the adjacent composite. Assay compositing was length and density weighted, and samples were not composited across mineralised domain boundaries.

Density is sampled over shorter 10-20cm lengths. Density was first composited to the assay sample intervals. In the minority of cases where no density sample had been collected over an assay interval, a sulphur-density regression was used to derive a density value. This complete density dataset was then composited to 1m lengths in line with the assay compositing procedure.

An example sulphur-density scatter plot for La Romanera is provided in Figure 14.9, whilst details of the sulphur-density regressions applied to each deposit are listed in Table 14.2.



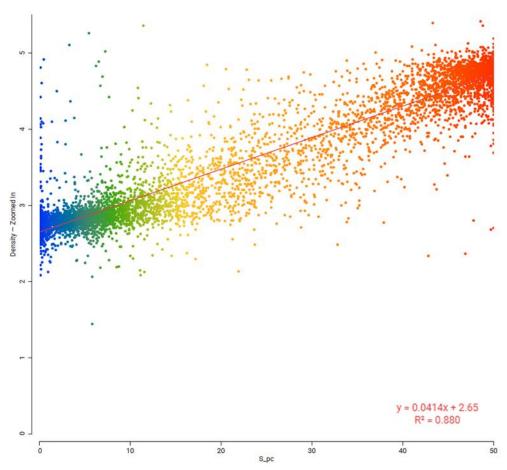


Figure 14.9: Sulphur-Density Scatter Plot and Regression (Red Line and Equation) for La Romanera

	Table 14.2: S	ulphur-D	ensity Reg	ressions po	er Deposit		
Deposit	Sulphur-Density	1	y Sample tistics	Statist	y Sample ics after ession	_	sion Based ty Values
	Regression	Count	Mean (g/cm³)	Count	Mean (g/cm³)	Count	% of Dataset
La Romanera	[S_pc]*0.0414+2.65	6153	3.50	6798	3.51	645	9
La Infanta	[S_pc]*0.0595+2.56	1949	2.78	2239	2.77	290	13
El Cura	[S_pc]*0.0415+2.61	585	2.94	804	2.89	219	27

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 14.3, Table 14.4 and Table 14.5.



	Table	e 14.3: La	Romaner	a Composi	ite Cappi	ing Stati	stics by	Domain			
		No.	No.	%		Raw Stats		С	apped Stat	s	
Domain	Metal	Comp.	Capped	Capped	Max	Mean	cv	Max (Cap)	Mean	CV	
	Zn (%)	1836	15	0.8	39.14	2.75	1.40	18.00	2.71	1.32	
	Pb (%)	1836	4	0.2	16.90	1.18	1.34	11.00	1.18	1.29	
Lower	Cu (%)	1836	12	0.7	7.32	0.47	1.37	4.20	0.46	1.23	
	Ag (ppm)	1836	13	0.7	914	60	1.31	490	59	1.19	
	Au (ppm)	1836	9	0.5	15.50	1.32	1.24	10.30	1.32	1.21	
	Zn (%)	1409	11	0.8	24.00	1.96	1.68	15.60	1.94	1.63	
	Pb (%)	1409	3	0.2	11.17	0.99	1.44	8.10	0.99	1.43	
Upper	Cu (%)	1409	5	0.4	16.62	0.39	1.67	4.00	0.37	1.08	
	Ag (ppm)	1409	6	0.4	471	56	1.10	320	56	1.08	
	Au (ppm)	1409	11	0.8	10.92	1.00	1.18	6.00	0.98	1.09	
	Zn (%)	21	0	0	4.16	1.78	0.65	ı	No Capping		
Lower	Pb (%)	21	0	0	1.72	0.65	0.82	ı	No Capping		
HW1	Cu (%)	21	0	0	0.15	0.06	0.79	ı	No Capping	1	
ПЛЛТ	Ag (ppm)	21	0	0	57	19	0.89	I	No Capping	1	
	Au (ppm)	21	0	0	2.20	0.74	1.01	ı	No Capping No Capping		
	Zn (%)	12	0	0	8.90	2.56	1.08	I	No Capping	1	
Upper	Pb (%)	12	0	0	5.06	1.66	1.01	I	No Capping	1	
HW1	Cu (%)	12	0	0	0.63	0.35	0.46	ı	No Capping	1	
11001	Ag (ppm)	12	0	0	154	63	0.80	I	No Capping	1	
	Au (ppm)	12	0	0	3.37	1.30	0.83	I	No Capping	1	
	Zn (%)	6	0	0	13.00	4.62	0.86	I	No Capping	1	
Upper	Pb (%)	6	0	0	5.25	2.42	0.70	I	No Capping	1	
HW2	Cu (%)	6	0	0	0.75	0.37	0.67	I	No Capping	1	
ПVVZ	Ag (ppm)	6	0	0	213	114	0.69	I	No Capping	1	
	Au (ppm)	6	0	0	5.26	1.98	0.94	No Capping			
	Zn (%)	7	0	0	16.67	4.87	1.51	No Capping			
Upper	Pb (%)	7	0	0	7.07	2.18	1.38	No Capping			
HW3	Cu (%)	7	0	0	1.72	0.43	1.24	I	No Capping	1	
11003	Ag (ppm)	7	0	0	225	89	0.98	I	No Capping	1	
	Au (ppm)	7	0	0	1.03	0.72	0.38		No Capping	,	

	Tab	le 14.4: L	.a Infanta (Composite	Cappin	g Statist	ics by [Oomain		
		No.	No.	%	ı	Raw Stats		Сар	ped Stats	
Domain	Metal	Comp.	Capped	Capped	Max	Mean	cv	Max (Cap)	Mean	cv
	Zn (%)	200	6	3.0	37.15	4.39	1.25	15.40	4.08	1.07
	Pb (%)	200	4	2.0	20.09	2.55	1.26	11.40	2.45	1.15
North	Cu (%)	200	2	1.0	4.00	0.62	1.27	3.00	0.61	1.23
	Ag (ppm)	200	3	1.5	526	65	1.54	394	64	1.48
	Au (ppm)	200	2	1.0	3.20	0.34	1.28	2.35	0.34	1.21
	Zn (%)	158	13	8.2	34.00	8.04	1.24	29.50	7.86	1.21
	Pb (%)	158	4	2.5	22.03	4.48	1.21	17.00	4.43	1.19
South	Cu (%)	158	0	0.0	4.61	1.16	1.13	No	o Capping	
	Ag (ppm)	158	2	1.3	497	101	1.20	402	100	1.18
	Au (ppm)	158	0	0.0	1.92	0.35	0.95	1.92	0.35	0.95
	Zn (%)	45	10	22.2	40.80	12.94	0.98	27.10	11.71	0.91
	Pb (%)	45	9	20.0	21.28	7.57	0.93	15.90	7.07	0.88
South 1	Cu (%)	45	6	13.3	5.97	1.71	1.00	3.70	1.56	0.92
	Ag (ppm)	45	4	8.9	724	135	1.27	356	113	1.00
	Au (ppm)	45	0	0.0	2.30	0.48	0.98	No	o Capping	•



	T	able 14.5	: El Cura C	omposite	Capping S	Statistics	by Do	main			
		No.	No.	%	R	aw Stats		Сар	ped Stats		
Domain	Metal	Comp.	Capped	Capped	Max	Mean	cv	Max (Cap)	Mean	cv	
	Zn (%)	148	0	0	10.48	1.46	1.38	No	Capping		
	Pb (%)	148	0	0	4.01	0.63	1.24	No	Capping		
Тор	Cu (%)	148	0	0	6.80	1.22	1.19	No	No Capping		
	Ag (ppm)	148	0	0	213	40	0.91	No Capping			
	Au (ppm)	148	0	0	5.61	1.25	0.89	No Capping			

14.7 Metal Correlations

Correlation statistics were undertaken to identify relationships between estimated variables. Bivariate relationships are broadly consistent within a given deposit and have been reproduced in the block model by maintaining relatively stable variogram and/or search orientations for correlated variables.

Correlation statistics for La Romanera and El Cura composites show moderate to strong positive correlations between all variables except for Cu (Table 14.6 and Table 14.8). Further statistical analysis highlights the presence of a group of composites that are high in Cu and low in other metals. The spatial distribution of these composites is not considered amenable to sub-domaining at the current data spacing. Correlation statistics for La Infanta composites exhibit moderate to strong positive correlations between all variables (Table 14.7).

