

## **Emperor Metals Reports Positive Metallurgical Results from Initial Testing on the Duquesne West Gold Deposit**

Vancouver, British Columbia, November 19, 2024 – [Emperor Metals Inc. \(“Emperor”\)](#) (CSE: [AUOZ](#), OTCQB: [EMAUF](#), FSE: [9NH](#)) is pleased to share initial metallurgical testing results from drilling intercepts in the 2023 drilling program. The drill core samples were collected from the Duquesne West Project, located on Highway 393, just 20 km north of Rouyn, Quebec, in a Tier 1 district.

### **Highlights:**

- Initial metallurgical testing commenced in 2024 and focused on both the replacement style mineralization and low-grade bulk tonnage style mineralization within the Quartz-Feldspar Porphyry (QFP). A total of 5 composites were gathered, by collecting 87 original drill core composites thorough key mineralized zones. These composites comprised approximately 73.4 metres of drill core with a combined weight of 168 kilograms.
- Weighted average gold extraction ranged from 90 to 100% in the Replacement Style Mineralization.
- Average of all samples was 90%. This average included a sample within the low-grade QFP related mineralization of 76% recovery; probably due to its nugget effect in the interval tested.
- Deleterious elements that consume both cyanide and oxygen are not present in quantities to be an issue for future metallurgical processes.

CEO John Florek commented: *“We are quickly building confidence that Duquesne West has key attributes for successful future extraction. As we continue to explore, expand, and discover the full potential of this deposit, we are very encouraged about our upcoming mineral resource estimate expected in Q1 of 2025.”*

### **Process**

The cyanide leach process monitors gold extraction efficiencies in metallurgical applications.

These initial results were produced by SGS Laboratory using an accelerated cyanide leach techniques to determine bulk leachable gold in our exploration samples using modified cyanide leach (Leachwell™). This Leachwell™ tab product method is a proprietary and patented process. The large sample is mixed with water and Leachwell™ tabs and tumbled.

This test work confirmed that the mineralization from Duquesne West can be processed using conventional gravity separation and carbon-in-leach (CIL) technology.”

## Results

The replacement-style ore in DQ23-01, 02, and 05 showed very consistent recovery (over 90% with an average of 92%). This result aligns with the typical characteristics of this type of mineralization, which is known for its good homogeneity over several meters, both visually and chemically.

