

# EMERITA ACHIEVES STRONG METALLURGICAL RESULTS FROM ONGOING TESTING PROGRAM AT LA ROMANERA DEPOSIT INCLUDING 64.3% GOLD RECOVERY

TORONTO, December 20, 2024 -- Emerita Resources Corp. (TSX – V: EMO; OTCQB: EMOTF; FSE: LLJA) (the "Company" or "Emerita") is pleased to provide results from its ongoing metallurgical testing program (the "Program") for La Romanera deposit for base and precious metals on its wholly-owned Iberian Belt West Project ("IBW" or the "Project"). La Romanera and El Cura deposits are unique in the Iberian pyrite belt in that they have significantly elevated gold values and it has been a key objective of the Emerita technical team to develop a process that will maximize the gold recoveries. A two-stage process has now been identified that provides excellent recoveries.

- 1. Stage 1: Conventional flotation a process to produce 3 sellable concentrates (zinc, lead and copper) as described in news release dated October 31, 2024.
- 2. Stage 2: Post Flotation Process (PFP) a pyrometallurgical process applied to the residual material after flotation, followed by a leaching process to recover the remaining gold, silver, copper and zinc. There are several common thermal technologies available, (roasting was used in this test) that break down the pyrite and arsenopyrite crystal structures and allow for leaching and recovery of the gold, silver and additional base metals. Stage 2 has demonstrated a particularly positive impact on total estimated gold recoveries for La Romanera mineralization.

The testing was completed in collaboration with Wardell Armstrong International in the United Kingdom and with Dundee Sustainable Technologies Inc. of Quebec, Canada. The PFP test was carried out on MET-1, a high gold grade sample from La Romanera deposit. These test results combined with results from the conventional Stage 1 have yielded excellent overall recoveries (See Table 1).

Table 1: Two stage metallurgical recoveries (conventional flotation plus PFP) for La Romanera deposit.

	Zn	Pb	Cu	Ag	Au
	%Recovery	%Recovery	%Recovery	%Recovery	%Recovery
Stage 1 - Flotation	79.6%	49.9%	60.7%	46.8%	12.5%
Stage 2 Post Flotation Process	11.7%		25.1%	33.7%	51.8%
Overall Recovery	91.3%	49.9%	85.8%	80.5%	64.3%

Table 1: experimental results obtained in post-flotation MET-1

Based on the MET-1 results, a total gold recovery of 64.3% has been estimated for the entire La Romanera deposit.

This estimated recovery value is expected to represent the lower limit of what the PFP could achieve. Testing of this post flotation process flow sheet will continue as project engineering accelerates. The results from the PFP recoveries tests will be included in mineral resource estimates (MRE) and future economic analysis and will be part of the plant design fine tuning and expected trade off study analysis.





Figure 1: Stacked bar chart showing the flotation recovery results for Met-1 from conventional flotation and PFP.

### **About the Post Flotation Process**

The Post Flotation Process (PFP) is fed with material remaining after the selective flotation of base metals to produce zinc, copper and lead concentrates. The Post Flotation Process commences with a conventional, well-established thermal treatment process that eliminates sulfur and deleterious elements, there are numerous commercial solutions for this. This feeds into a Hydrometallurgical Treatment, that includes the dissolution of the base metals oxidised in the thermal process with dilute acid followed by hypochlorite brine gold leaching by CLEVR<sup>™</sup> to recover precious metals using a cyanide free process.

The Post Flotation Process offers several advantages: It allows for the maximization of base metals recoveries (Zn, Cu) and precious metals recoveries (Au, Ag), while minimizing waste products. The waste from this process is not acid generating and is suitable for use as backfill in the mine significantly reducing the environmental footprint.

CLEVR<sup>™</sup> is a non-cyanide leaching gold process that the Company has been evaluating with Dundee Sustainable Technologies Inc. A non-cyanide leaching process is a more environmentally friendly option. Emerita's vision for the IBW Project is a mining project that adheres to the highest environmental standards should it reach a production decision.