Table 14.6: Correlation Matrix for Metals and Density for La Romanera										
	Zn	Pb	Cu	Ag	Au	Density				
Zn	1.00	0.82	0.08	0.52	0.36	0.50				
Pb	0.82	1.00	0.10	0.72	0.52	0.53				
Cu	0.08	0.10	1.00	0.17	0.14	0.34				
Ag	0.52	0.72	0.17	1.00	0.65	0.57				
Au	0.36	0.52	0.14	0.65	1.00	0.55				
Density	0.50	0.53	0.34	0.57	0.55	1.00				

Table 14.7: Correlation Matrix for Metals and Density for La Infanta											
	Zn	Pb	Cu	Ag	Au	Density					
Zn	1.00	0.96	0.88	0.78	0.41	0.82					
Pb	0.96	1.00	0.87	0.78	0.41	0.81					
Cu	0.88	0.87	1.00	0.87	0.49	0.73					
Ag	0.78	0.78	0.87	1.00	0.57	0.66					
Au	0.41	0.41	0.49	0.57	1.00	0.40					
Density	0.82	0.81	0.73	0.66	0.40	1.00					

Table 14.8: Correlation Matrix for Metals and Density for El Cura										
	Zn	Pb	Cu	Ag	Au	Density				
Zn	1.00	0.91	0.19	0.60	0.52	0.36				
Pb	0.91	1.00	0.20	0.61	0.50	0.36				
Cu	0.19	0.20	1.00	0.48	0.54	0.53				
Ag	0.60	0.61	0.48	1.00	0.57	0.43				
Au	0.52	0.50	0.54	0.57	1.00	0.65				
Density	0.36	0.36	0.53	0.43	0.65	1.00				



14.8 Variography

Continuity analysis and variogram modelling was conducted using normal score transformed capped composites, for domains with sufficient composite pairs to resolve variogram structure. This included the Lower and Upper Lenses at La Romanera and the North and South Lenses at La Infanta. 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. 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 14.10 for La Romanera and Figure 14.11 for La Infanta.

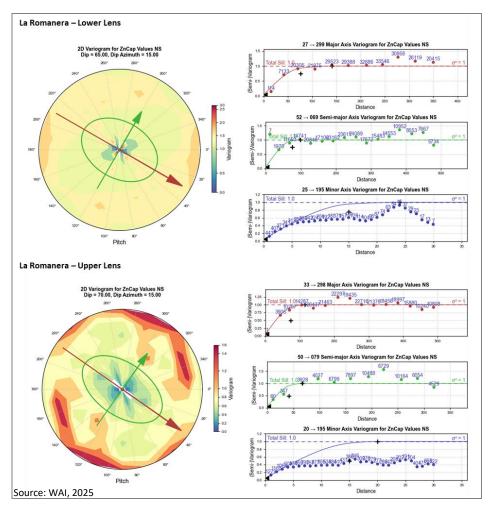


Figure 14.10: La Romanera - Zn Normal Score Down-Dip Continuity Maps and Variograms



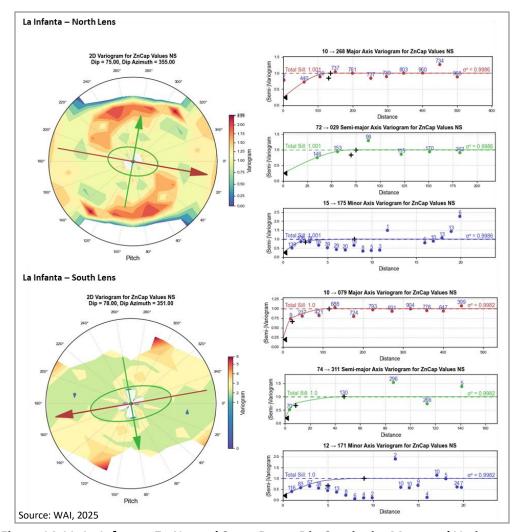


Figure 14.11: La Infanta - Zn Normal Score Down-Dip Continuity Maps and Variograms

Normal score variogram model parameters were back-transformed for use in estimation. The resulting model parameters for all variables are listed in Table 14.9 and Table 14.10.

Table 14.9: La Romanera Variogram Model Parameters											
		Rotation			Struc	ture 1			Stru	cture 2	
Domain	Element	(Degrees)	Nugget		Axi	s Distance (n	1)		, and a	Axis Distance	(m)
Domain	Liement	(Dip/Dip Dir/Pitch)	Effect	Sill	Major	Semi- Major	Minor	Sill	Major	Semi- Major	Minor
	Zn	65 / 15 / 30	0.07	0.74	76	75	15	0.19	141	98	24
	Cu	65 / 15 / 30	0.04	0.31	90	43	8	0.65	90	60	20
Lower	Pb	65 / 15 / 30	0.14	0.56	77	70	4	0.3	121	70	25
LOWEI	Ag	65 / 15 / 50	0.05	0.59	135	89	9	0.36	150	126	25
	Au	65 / 15 / 50	0.04	0.49	92	95	9	0.47	180	95	26
	Density	65 / 15 / 40	0.12	0.21	120	32	2.5	0.67	120	64	20
	Zn	70 / 15 / 35	0.07	0.58	74	41	15	0.35	115	67	20
	Cu	70 / 15 / 35	0.08	0.55	49	16	10	0.37	109	78	20
Upper	Pb	70 / 15 / 50	0.17	0.29	91	58	3	0.54	91	60	15
Орреі	Ag	70 / 15 / 30	0.05	0.66	70	60	15	0.29	90	60	18
	Au	70 / 15 / 30	0.1	0.18	105	15	3	0.72	105	73	18
	Density	70 / 15 / 55	0.12	0.27	106	82	2	0.61	106	92	20



	Table 14.10: La Infanta Variogram Model Parameters											
		Rotation ZXY			Struc	ture 1	Structure 2					
Domein	Flowant	(Degrees)	Nugget		Axi	s Distance (n	n)		A	Axis Distance	(m)	
Domain	Element	(Direction 1/2/3)	Effect	Sill		Semi-		Sill		Semi-		
					Major	Major	Minor		Major	Major	Minor	
	Zn	75 / 355 / 10	0.3	0.57	130	70	2.5	0.13	135	75	8	
	Cu	75 / 355 / 10	0.19	0.65	108	48	2.4	0.16	150	115	10	
North	Pb	75 / 355 / 10	0.11	0.8	120	67	2.7	0.09	140	80	7	
North	Ag	75 / 355 / 30	0.21	0.5	115	54	2.7	0.29	115	75	3	
	Au	75 / 355 / 10	0.07	0.4	75	105	4.5	0.53	240	230	5	
	Density	75 / 355 / 10	0.3	0.44	105	60	2.5	0.26	105	60	8	
	Zn	78 / 351 / 170	0.28	0.46	23	8.5	5	0.26	115	47	9	
	Cu	78 / 351 / 170	0.36	0.37	30	4	5	0.27	58	50	10	
Courth	Pb	78 / 351 / 170	0.19	0.3	22	6	6	0.51	125	45	10	
South	Ag	78 / 351 / 170	0.25	0.3	28	8	3	0.45	120	70	10	
	Au	78 / 351 / 160	0.23	0.43	125	4	3.7	0.35	125	45	9	
	Density	79 / 351 / 170	0.29	0.47	35	6	2.5	0.23	50	45	6	

The authors consider the overall quality of the experimental variograms to be acceptable and are generally based on a significant number of composite pairs which have been appropriately domained. 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 all 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 14.11.

Table 14.11: Block Model Parameters											
Davamatas	La	Romanera	9		La Infanta		El Cura				
Parameter	Х	Υ	Z	Х	Υ	Z	Х	Υ	Z		
Parent Block Size (m)	20	20	5	20	20	5	20	20	5		
Sub-Block Count	8	8	16	16	16	16	16	16	16		
Minimum Sub-Block Size	2.5	2.5	0.3125	1.25	1.25	0.3125	1.25	1.25	0.3125		
Base Point	645780	4172623	440	652663	4171567	425	649130	4171187	297		
	Azimuth	Dip	Pitch	Azimuth	Dip	Pitch	Azimuth	Dip	Pitch		
Rotation (°)	16	70	0	352	78	0	342	76	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 estimation method for domains where a suitable variogram was derived (La Romanera Lower and Upper, La Infanta North and South). Inverse distance weighting squared (IDW2) was used for the remaining domains (La Romanera minor lenses, La Infanta South 1 and El Cura Top).