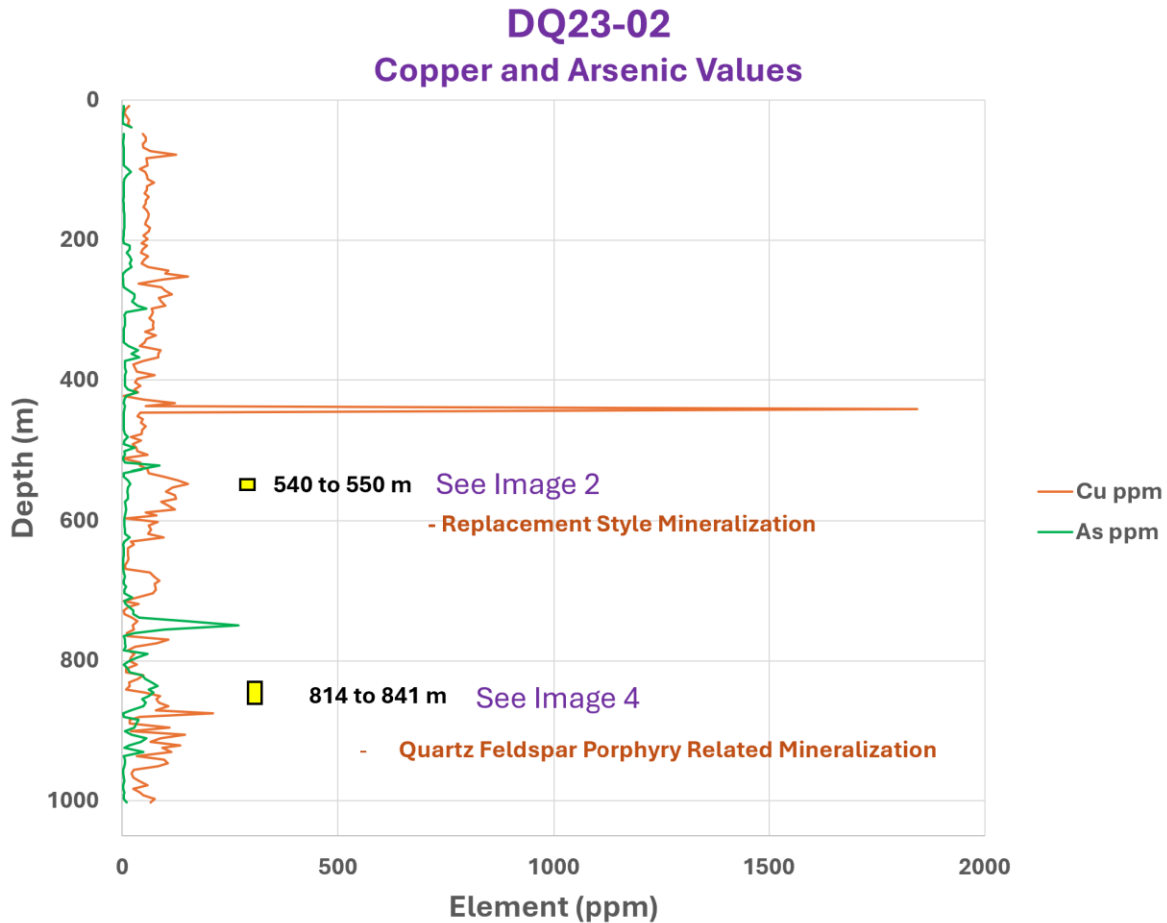
Quartz Feldspar Porphyry (QFP) related mineralization recovery varied, ranging from 76% to 100%. The variability is likely due to lower-grade gold values and the nuggetty nature of gold in this rock type. Larger sample sizes would be needed to better account for this variability. Despite the variability, the average recovery for the samples submitted to the lab was a reasonable 88%.

We are also very encouraged about low values of potentially detrimental elements in the mineralization, which consume oxygen and cyanide during metallurgical recovery. Figure 1 shows the low values of Copper (Cu) and Arsenic (As) in a representative drill-hole which encountered both the replacement style mineralization and the quartz-feldspar porphyry related mineralization.

By having low concentrations of these potentially harmful elements, the deposit becomes more favorable for efficient and cost-effective processing, with reduced need for expensive treatments or additional steps to manage these issues. This often results in a more straightforward, cleaner, and economically viable extraction process.

Samples (Hole ID)	CN (Au ppm)	Fire Assay (Au ppm)	Thickness (m)	Recovery
<sup>R</sup> DQ23-01	5.12	5.63	11.7	91%
<sup>R</sup> DQ23-02	3.58	3.97	10.65	90%
<sup>Q</sup> DQ23-02	1.21	1.59	27	76%
<sup>R</sup> DQ23-05	14.87	15.85	10.8	94%
<sup>Q</sup> DQ23-09	3.76	3.75	13.2	100%
R: Replacement Style Mineralization Q: Quartz Feldspar Porphyry Related Mineralization				

**Table 1:** Results of the bulk leachable gold using modified cyanide (CN) leach vs Fire Assay to determine recovery.



**Figure 1:** Graph displays low levels of Copper (Cu) and Arsenic (As) values. These are element that are detrimental to oxygen and cyanide consumption during cyanide extraction processes.

### **Replacement Style Mineralization:**

The high-grade replacement-style mineralization achieved an average recovery of 92%.

This result was observed in DQ23-01, 02, and 05, with mineralization displaying:

- Complete replacement by quartz-ankerite-sericite-pyrite.
- Partial replacement in breccia zones.