Jorge Blanco, Director of Metallurgy for Emerita, comments, "We are very pleased with the progress using the CLEVR<sup>™</sup> technology. As our testing has progressed, we have continued to improve on the gold recovery for La Romanera mineralization to realize our objective of maximizing La Romanera deposit's value. In addition, this process would also gather much of the copper and zinc that was not collected in the initial flotation process. We are continuing to test other technologies with the aim of identifying the most efficient and optimal solution tomaximize the value recovery at La Romanera while minimizing the overall environmental impact at the IBW Project."

Petrographic analyses with Laser ICP-MS studies of IBW's tailings has shown that 60% of the gold is associated with arsenopyrite with an average grade of 96 g/t Au in the arsenopyrite. Arsenopyrite only comprises 2.3% of total tailings mass. This makes the tailings an attractive target for metallurgical extraction.



Joaquin Merino, P.Geo., President of Emerita, comments, "Emerita is exploring the PFP metallurgical process in order to optimize the value of IBW's continuously expanding mineral resources by incorporating environmentally friendly technologies. The results could significantly derisk the Project and enhance value as we move forward. We have already begun a second round of testing, the results of which are expected in Q1, 2025. We are very encouraged by what we have achieved to date."

Emerita is continuing tests to optimize the metallurgy for the IBW Project with the following work programs in progress:

- **Optimized gold recovery**; As part of ongoing project engineering, additional composite samples are being tested to fully understand metal recoveries across the grade ranges of La Romanera and El Cura and to fully optimize the process.
- **Pyrite-Arsenopyrite separation tests**; because most of the gold is associated with the arsenopyrite fraction of the sulphides, Emerita has been exploring separating arsenopyrite from pyrite to produce an arsenopyrite concentrate. Results expected end-Q1 2025.
- **Cleaning Zinc and Copper concentrates**; "cleaning" tests to remove elements such as As, Sb and Hg from the Cu and Zn concentrates are in progress to enhance the value. Two methods are being explored; sulphate leaching, and alkaline leaching. Sulfate leaching test results are expected by the end of December 2024 and alkaline leaching test results are expected in February 2025.

Following completion of this work, Emerita will define the flow sheet for optimal treatment of gold-rich mineralization comprising the IBW project.

Emerita's metallurgical testing has been conducted under the guidance of Jorge Blanco, Emerita's Director of Metallurgy, in collaboration with Wardell Armstrong International for the flotation testing, and with Dundee Sustainable Technologies Inc. out of Quebec, Canada for the CLEVR<sup>™</sup> testing.

In addition to the work reported above, a representative sample from the Company's El Cura deposit has been sent to Wardell Armstrong to commence metallurgical testing to determine the base and precious metal recoveries for this deposit. El Cura was not included in the Company's NI 43-101 Mineral Resource Estimate ("MRE") for the IBW Project (effective May 4, 2023; see Company's press release dated May 23, 2023). The Company expects to publish an updated MRE in Q1 2025 which will reflect the ongoing successful drill results for El Cura.

## **Qualified Person**

Scientific and technical information in this news release has been reviewed and approved by each of Joaquin Merino, P.Geo., President of the Company and. Jorge Blanco, MChem., Director of Metallurgy of the Company and each a Qualified Person as defined by NI 43-101.

### About Emerita Resources Corp.

Emerita is a natural resource company engaged in the acquisition, exploration, and development of mineral properties in Europe, with a primary focus on exploring in Spain. The Company's corporate office and technical team are based in Sevilla, Spain with an administrative office in Toronto, Canada



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### **Cautionary Note Regarding Forward-looking Information**

This press release contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, without limitation, statements regarding the prospectivity of the IBW Project, metallurgical results and the timing thereof, the mineralization and the IBW Project, the economic viability of the IBW project, the Company's ability to establish a mineral resource estimate at El Cura, the Company's future exploration plans and the Company's future plans. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward- looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of Emerita, as the case may be, to be materially different from those expressed or implied by such forward-looking information, including but not limited to: general business, economic, competitive, geopolitical and social uncertainties; the actual results of current exploration activities; risks associated with operation in foreign jurisdictions; ability to successfully integrate the purchased properties; foreign operations risks; and other risks inherent in the mining industry. Although Emerita has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information. Emerita does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

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