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 OK domains, the first pass maximum search distance was set at 1 to 1.5 times the nominal drillhole spacing. Intermediate and minimum search distances were then scaled to reproduce the geometric anisotropy defined by the variogram model for each variable. First pass search distances for IDW2 domains were based on the general drillhole spacing only. For all domains, the second pass search corresponded to two times the first pass and the third pass search to three times the first pass. 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 typically 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 selectively 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 variable. 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 14.12, La Infanta in Table 14.13 and El Cura in Table 14.14.

	Table 14.12: La Romanera Grade Estimation Parameters											
				E	llipsoid Range	s (m)	Numl	er of Sampl	Distance Based Cap			
Domain	Interpolant	Variable	Pass	Max.	Int.	Min.	Min.	Max.	Max. per Hole	Сар	Distance (% of Ellipsoid)	
		Zn	1	75	52	13	8	20	4			
			2	150	104	26	4	16				
			3	225	156	38	1	16				
		K Pb	1	75	50	17	8	20	4			
Lower	OK		2	150	100	33	4	16				
			3	225	150	50	1	16				
			1	75	43	15	8	20	4			
		Cu	2	150	87	31	4	16				
			3	225	130	46	1	16				



	Table 14.12: La Romanera Grade Estimation Parameters Ellipsoid Ranges (m) Number of Samples Distance Based Cap													
				E	llipsoid Range	s (m)	Num	ber of Samp	les	Dista	nce Based Cap			
Domain	Interpolant	Variable	Pass	Max.	Int.	Min.	Min.	Max.	Max. per Hole	Сар	Distance (% of Ellipsoid)			
			1	75	63	13	8	20	4					
		Ag	2	150	126	25	4	16						
			3	225	189	38	1	16						
			1	75	40	11	8	20	4					
Lower	ОК	Au	2	150	79	22	4	16						
			3	225	119	33	1	16						
			1	75	40	13	8	20	4	Сар				
		Density	2	150	80	25	4	16 16 20 4 16 16						
			3	225	120	38	1	16						
			1	75	44	13	8	20	4					
		Zn	2	150	87	26	4	16						
			3	225	131	39	1	16						
			1	75	54	14	8	20	4					
		Pb	2	150	107	28	4	16						
			3	225	161	41	1	16		r Cap Distance (7 of Ellipsoid				
			1	75	49	12	8	20	4					
		Cu	2	150	99	25	4	16						
Upper	ОК		3	225	148	37	1	16						
Oppei	OK		1	75	50	15	8	20	4					
		Ag	2	150	100	30	4	16						
			3	225	150	45	1	16						
			1	75	52	13	8	20	4					
		Au	2	150	104	26	4	16						
			3	225	156	39	1	16						
			1	75	65	14	8	20	4					
		Density	2	150	130	28	4	16						
			3	225	195	42	1	16						
Minor			1	75	50	20	8	20	4					
Minor Lenses	IDW2	ALL	2	150	100	40	4	16						
relises			3	225	150	60	1	16						

	Table 14.13: La Infanta Grade Estimation Parameters													
				E	llipsoid Range	s (m)	Numl	er of Samp	les	Dista	nce Based Cap			
Domain	Interpolant	Variable	Pass	Max.	Int.	Min.	Min.	Max.	Max. per Hole	Сар	Distance (% of Ellipsoid)			
			1	75	42	15	8	16	4					
		Zn	2	150	83	30	4	12		9.2	50			
			3	225	125	45	1	12		5.2	25			
			1	75	58	15	8	16	4					
		Pb	2	150	115	30	4	12		3.2	50			
			3	225	173	45	1	12		3.2	25			
			1	75	43	15	8	16	4					
		Cu	2	150	86	30	4	12		2.0	50			
N1	ОК		3	225	129	45	1	12		1.3	25			
North	OK .		1	75	49	15	8	16	4					
		Ag	2	150	98	30	4	12						
			3	225	147	45	1	12		238	25			
			1	75	72	15	8	16	4					
		Au	2	150	144	30	4	12		1.35	25			
			3	225	216	45	1	12		1.35	25			
			1	75	43	15	8	16	4					
		Density	2	150	86	30	4	12						
			3	225	129	45	1	12						
			1	75	31	15	8	16	4					
South	ОК	Zn	2	150	61	30	4	12		10	50			
			3	225	92	45	1	12		5	25			



		Tabl	e 14.1	l3: La l	Infanta Gr	ade Estin	nation Pa	rameter	s		
				E	llipsoid Range	es (m)	Num	ber of Samp	les	Dista	nce Based Cap
Domain	Interpolant	Variable	Pass	Max.	Int.	Min.	Min.	Max.	Max. per Hole	Сар	Distance (% of Ellipsoid)
			1	75	65	13	8	16	4		
		Pb	2	150	129	26	4	12		11.7	50
			3	225	194	39	1	12		11.7	25
			1	75	27	15	8	16	4		
		Cu	2	150	54	30	4	12		2.7	25
			3	225	81	45	1	12		2.7	12.5
			1	75	44	15	8	16	4		
South	ОК	Ag	2	150	88	30	4	12		270	50
			3	225	131	45	1	12		270 50 270 25 4 1 50	
			1	75	27	15	8	16	4		
		Au	2	150	54	30	4	12		1	50
			3	225	81	45	1	12		1	25
			1	75	68	15	8	16	4		
		Density	ensity 2 150 135 30 4 12								
		Density	3	225	203	45	1	12			
		Zn	1	50	50	50	6	16	4		
		ZII	2	100	100	100	2	12		7.5	25
		Pb	1	50	50	50	6	16	4		
		PU	2	100	100	100	2	12		5.2	25
		Cu	1	50	50	50	6	16	4		
South	IDW2	Cu	2	100	100	100	2	12		1.75	50
300011	IDVVZ	۸۵	1	50	50	50	6	16	4		·
		Ag	2	100	100	100	2	12		80	25
		Au	1	50	50	50	6	16	4		
		Au	2	100	100	100	2	12		0.8	50
		Doncity	1	50	50	50	6	16	4		
		Density	2	100	100	100	2	12			

	Table 14.14: El Cura Grade Estimation Parameters												
				E	llipsoid Range	s (m)	Numl	per of Sampl	es	Dista	nce Based Cap		
Domain	Interpolant	Variable	Pass	Max.	Int.	Min.	Min.	Max.	Max. per Hole	Сар	Distance (% of Ellipsoid)		
			1	50	50	25	6	16					
Тор	IDW2	ALL	2	100	100	50	2	12					
			3	150	150	75	2	12					

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 and long section. The checks showed good agreement between drill hole composite values and block model values. Representative cross and long sections are provided for La Romanera (Figure

ZT61-2308/MM1830 Page 101 Final V3.0



14.12 and Figure 14.13), La Infanta (Figure 14.14 and Figure 14.15) and El Cura (Figure 14.16 and Figure 14.17).

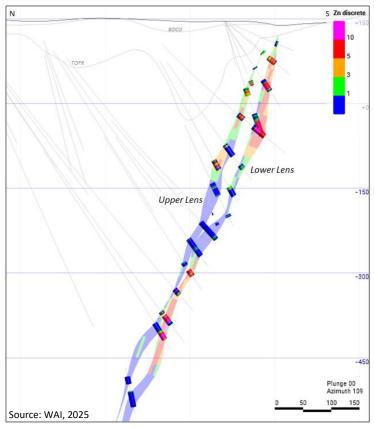


Figure 14.12: La Romanera Cross Section - Zn Estimate vs. Capped 1m Composite Grades

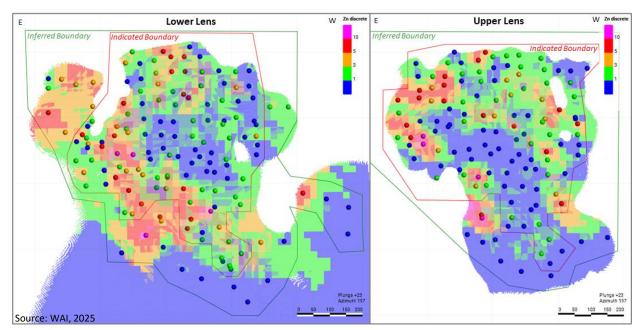


Figure 14.13: La Romanera Long Sections - Zn Estimate vs. Full Domain Width Composite Grades