The uniformity of both grade and thickness over the intervals makes this type of mineralization highly suitable for mining scenarios.

Images 1 to 3 illustrate these zones.

### **Quartz Feldspar Porphyry Related Mineralization**

DQ23-02 and DQ23-09 represent a Quartz Feldspar Porphyry (QFP) related style of mineralization.

This style of mineralization achieved an average recovery of 88%, but recovery ranged from 76% to 100%.

The mineralized QFP is characterized by sericite and quartz alteration, with sulfide disseminations in the host rock and quartz veins in higher-grade portions. Gold occurs in both the altered host rock and the quartz veins. This mineralization style is broad and pervasive compared to others.

The mineralization discussed is lower grade compared to Replacement-Style Mineralization but equally important as the high-grade mineralization characterized by offering several key points:

- 1) **Economic Significance:** Despite the lower grade, it's equally important for mining economics. Its broad intervals, such as a 25-meter section grading 1.7 grams per tonne (g/t) of gold (Au), contribute to the overall value. Image 4 shows this intercept (press release September 12, 2023).
- 2) **Operational Benefits:** This type of broad mineralization can reduce stripping ratios, which are the amounts of non-valuable material that must be removed to access the mineralized ore.
- 3) **Added Value:** It adds previously overlooked, incremental ounces to the deposit, enhancing the project's viability.



**Image 1:** Replacement Style Mineralization, DQ23-01 recovery was **91%** from 11.7 m of 5.6 g/t Au





**Image 2:** Replacement Style Mineralization, DQ23-02 recovery was **90%** from 10.65 m of 4.0 g/t Au (Includes 5.0 m of 5.3 g/t Au)