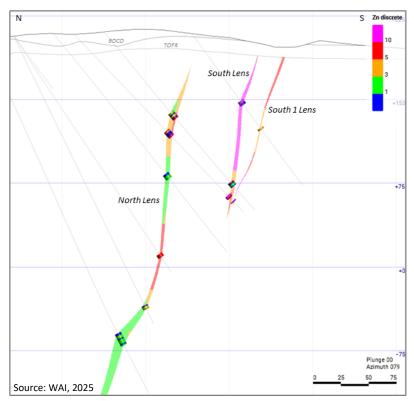


Figure 14.14: La Infanta Cross Section - Zn Estimate vs. Capped 1m Composite Grades

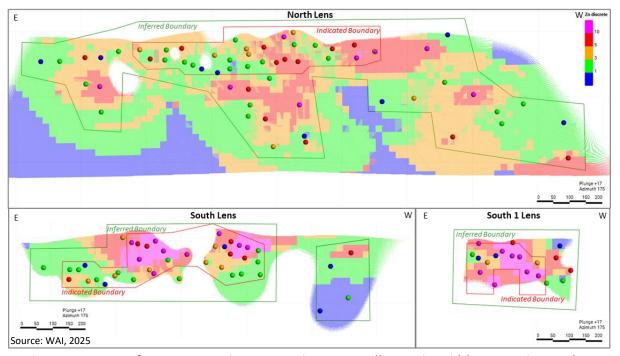


Figure 14.15: La Infanta Long Sections - Zn Estimate vs. Full Domain Width Composite Grades



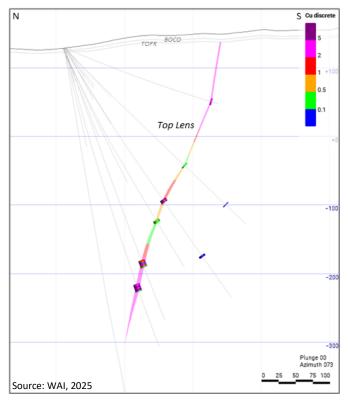


Figure 14.16: El Cura Cross Section - Cu Estimate vs. Capped 1m Composite Grades

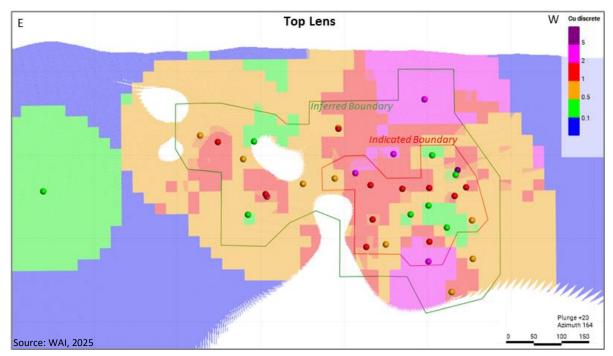


Figure 14.17: El Cura Long Sections - Cu Estimate vs. Full Domain Width Composite Grades



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 for major lenses are summarised in Table 14.15, Table 14.16 and Table 14.17 show no material global bias.

	Table 14.15: La Romanera Mean Grade Comparison by Domain												
Domain	Statistic	Zn (%)		Pb (%)		Cu (%)		Ag (g/t)		Au (g/t)		Bulk Density (g/cm³)	
		MRE	NN	MRE	NN	MRE	NN	MRE	NN	MRE	NN	MRE	NN
Lower	Mean	2.76	2.70	1.20	1.25	0.48	0.51	57.2	58.8	1.21	1.23	4.19	4.20
Lower	% Diff.	2.1%		-3.4%		-6.3%		-2.8%		-1.8%		-0.:	1%
Upper -	Mean	1.86	1.67	1.00	0.89	0.42	0.43	52.7	50.8	0.98	0.90	4.09	4.04
	% Diff.	10.7%		12.2%		-2.2%		3.7%		7.8%		1.1%	

	Table 14.16: La Infanta Mean Grade Comparison by Domain												
Domain	Statistic	Zn (%)		Pb (%)		Cu (%)		Ag (g/t)		Au (g/t)		Bulk Density (g/cm³)	
		MRE	NN	MRE	NN	MRE	NN	MRE	NN	MRE	NN	MRE	NN
NI o utilo	Mean	4.26	4.70	2.69	2.88	0.67	0.74	66.6	77.0	0.27	0.29	2.94	2.98
North	% Diff.	-10.0%		-6.9%		-10	.5%	-14	.4%	-5.4%		-1.	3%
Carrella	Mean	6.90	7.50	4.03	4.35	1.02	1.02	89.5	87.1	0.32	0.34	3.04	3.06
South	% Diff.	-8.3%		-7.8%		0.5%		2.7%		-7.0%		-0.4%	
Courth 1	Mean	10.92	11.48	6.58	7.00	1.52	1.63	108.9	112.3	0.48	0.54	3.32	3.25
South 1	% Diff.	-5.0%		-6.2%		-7.3%		-3.0%		-12.4%		2.3%	

Table 14.17: El Cura Mean Grade Comparison by Domain													
Domain	Statistic	Zn (%)		Pb (%)		Cu (%)		Ag (g/t)		Au (g/t)		Bulk Density (g/cm³)	
		MRE	NN	MRE	NN	MRE	NN	MRE	NN	MRE	NN	MRE	NN
Т	Mean	1.78	1.88	0.78	0.91	1.41	1.39	44.10	51.35	1.38	1.52	3.92	3.96
Тор	% Diff.	-5.2%		-15.5%		1.0%		-15.2%		-9.7%		-1.0%	

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 14.18 and Figure 14.19). The model estimate should be smoother than the NN estimate. The observed grade profiles behave as expected and show no significant local bias.



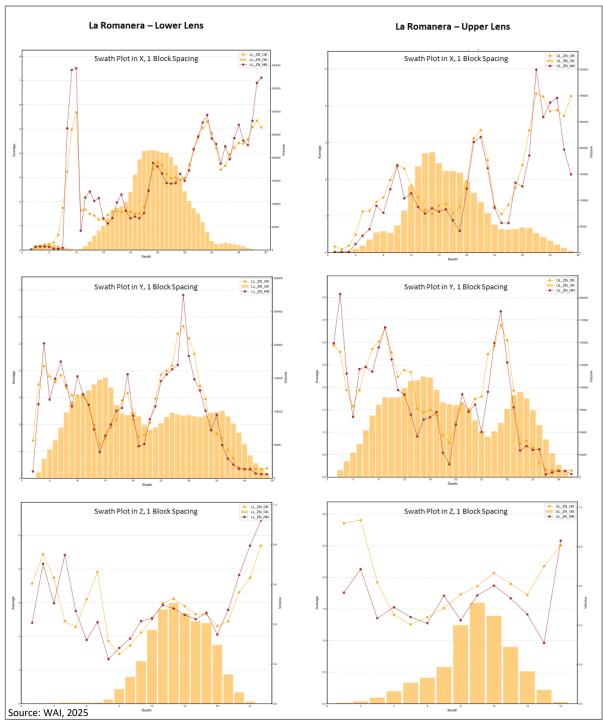


Figure 14.18: Swath Plots for Principal La Romanera Domains (OK Grade Profile in Orange and NN Grade Profile in Dark Red)



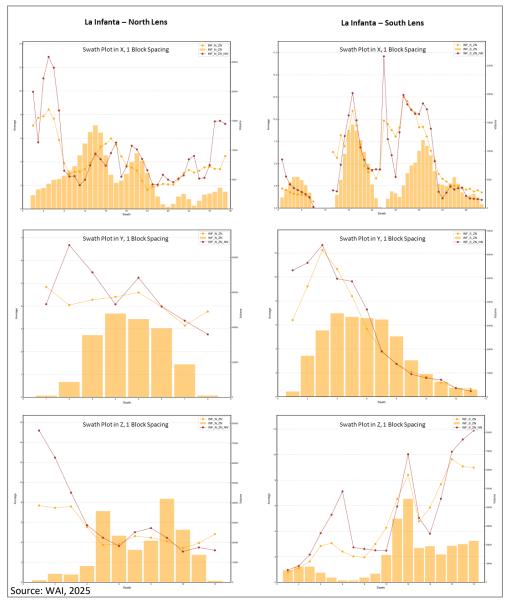


Figure 14.19: Swath Plots for Principal La Infanta Domains (OK Grade Profile in Orange and NN Grade Profile in Dark Red)

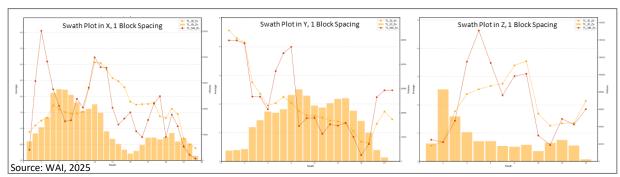


Figure 14.20: Swath Plots for El Cura Top Lens (ID2 Grade Profile in Orange and NN Grade Profile in Dark Red)



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. Minor parallel lenses at La Romanera were classified as Inferred. The Mineral Resource classification relative to input drillhole data is shown for La Romanera in Figure 14.21, La Infanta in Figure 14.22 and El Cura in Figure 14.23.

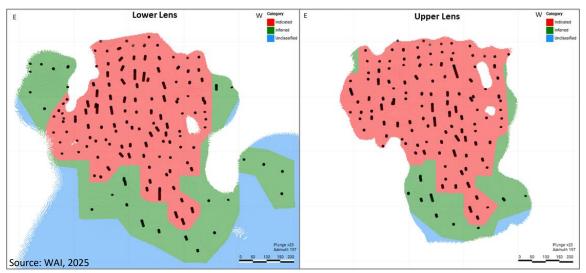


Figure 14.21: La Romanera Mineral Resource Classification vs. Drill Coverage Per Domain

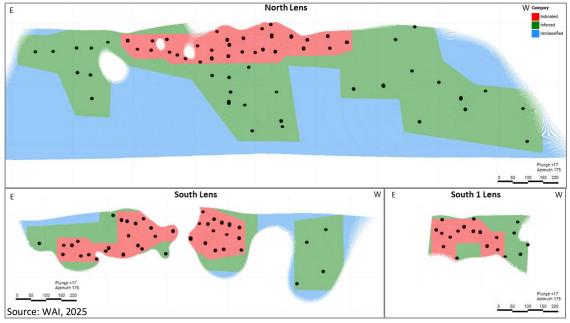


Figure 14.22: La Infanta Mineral Resource Classification vs. Drill Coverage Per Domain

ZT61-2308/MM1830 Final V3.0 Page 108 April 2025



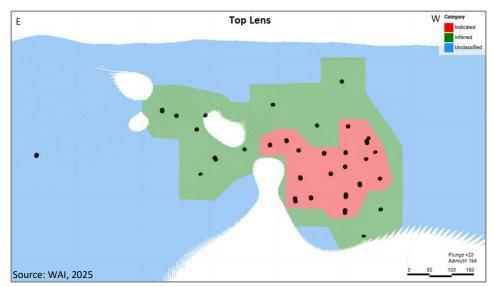


Figure 14.23: El Cura Mineral Resource Classification vs. Drill Coverage

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. This was achieved by calculating block metal equivalent grades and reporting Mineral Resources at break-even metal equivalent cutoff grades.

To reflect the primary value drivers at each deposit, block zinc equivalent (ZnEq) grades were calculated for La Romanera and La Infanta, whilst block copper equivalent (CuEq) grades were calculated for El Cura. Key assumptions and equivalent grade calculations are outlined in Table 14.18.

Breakeven cut-off grades (COG) were calculated using the following formula:

$$Breakeven \ COG = \frac{(Mining \ Costs + Process \ Costs + Overhead \ Costs)}{recovery * (metal \ price - sales \ cost)}$$

Preliminary cost assumptions used for cut-off grade development envisage underground mining and two stage mineral processing using selective copper-lead-zinc flotation and a post-flotation process. They include a total mining, processing and G&A cost of US\$76.6/t ore and sales cost of 396\$/t metal.

Mineral Resources are reported at calculated breakeven cut-off grades of 3.0% ZnEq for La Romanera and La Infanta, and 0.9% CuEq for El Cura.

Narrow zones of mineralisation are present at the IBW Project and MRE reporting was further restricted to exclude blocks where equivalent grade fell below cut-off when diluted over a 3m minimum mining width.



Table 14.18	: Parameters and	Equations used t	o Calculate Blo	ck Metal Equivalent Grades					
		Metal P	rices						
Price_Zn_\$/t		3,200							
Price_Pb_\$/t		2,300							
Price_Cu_\$/t		9,500		Benchmarked long term pricing					
Price_Ag_\$/oz		25							
Price_Au_\$/oz		2,200							
		Metallurgical I	Recoveries						
	La Romanera	La Infanta	El Cura						
Rec_Zn	0.904	0.856							
Rec_Pb	0.522	0	Daned on teatronal continued in						
Rec_Cu	0.84	0.93	0.92	Based on testwork outlined in					
Rec_Ag	0.801	0.956	0.806	Section 13					
Rec_Au	0.641	0.799	0.641						
		Recovered	Value						
Zn_RV_\$/10kg	([Price_Z	'n_\$/t] / 100) * [Re	ec_Zn]						
Pb_RV_\$/10kg	([Price_F	pb_\$/t] / 100) * [Re	ec_Pb]]					
Cu_RV_\$/10kg	([Price_C	Cu_\$/t] / 100) * [Re	ec_Cu]	Calculated variables: In-situ					
Ag_RV_\$/g	([Price_Ag_	\$/oz] / 31.1035) *	[Rec_Ag]	value after recovery is applied					
Au_RV_\$/g	([Price_Ag_	\$/oz] / 31.1035) *	[Rec_Au]]					
		In Situ V	alue						
Zn_ISV_\$/10kg	([P	rice_Zn_\$/t] / 100		Calculated variables: In-situ					
Cu_ISV_\$/10kg	([P	rice_Cu_\$/t] / 100)	value					
		Metal Equivaler							
7n F a	((([Zn_pct]*[Zn_R\	/_\$/10kg]) + ([Cu_	pct]*[Cu_RV_\$/1	0kg]) + ([Pb_pct]*[Pb_RV_\$/10kg])					
ZnEq	+ ([Ag_ppm]*[Ag	_RV_\$/g]) + ([Au_p	pm]*[Au_RV_\$/	g])) / [Zn_ISV_\$/10kg]) / [Rec_Zn]					
CuEa	((([Zn_pct]*[Zn_R\	/_\$/10kg]) + ([Cu_	pct]*[Cu_RV_\$/1	0kg]) + ([Pb_pct]*[Pb_RV_\$/10kg])					
CuEq	+ ([Ag_ppm]*[Ag_	_RV_\$/g]) + ([Au_p	pm]*[Au_RV_\$/{	g])) / [Cu_ISV_\$/10kg]) / [Rec_Cu]					

14.14 Mineral Resource Statement

The Mineral Resource estimates for the Iberian Belt West Project are classified in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014). The Mineral Resource statement is shown in Table 14.19. The effective date of the Mineral Resource Estimates is February 26, 2025.

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 14.19: Mineral Resource Estimate for the Iberian Belt West Project													
		Tannas		Av	erage Gra	ide		Metal Ed	uivalent		Cor	tained M	letal	9
Deposit	Class	Tonnes	Zn	Pb	Cu	Ag	Au	ZnEq	CuEq	Zn	Pb	Cu	Ag	Au
		Mt	%	%	%	g/t	g/t	%	%	Kt	Kt	Kt	Koz	Koz
La Romanora	Indicated	17.34	2.64	1.25	0.43	65.0	1.34	7.89	2.86	458	217	75	36,216	747
La Romanera	Inferred	4.13	3.08	1.27	0.61	49.7	0.82	7.69	2.79	127	52	25	6,589	109
La Infanta	Indicated	1.09	7.38	4.39	1.08	94.6	0.35	16.61	5.42	80	48	12	3,311	12
La Infanta	Inferred	1.91	4.08	2.23	0.66	74.0	0.38	10.22	3.34	78	42	13	4,542	23
El Cuma	Indicated	0.53	1.58	0.69	1.45	42.9	1.41	9.57	3.00	8	4	8	735	24
El Cura	Inferred	0.76	2.08	0.91	1.51	48.0	1.46	10.47	3.28	16	7	12	1,180	36
IDW/ Droinet	Indicated	18.96	2.88	1.42	0.50	66.0	1.28	8.44	3.01	547	269	94	40,263	783
IBW Project	Inferred	6.80	3.25	1.50	0.73	56.3	0.77	8.72	3.00	221	102	49	12,311	168

Notes:

- 1. Mineral Resources are classified according to the CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines (CIM, 2014);
- 2. The effective date of the Mineral Resource estimate is February 26, 2025;
- 3. Mineral Resources are reported at a cut-off grade of 3.0% zinc equivalent (ZnEq) for La Romanera and La Infanta, and 0.9% copper equivalent (CuEq) for El Cura. Cut-off grades are based on metal price, metallurgical recovery and preliminary operating cost assumptions (total mining, processing and G&A cost of US\$76.6/t, for underground mining and two stage mineral processing using selective copper-lead-zinc flotation and a post-flotation process);
- 4. Block equivalent grade calculations use factors based upon metal prices and metallurgical recoveries where:
 - a. La Romanera ZnEq = ((Zn*28.93)+(Pb*12.01)+(Cu*79.80)+(Ag*0.64)+(Au*45.34)/32))/0.904;
 - b. La Infanta ZnEq = ((Zn*28.83)+(Pb*18.01)+(Cu*88.35)+(Ag*0.77)+(Au*56.51)/32))/0.901;
 - c. El Cura CuEq = ((Zn*27.39)+(Pb*0)+(Cu*87.40)+(Ag*0.65)+(Au*45.34)/95))/0.92);
- 5. Metal price assumptions used in the equivalent grade calculations are US\$3,200/t Zn, US\$2,300/t Pb, US\$9,500/t Cu, US\$25/oz Ag and US\$2,200/oz Au;
- 6. Metallurgical recovery assumptions based on available testwork results used in the equivalent grade calculations are:
 - a. 90.4% Zn, 52.2% Pb, 84% Cu, 80.1% Ag and 64.1% Au for La Romanera;
 - b. 90.1% Zn, 78.3% Pb, 93% Cu, 95.6% Ag and 79.9% Au for La Infanta; and
 - c. 85.6% Zn, 0% Pb, 92% Cu, 80.6% Ag and 64.1% Au for El Cura;
- 7. All blocks less than the reporting cut-off grades when diluted over a 3m minimum mining width were excluded from the Mineral Resources;
- 8. Only primary sulphide mineralisation is included in the Mineral Resources;
- 9. Metal grade and content are reported in-situ and have not been adjusted for metallurgical recovery or mining dilution;
- 10. Mineral Resources are not Reserves until they have demonstrated economic viability based on a pre-feasibility study or feasibility study;
- 11. Numbers may not add due to rounding; and
- 12. The Qualified Person for the Iberian Belt West Project Mineral Resource estimate is Frank Browning, MSci, MSc, PGCert, FGS, CGeol of WAI (part of SLR).



14.15 Comparison with Previous Mineral Resource Estimate

The current Iberian Belt West Project Mineral Resource estimate is effective February 26, 2025 and supersedes the previous Mineral Resource estimate (effective dates of May 4, 2023 for La Romanera and April 30, 2023 for La Infanta). Changes in Mineral Resource tonnage (Figure 14.24) and contained metal (Figure 14.25) are summarised below.

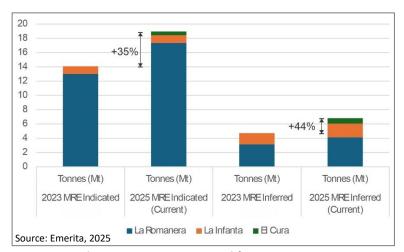


Figure 14.24: IBW Project MRE Tonnage - Maiden 2023 vs. Current 2025 Estimate

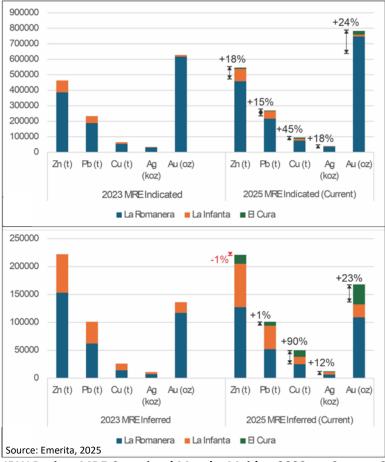


Figure 14.25: IBW Project MRE Contained Metal – Maiden 2023 vs. Current 2025 Estimate

ZT61-2308/MM1830 Final V3.0 Page 112 April 2025



Changes in the Mineral Resource estimate are primarily driven by the following factors:

- Additional drilling totalling 69 drillholes for 33,238m delivering;
 - o A maiden Mineral Resource estimate for El Cura; and
 - O Depth extensions to the La Romanera Mineral Resource;
- Both El Cura and depth extensions to La Romanera are relatively copper rich, contributing to pronounced increases in copper grade and contained metal for the project;
- Whilst new drilling at La Romanera has added Mineral Resource tonnage and contained metal overall, high-grade intersections previously at the edge of the drill grid, have since been infilled and spatially constrained, causing Zn and Pb grades in the La Romanera Inferred Resource to drop and align more closely with the Indicated Mineral Resource. This accounts for the limited changes in contained Zn and Pb metal for the Inferred Mineral Resource;
- Metallurgical recovery assumptions have been updated based on testwork results, the main change being increased gold recovery via a post-flotation process (PFP), from 20% in the previous estimate, to 64.1% for La Romanera and El Cura and 79.9% for La Infanta. PFP costs have been incorporated into reporting cut-off grade calculations;
- Dilution over a 3m minimum mining width has been considered in MRE reporting for all deposits (previously only applied to the narrower lenses at La Infanta); and
- Variogram and estimation parameters have been adjusted based on changes to domain sample populations.



15 MINERAL RESERVE ESTIMATES

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



16 MINING METHODS



17 RECOVERY METHODS



18 PROJECT INFRASTRUCTURE



19 MARKET STUDIES AND CONTRACTS



20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT



21 CAPITAL AND OPERATING COSTS



22 ECONOMIC ANALYSIS



23 ADJACENT PROPERTIES

There is no information regarding adjacent properties applicable to the Iberian Belt West Project 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 Iberian Belt West Project.



25 INTERPRETATION AND CONCLUSIONS

25.1 Introduction

Emerita is an exploration and development company focussed on the discovery and development of high-grade polymetallic deposits in Spain. Emerita holds 100% ownership of the Iberian Belt West (IBW) Project via its subsidiary Emerita Resources España SLU.

The IBW Project hosts three previously identified volcanogenic massive sulphide deposits: La Romanera, La Infanta and El Cura. Exploration drilling has now defined Mineral Resources at all three deposits. Drilling at the project is expected to continue through 2025, with four diamond drill rigs currently on site targeting further Mineral Resource growth.

25.2 Drilling, Sampling and Analysis

The Mineral Resource estimates for the La Romanera, La Infanta and El Cura polymetallic deposits, are based on results from diamond drilling completed by Emerita from July 2021 to February 26, 2025. The drilling, logging, sampling, analysis and QAQC procedures used are considered suitable for the purposes of Mineral Resource estimation. QAQC results demonstrate acceptable accuracy, precision and contamination for assay data. Database verification carried out by the authors confirmed the integrity of the data contained in the electronic databases provided by Emerita.

25.3 Mineral Processing and Metallurgical Testwork

WAI has completed locked cycle tests (LCT) for each deposit, focused on conventional flotation of selective Cu, Pb and Zn concentrates. Emerita is investigating the use of a post-flotation process (PFP) for additional precious and base metal recovery from flotation tails. Laboratory-scale testwork has been conducted using the CLEVR Process® developed by Dundee Sustainable Technologies (DST). The LCT flotation results have been combined with indicative PFP recoveries, to develop overall metal recovery assumptions used in Mineral Resource estimation.

The CLEVR Process® is currently un-commercialised and will require significant additional testwork (already underway), and, ideally, a scoping study from DST, to finalise the conceptual circuit and confirm the indicative PFP recoveries. In addition, sample characteristics required pyrolysis, roasting and acid leaching prior to the CLEVR Process®. Further investigations will be required regarding the disposal of the arsenic trisulphide product from pyrolysis and the recovery of the acid-leached copper and zinc (e.g., using SX/EW).

As the flotation tailings will have to be filtered prior to the PFP process, conventional roasting and CIL is available as an alternative processing route, which has not been discounted by Emerita, although the testwork focus remains on a cyanide-free method via the CLEVR process®.



At this stage for the MRE, 100% metals payabilities have been assumed with no allowance for deleterious elements. Potential penalty elements variously include combined lead and zinc, fluorine, arsenic, mercury and antimony and the impact of these has not been fully explored at this stage of the project. Various penalties could apply to all three concentrates from all three deposits, although very high mercury levels are of particular concern. This will be fully investigated in the next stage of study and through further optimised testwork programmes.

25.4 Mineral Resource Estimation

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.

Mineral Resources are reported at calculated breakeven cut-off grades of 3.0% ZnEq for La Romanera and La Infanta, and 0.9% CuEq for El Cura. Cut-off grades are based on metal price, metallurgical recovery and preliminary operating cost assumptions, in line with underground mining and two stage mineral processing using selective copper-lead-zinc flotation and a post-flotation process. MRE reporting was further restricted to exclude blocks where equivalent grade fell below cut-off when diluted over a 3m minimum mining width.