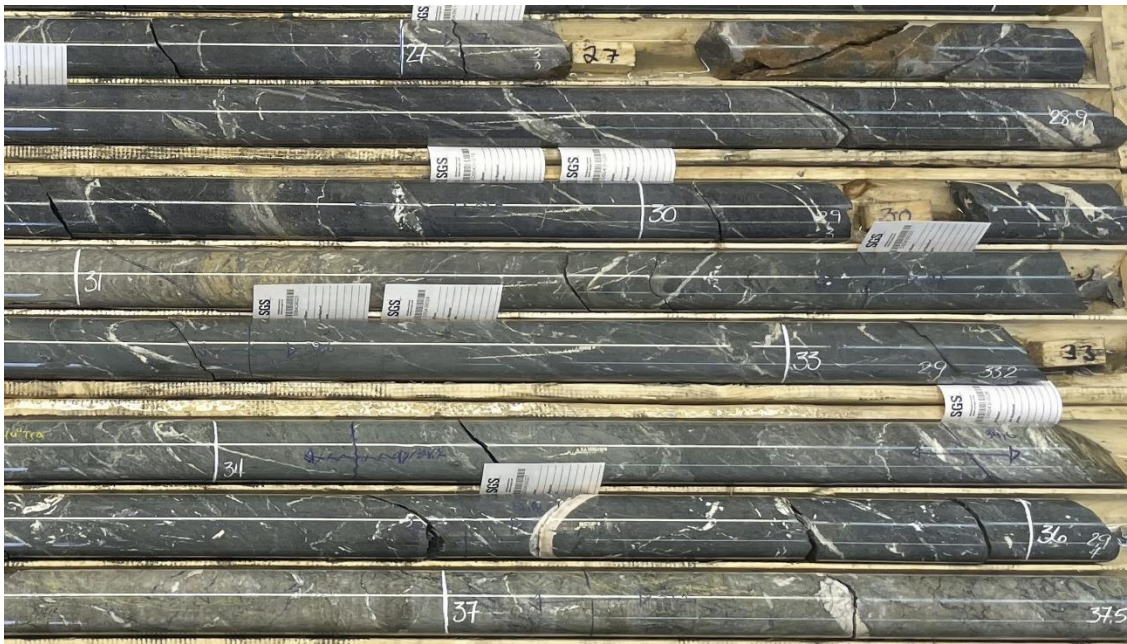


**Image 3:** Partial Replacement Style Mineralization, DQ23-05 recovery was **94%** from 10.8 m of 15.9 g/t Au.





**Image 4:** Quartz-Feldspar Porphyry Related Mineralization, DQ23-02 recovery was **76%** from 25.0 m of 1.7 g/t Au.



**Image 5:** Quartz-Feldspar Porphyry Related Mineralization, DQ23-09 recovery was **100%** from 13.2 m of 3.8 g/t Au.

### Program Objectives

The 2024 season is a multifaceted program designed to test several scenarios to add ounces and/or

expand the footprint:

- 1) **Explore Lower Grade Discoveries:** Target additional discoveries within the host rock containing high-grade gold lenses, focusing on the conceptual open-pit model.
- 2) **Increase the Thickness of the High-Grade Lenses:** Incorporate previously unaccounted lower-grade gold from the margins of high-grade lenses to enhance their overall thickness.
- 3) **Expand Mineralized Zones:** Extend the lateral footprint of mineralized zones along strike and dip.
- 4) **Discover New Zones:** Explore potential new zones not yet included in the Conceptual Open Pit Model, with a particular focus on eastward expansion.

Emperor Metals is positioned to significantly expand its resource base with drill testing. **A mineral resource update is scheduled for Q1 of 2025**, reflecting the results of the ongoing exploration program.

### **Quality Assurance and Control**

The Quality Assurance and Quality Control (QAQC) was conducted by Technominex, a geological contractor hired by Emperor Metals, which adheres to CIM Best Practices Guidelines for exploration related activities conducted at its facility in Rouyn Noranda, Quebec. The QA/QC procedures are overseen by a Qualified Person on site.

Emperor Metals QA/QC protocols are maintained through the insertion of certified reference material (standards), blanks and lab duplicates within the sample stream totaling approximately one QA/QC sample per 7 samples. Drill core is cut in-half with a diamond saw, with one-half placed in sealed bags with appropriate tags and shipped to the SGS Sudbury laboratory and the other half retained on site in the original core box. A dispatch list consists of 88 or 176 samples along with their corresponding QA/QC samples for a single batch. This allows complete batches (88 samples) for fire assay. A file for sample tracking records tags used and weights of sample bags shipped to the SGS Lakefield. Shipment is done by Manitoulin Transport and coordination by Technominex staff in Rouyn-Noranda.

The third-party laboratory, SGS prep laboratory in Sudbury Ontario, processes the shipment of samples using standard sample preparation (code PRP91) and produces pulps from the specified samples. The pulps are then sent off to SGS Burnaby for analysis. Chain of custody is maintained from the drill to the submittal into the laboratory preparation facility all the way to analysis at the SGS Burnaby B.C. laboratory.

Analytical testing is performed by SGS laboratories in Burnaby, British Columbia. The entire sample is crushed to 75% passing 2mm, with a split of 500g pulverized to 85% passing 75 microns. Samples are then analyzed using Au - ore grade 50g Fire Assay, ICP-AES with reporting limits of 0.01 -100 part per million (ppm). High grade gold analysis based on the presence of visible gold or a fire assay result exceeding 100 ppm, are analyzed by Au - metallic screening, 1kg screened to 106µm, 50g fire assay, gravimetric, AAS or ICP-AES of entire plus fraction and duplicate analysis of minus fraction. Reporting limit 0.01ppm.

## **About the Duquesne West Gold Project**

The Duquesne West Gold Property is located 32 km northwest of the city of Rouyn-Noranda and 10 km east of the town of Duparquet, Quebec, Canada. The property lies within the historic Duparquet gold mining camp in the southern portion of the Abitibi Greenstone Belt in the Superior Province.