The Mineral Resource estimates for the Iberian Belt West Project are classified in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014). As of February 26, 2025, the Indicated Mineral Resources are estimated to be 18.96Mt with average grades of 2.88% Zn, 1.42% Pb, 0.50% Cu, 66.0g/t Ag, 1.28g/t Au, for 8.44% ZnEq. Inferred Mineral Resources are estimated to be 6.80Mt with average grades of 3.25% Zn, 1.50% Pb, 0.73% Cu, 56.3g/t Ag, 0.77g/t Au, for 8.72% ZnEq.

Compared to the previous 2023 Mineral Resource estimate, this represents a +35% increase in total Indicated Resource tonnage and +44% increase in total Inferred Resource tonnage for the project. Resource growth has primarily been driven by additional drilling totalling 69 drillholes for 33,872m. Major additions include a maiden Mineral Resource estimate for El Cura and depth extensions to the La Romanera Mineral Resource. Both El Cura and depth extensions to La Romanera are relatively copper rich, contributing to pronounced increases in copper grade and contained metal for the project.



26 RECOMMENDATIONS

26.1 General

The authors recommend a preliminary economic assessment (PEA) is completed for the project, to inform the design of more detailed engineering studies (PFS). The cost estimate for a PEA is US\$150,000 to US\$300,000. The following actions are recommended as part of this next phase of study.

26.2 Mineral Processing and Metallurgical Testwork

- Continue testwork with Dundee Sustainable Technologies to optimise the parameters for the conceptual filtration, pyrolysis, roasting, acid leaching and CLEVR Process® flowsheet to treat the flotation tailings;
- This should include a scoping level assessment of the conceptual flowsheet, scoping level
 capital and operating cost estimates for the full flowsheet, confirmation of gold, silver, copper
 and zinc recoveries and reagent and consumables consumptions. This should also include the
 assumed SX/EW circuit or otherwise for the production of copper and zinc saleable products
 after the acid leaching stage;
- Investigation into alternative conventional processing methods of the refractory flotation tailings, i.e., filtration, roasting and CIL processing;
- Overall scoping level assessment of the viability of the Post-Flotation Process for gold and silver recovery (plus additional copper and zinc recovery);
- Continue testwork programmes to investigate the reduction of deleterious elements in the three base metals concentrates, either through hydrometallurgical leaching, retorting or other methods; and
- Details of the three base metals concentrates should be sent to prospective smelters to get
 an indication of payability and the impact of the deleterious elements in terms of penalties
 and particularly for mercury in terms of concentrate acceptability. This will also inform on the
 degree of deleterious element reduction required.

26.3 Exploration, Geology and Mineral Resources

- Continue resource development drilling at the existing IBW Project deposits;
- Develop project scale fault and lithostratigraphic 3D models;
- 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 routine QAQC protocol for density measurements; and
- Refine metallurgical recovery assumptions and develop payability assumptions based on the results of the recommended metallurgical testwork programmes.



27 REFERENCES

Almodóvar, G. R., Yesares, L., Sáez, R., Toscano, M., González, F., and Pons, J. M. (2019). Massive sulphide ores in the Iberian Pyrite Belt: Mineralogical and textural evolution. Minerals, 9(11), 653.

Azor, A. (2023). Preliminary report on the visit to the Romanera polymetallic sulphide project Andévalo, Huelva.

Barrie, C.T., and Hannington, M.D., 1999, Classification of volcanic-associated massive sulphide deposits based on host-rock composition, in Barrie, C.T., and Hannington, M.D., eds., Volcanic-associated massive sulphide deposits—Processes and examples in modern and ancient settings: Reviews in Economic Geology, v. 8. p. 1–11.

Conde, C. (2016). Geology and hydrothermal evolution of massive sulphides of the Iberian Pyrite Belt, Spain. Universidad de Salamanca, Facultad de Ciencias, Departamento de Geología.

Deere, D.U. & Deere, D.W. (1988). The Rock Quality Designation (RQD) Index in Practice, Rock Classification System for Engineering Purpose. ASTM STP. 984. 91-101.

Donaire, T., Sáez, R. and Pascual, E. (1998). Geology and magmatic evolution of the Paymogo volcanic axis. Geogaceta 24.

Donaire, T., Pascual, E., Saez, R., and Toscano, M. (2020). Facies architecture and palaeoenvironmental constraints of subaqueous felsic volcanism in the Iberian Pyrite Belt: The Paymogo Volcano-Sedimentary Alignment. Journal of Volcanology and Geothermal Research, 405, 107045.

Mining.com. (2025). Sponsored Content: Dundee Sustainable Technologies partners with top gold miners on groundbreaking non-cyanide mineral extraction. https://dundeetechnologies.com/s/DundeeTechnologies/sg/Dundee%20Sustainable%20Technologies%20partners%20with%20top%20g old%20miners%20on%20groundbreaking%20non-cyanide%20mineral%20extraction%20-%20MINING.COM.pdf

Mining.com. (2023). JV Article: Dundee's novel processing techs address cyanide and arsenic risks. https://www.mining.com/joint-venture/jv-article-dundees-novel-processing-techs-address-cyanide-and-arsenic-risks/#:~:text=The%20process%20has%20received%20ISO,yields%20on%20the%20same %20samples

Emerita Resources Corporation (2024). https://www.emeritaresources.com/news-and-media/news-releases/emerita-achieves-strong-metallurgical-results-from-ongoing-testing-program-at-la-romanera-deposit-including-643-gold-recovery

ESGold Corp. (2025). ESGold Reports over 90.9% Gold Recovery Using Dundee Sustainable Technologies Non-Cyanide CLEVR Process(TM) on Montauban Project Stockpiled Tailings. https://www.newsfilecorp.com/release/243569/ESGold-Reports-over-90.9-Gold-Recovery-Using-Dundee-Sustainable-Technologies-NonCyanide-CLEVR-ProcessTM-on-Montauban-Project-StockpiledTailings#:~:text=ESGold%20and%20DST%20are%20now,in%20the%20next%20phase%20include

Franklin, J.M., Gibson, H.L., Jonasson, I.R., and Galley, A.G. (2005). Volcanogenic massive sulphide deposits, in Hedenquist, J.W., Thompson, J.F.H., Goldfarb, R.J., and Richards, J.P., eds., Economic

ZT61-2308/MM1830 Final V3.0 Page 127



Geology 100th anniversary volume, 1905–2005: Littleton, Colo., Society of Economic Geologists, p. 523–560.

Jesus, A., Munhá, J., Mateus, A., Tassinari, C. and Nutman, A. (2007). The Beja layered gabbroic sequence (Ossa–Morena Zone, Southern Portugal): geochronology and geodynamic implications. Geodinamica Acta, 20, 139-157.

Leistel, J.M., Marcoux, E., Thieblemont, D., Quesada, C., Sánchez, A., Ruiz de Almodovar, G., Pascual, E. and Sáez, R. (1998). The volcanic-hosted massive sulphide deposits of the Iberian Pyrite Belt. Min. Dep., 33, 2-30.

Moreno, C. (1993). Postvolcanic paleozoic of the Iberian Pyrite Belt: An example of basin morphologic control on sediment distribution in a turbidite basin. Journal Sedimentary Petrology, 63, 1118-1128.

Moreno, C., Sierra, S. & Sáez, R. (1996). Evidence for catastrophism at the Famennian–Dinantian boundary in the Iberian Pyrite Belt. In: Strogen, P., Somervilee, I.D., Jones, G.L. (Eds.), Recent Advances in Lower Carboniferous Geology, Special Publication-Geological Society of London, vol. 107, 153-162.

Mendes, M., Pereira, Z., Vaz, N., Díez-Montes, A., Matos, J. X., Albardeiro, L., ... and Chew, D. (2022). A new approach to palynostratigraphy of the middle–late Famennian Gafo Formation, southern sector of the Pulo do Lobo Domain, SW Iberia (Portugal and Spain). Geological Magazine, 159(8), 1454-1470.

Oliveira, J. T., Quesada, C., Pereira, Z., Matos, J. X., Solá, A. R., Rosa, D., ... and Relvas, J. M. R. S. (2019). South Portuguese Terrane: a continental affinity exotic unit. The Geology of Iberia: A Geodynamic Approach: Volume 2: The Variscan Cycle, 173-206.

Quesada, C. (1991). Geological constraints on the Paleozoic tectonic evolution of tectonostratigraphic terranes in the Iberian Massif. Tectonophysics, 185(3-4), 225-245.

Quesada, C. (1998). A reappraisal of the structure of the Spanish segment of the Iberian Pyrite Belt. Mineralium Deposita 33, pp. 31–44.

Quesada, C., Fonseca, P. E., Munhá, J., Oliveira, J. T., and Ribeiro, A. (1994). The Beja-Acebuches Ophiolite (Southern Iberia Variscan fold belt): geological characterization and geodynamic significance. Boletín Geológico y Minero, Vol.105, 3-49.

Ribeiro, A., Quesada, C. and Dallmeyer, R.D. (1990). Geodynamic evolution of the Iberian of the Iberian Massif. In Dallmeyer, R.D., and Martínez García, E., (Eds.), Pre-Mesozoic Geology of Iberia: Springer-Verlag, Berlin Heidelberg New York, 399-409.

Shanks, W.C. Pat, III, and Thurston, R., eds., 2012. Volcanogenic massive sulphide occurrence model: U.S. Geological Survey Scientific Investigations Report 2010–5070–C, 345 p.

Schermerhorn, L.J.G., (1971). An outline of the stratigraphy of the Iberian Pyrite Belt. Boletín Geológico y Minero 82, 239-268.

Silva, J. B. (1989). Accreted terranes in southern Iberia: correlations between South Portuguese and Pulo do Lobo terranes (Iberian Variscan belt). Int. Geol. Correlation Program, Univ. of Ga., Athens, Ga., USA. 101-105.



Silva, J.B., Oliveira, J.T. and Ribeiro, A. (1990). Structural outline of the South Portuguese Zone. In: Pre-Mesozoic Geology of Iberia. Dallmeyer, R.D., Martínez García, E. (edit.). Springer Verlag, 348-362.

Tornos, F. (2006). Environment of formation and styles of volcanogenic massive sulphides: The Iberian Pyrite Belt. Ore Geology Reviews, 28(3), 259-307.

Tornos, F. & Heinrich, C.A. (2008). Shale basins, sulfur-deficient ore brines, and the formation of exhalative base metal deposits. Chemical Geology 247, 195-207.

Tornos, F., López Pamo, E. and Sánchez España, F.J. (2009). Iberian Pyrite Belt in: Spanish Geological Frameworks and Geosites: An Approach to Spanish Geological Heritage of International Relevance. A. García Cortés, ed. pr.; J. Águeda Villar, J. Palacio Suárez-Valgrande, C.I. Salvador González, eds. - Madrid: Instituto Geológico y Minero de España, 2009, pp. 56-64



CERTIFICATE OF QUALIFIED PERSON

I, Frank Browning, MSci, MSc, PGCert, FGS, CGeol as an author of this report titled "NI 43-101 Technical Report on the Iberian Belt West Project, Spain" dated April 30, 2025, and with an effective date of February 26, 2025, do hereby certify that:

- I am a Principal Resource Geologist with Wardell Armstrong International (part of SLR), 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 (MSci 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 in the Iberian Pyrite Belt.
- 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, La Infanta and El Cura deposits on February 10 to February 12, 2025.
- I am the co-author of this report and responsible for Sections: 1.3, 1.4, 1.5, 1.7, 1.8.2, 7, 9, 10, 11, 12, 14, 25.2, 25.4 and 26.3.
- I am independent of the issuer, Emerita Resources Corp., as defined by Section 1.5 of NI 43-101.
- My prior involvement with the Iberian Belt West Project includes acting as qualified person for Sections 1.8 and 14 of the technical report titled "NI 43-101 Technical Report on the La Romanera and La Infanta Polymetallic Deposits, Spain" with an effective date of July 5, 2023.
- 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 30th day of April, 2025.

(Signed & Sealed) Frank Browning

Frank Browning MSci, MSc, PGCert, FGS, CGeol



CERTIFICATE OF QUALIFIED PERSON

I, Alan Clarke, EurGeol, CGeol, BSc, MSc, MCSM, FGS, as an author of this report titled "NI 43-101 Technical Report on the Iberian Belt West Project, Spain" dated April 30, 2025, and with an effective date of February 26, 2025, do hereby certify that:

- I am a Technical Director (Geology) with Wardell Armstrong International (part of SLR), 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 of Edinburgh in the United Kingdom (BSc Geology, 2002) and Camborne School of Mines (University of Exeter) in the United Kingdom (MSc Mining Geology, 2003). I have practiced my profession continuously since 2003 and have estimated and audited Mineral Resources for a variety of commodities, including polymetallic massive sulphide deposits in the Iberian Pyrite Belt.
- 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 (# 1014124).
- I have not personally inspected the Iberian Belt West Project.
- I am the co-author of this report and responsible for Sections: 1.1, 1.2, 1.8.1, 2, 3, 4, 5, 6, 8, 23, 24, 25.1 and 26.1.
- I am independent of the issuer, Emerita Resources Corp., as defined by Section 1.5 of NI 43-101.
- I have had no prior involvement with the Iberian Belt West Project that is 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 30th day of April, 2025.

(Signed & Sealed) Alan Clarke

Alan Clarke EurGeol, CGeol, BSc, MSc, MCSM, FGS



CERTIFICATE OF QUALIFIED PERSON

I, James Turner, ACSM, MCSM, BSc (Hons), MSc, CEng, MIMMM, as an author of this report titled "NI 43-101 Technical Report on the Iberian Belt West Project, Spain" dated April 30, 2025, and with an effective date of February 26, 2025, do hereby certify that:

- I am a Technical Director (Mineral Processing) with Wardell Armstrong International (part of SLR), 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 Camborne School of Mines (University of Exeter) in the United Kingdom (BSc Minerals Engineering, 1984 and MSc Minerals Engineering, 1993). I have practiced my profession continuously since 1984 and have extensive experience specialising in gold CIP/CIL/heap/dump leaching and base metal gravity and flotation processes, including laboratory testwork, process design and operations.
- 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 Institute of Materials, Minerals & Mining (# 0046967) and Chartered Engineer with the Engineering Council.
- I have not personally inspected the Iberian Belt West Project.
- I am the co-author of this report and responsible for Sections: 1.6, 1.8.3, 13, 25.3 and 26.2.
- I am independent of the issuer, Emerita Resources Corp., as defined by Section 1.5 of NI 43-101.
- I have had no prior involvement with the Iberian Belt West Project that is 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 30th day of April, 2025.

(Signed & Sealed) James Turner

James Turner, ACSM, MCSM, BSc (Hons), MSc, CEng, MIMMM

wardell-armstrong.com

STOKE-ON-TRENT

Sir Henry Doulton House Forge Lane **Etruria** Stoke-on-Trent ST1 5BD Tel: +44 (0)1782 276 700

BIRMINGHAM

Two Devon Way Longbridge Technology Park Longbridge Birmingham B31 2TS Tel: +44 (0)121 580 0909

BOLTON

41-50 Futura Park Aspinall Way Middlebrook Bolton BL6 6SU Tel: +44 (0)1204 227 227

BRISTOL

3rd Floor **Brew House** Jacob Street **Tower Hill** Bristol BS2 OEQ Tel: +44 (0)117 203 4477

BURY ST EDMUNDS

Armstrong House Lamdin Road Bury St Edmunds Suffolk **IP32 6NU** Tel: +44 (0)1284 765 210

CARDIFF

Tudor House 16 Cathedral Road Cardiff CF119LJ

Tel: +44 (0)292 072 9191

CARLISLE

Marconi Road **Burgh Road Industrial Estate** Carlisle Cumbria CA2 7NA Tel: +44 (0)1228 550 575

EDINBURGH

The Tun 4 Jackson's Entry Edinburgh EH8 8PJ

Tel: +44 (0)131 555 3311

GLASGOW

24 St Vincent Place Glasgow G1 2EU Tel: +44 (0)141 428 4499

LEEDS

36 Park Row Leeds LS1 5JL

Tel: +44 (0)113 831 5533

LONDON

Summit House 12 Red Lion Square London WC1R 4QH Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE

City Quadrant 11 Waterloo Square Newcastle upon Tyne NE1 4DP Tel: +44 (0)191 232 0943

TRURO

Baldhu House Wheal Jane Earth Science Park Baldhu Truro TR3 6EH Tel: +44 (0)187 256 0738

International office:

ALMATY

29/6 Satpaev Avenue Hyatt Regency Hotel Office Tower Almaty Kazakhstan 050040

Tel: +7(727) 334 1310