Under an Option Agreement, Emperor agreed to acquire a 100% interest in a mineral claim package comprising 38 claims covering approximately 1,389 ha, located in the Duparquet Township of Quebec (the “Duquesne West Property”) from Duparquet Assets Ltd., a 50% owned subsidiary of Globex Mining Enterprises Inc. (GMX-TSX). For further information on the Duquesne West Property and Option Agreement, see Emperor’s press release dated Oct. 12, 2022, available on SEDAR.

The Property hosts a historical inferred mineral resource estimate of 727,000 ounces of gold at a grade of 5.42 g/t Au.<sup>1,2</sup> The mineral resource estimate predates modern Canadian Institute of Mining and Metallurgy (CIM) guidelines and a Qualified Person on behalf of Emperor has not reviewed or verified the mineral resource estimate, therefore it is considered historical in nature and is reported solely to provide an indication of the magnitude of mineralization that could be present on the property. The gold system remains open for resource identification and expansion.

A reinterpretation of the existing geological model was created using AI and Machine Learning. This model shows the opportunity for additional discovery of ounces by revealing gold trends unknown to previous workers and the potential to expand the resource along significant gold-endowed structural zones.

Multiple scenarios exist to expand additional resources which include:

- 1) Underground High-Grade Gold.
- 2) Open Pit Bulk Tonnage Gold.
- 3) Underground Bulk Tonnage Gold.

<sup>1</sup> Watts, Griffis, and McOuat Consulting Geologists and Engineers, Oct. 20, 2011, Technical Report and Mineral Resource Estimate Update for the Duquesne-Ottoman Property, Quebec, Canada, for XMet Inc.

<sup>2</sup> Power-Fardy and Breede, 2011. The Mineral Resource Estimate (MRE) constructed in 2011 is considered historical in nature as it was constructed prior to the most recent CIM standards (2014) and guidelines (2019) for mineral resources. In addition, the economic factors used to demonstrate reasonable prospects of eventual economic extraction for the MRE have changed since 2011. A qualified person has not done sufficient work to consider the MRE as a current MRE. Emperor is not treating the historical MRE as a current mineral resource. The reader is cautioned not to treat it, or any part of it, as a current mineral resource.

## **Grant of Options**

Subject to regulatory approval, the Company has granted 2.4 million options to its directors, officers and consultants, exercisable for five years at a price of \$0.10.



## **QP Disclosure**

The technical content for the Duquesne West Project in this news release has been reviewed and approved by John Florek, M.Sc., P.Geol., a Qualified Person pursuant to CIM guidelines.

## **About Emperor Metals Inc.**

Emperor Metals Inc. is an innovative Canadian mineral exploration company focused on developing high-quality gold properties situated in the Canadian Shield. For more information, please refer to SEDAR ([www.sedar.com](http://www.sedar.com)), under the Company's profile.

ON BEHALF OF THE BOARD OF DIRECTORS

*s/ "John Florek"*

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The Canadian Securities Exchange has not approved nor disapproved the content of this press release.

## **Cautionary Note Regarding Forward-Looking Statements**

Certain statements made and information contained herein may constitute "forward-looking information" and "forward-looking statements" within the meaning of applicable Canadian and United States securities legislation. These statements and information are based on facts currently available to the company and there is no assurance that the actual results will meet management's expectations. Forward-looking statements and information may be identified by such terms as "anticipates," "believes," "targets," "estimates," "plans," "expects," "may," "will," "could" or "would."

Forward-looking statements and information contained herein are based on certain factors and assumptions regarding, among other things, the estimation of mineral resources and reserves, the realization of resource and reserve estimates, metal prices, taxation, the estimation, timing and amount of future exploration and development, capital and operating costs, the availability of financing, the receipt of regulatory approvals, environmental risks, title disputes and other matters. While the company considers its assumptions to be reasonable as of the date hereof, forward-looking statements and information are not guarantees of future performance and readers should not place undue importance on such statements as actual events and results may differ materially from those described herein. The company does not undertake to update any forward-looking statements or information except as may be required by applicable securities laws.