ValOre Approves Phase 2 of Metallurgical Testwork for Pedra Branca PGE project in Brazil

09.02.2026 | GlobeNewswire

Program Underway in Partnership with the University of Cape Town Department of Chemical Engineering

ValOre Metals Corp. ("ValOre"; TSX-V: VO, OTCQB: KVLQF, Frankfurt: KEQ0; "the Company") today announced highlights of the Phase I metallurgical testwork ("Phase I Testwork") and the commencement of the second phase of the metallurgical testwork campaign ("Phase II Testwork"), in partnership with the University of Cape Town's Department of Chemical Engineering for its 100%-owned Pedra Branca Platinum Group Elements ("PGE", "2PGE+Au") Project ("Pedra Branca") in northeastern Brazil.

Metallurgical Testwork and Flowsheet Design

Phase II Testwork was recently approved by ValOre's board of directors, as part of the technical work program supporting the preparation of a Preliminary Economic Assessment ("PEA") for the Pedra Branca project, currently targeted for completion by the end of 2026. The metallurgical program is designed to expand upon the Phase I results and will focus on:

- Scaling up a novel bioleaching process being developed for the weathered mineralized material;
- Assessing the technical feasibility of low-capital-intensity heap leaching scenarios through column testing of weathered material;
- Evaluating the applicability of bioleaching to fresh mineralization; and
- Advancing conventional flotation and leaching testwork for fresh rock material representing primary mineralization typically found at depths below approximately 30 metres.

Testwork will be undertaken in parallel with, and will inform, ongoing process engineering and flowsheet development being carried out by Lycopodium (see news release dated December 22, 2025). Results from the Phase II metallurgical program will be incorporated into the planned PEA study.

Management Commentary

ValOre CEO, Nick Smart stated, "*The Phase II testwork now underway builds on the encouraging Phase I proof of concept work carried out by UCT's teams: Centre for Minerals Research ("CMR"), Centre for Bioprocess Engineering Research (CeBR) and Hydromet Research Group. Detailed mineralogical characterization identified that bioleaching pretreatment has the potential to improve PGE liberation from Pedra Branca weathered material prior to downstream recovery processes.*"

Bioleaching, which uses a consortium of naturally occurring bacteria, has found increasingly widespread application in minerals processing, and accounts for up to 20% of global copper production.[1] Bio pretreatment has been successfully applied to process refractory gold ores, producing over 36 million ounces of gold to date across 14 commercially operating gold mines.[2]

Nick Smart continued, *"Phase II Testwork will aim to validate and confirm the promising results indicated in Phase I at a larger scale and higher solids loading, in particular the potential of low-cost heap bioleaching and leaching as a viable processing method for the weathered PGE material. This testwork, in conjunction with the engineering work being carried out by Lycopodium aims to demonstrate the technical and economic potential of our near-surface PGE deposit at Pedra Branca, which hosts an inferred mineral resource of 2.2 million ounces of 2 PGE + Au grading 1.08 g/t 2PGE+Au in 63 million tonnes*."*

Summary of Results from Phase I Metallurgical Tests

ValOre announced the commencement of metallurgical testwork at UCT on September 9, 2024 (see news release dated September 9, 2024), focusing initially on detailed mineralogical characterization followed by conventional flotation testing. Final reports have been received from UCT for the Phase I program, with result highlights below:

- Mineralogical Characterization:
  - Comprehensive mineralogical analyses were completed, providing critical input for process design;
  - For fresh material, work focused on PGE speciation and liberation, supporting flotation circuit design;
  - For weathered material, work identified the refractory nature of the mineralization and highlighted the potential for bioleaching to improve PGE recoveries.
- Flotation Testing on Fresh Material:
  - Phase I flotation testing, and preliminary empirical circuit modelling, indicated potential palladium and platinum recoveries in the range of 70 - 80%, consistent with results from previous flotation testwork carried out in 2024 at Blue Coast Research (see news release dated September 9, 2024);
  - Further testwork will be required in subsequent study phases to validate grind size, reagent selection, and to optimize recoveries and mass pull.

- Flotation Testing on Weathered and Chromitite Material:
  - Phase I batch flotation tests on weathered material returned low recoveries across all conditions tested, confirming the refractory nature of this material.
  - Phase II testwork will therefore focus on the bio-oxidation and leaching processes for weathered mineralization;
- Evaluation of Leaching Alternatives for Weathered material:
  - Based on the mineralogical assessment, ValOre and UCT identified opportunities for leaching and bioleaching as complementary recovery routes, particularly for weathered mineralization.
  - Preliminary Phase I shake flask tests demonstrated that bioleaching is effective at increasing iron liberation, potentially enhancing PGEs liberation from silicate minerals on the weathered material;
  - Phase II testwork program is planned to validate the process at larger scale and higher pulp densities, evaluate the potential for heap leaching and develop PEA-level process flowsheets.

Why This Matters to Investors

Metallurgy is an important technical derisking step on the path to project development and future cashflow. Positive, independently verified metallurgical testwork results inform processing route selections, validate recovery and cost assumptions and underpin economic assumptions.

At Pedra Branca the focus of the testwork and engineering design is on development of a capital efficient, and effective PGE recovery process, suited to best realize the value of the deposit.

Sampling and Preparation

The Phase II metallurgical testwork program will be conducted on fresh and weathered composite samples derived from mineralized material selected from ValOre's recent Trado® auger drilling campaigns over the Esbarro deposit (see news release dated July 2, 2025), together with selected mineralized drill core intervals from twin diamond drill holes completed by ValOre at the Curiu deposit in 2021 (see news release dated October 4, 2021).

Sample material has been selected to be broadly representative of both weathered and fresh mineralization domains within the Esbarro and Curiu deposits. The samples are intended to be indicative only of the specific mineralization types tested and may not be representative of the overall mineral resource present within the Pedra Branca project area.

Head grade determination and chemical characterization of the composite samples were completed by SGS Geosol Laboratories Ltda. (SGS Brazil) prior to shipment of the prepared material to the University of Cape Town's Centre for Minerals Research (CMR), South Africa, for Phase II bioleaching and downstream metallurgical testwork.

The Esbarro and Curiu deposits host NI 43-101 compliant inferred mineral resources, as disclosed in ValOre's news release dated March 24, 2022, of 403,000 ounces grading 1.16 g/t 2PGE+Au in 10.8 million tonnes and 150,000 ounces grading 2.20 g/t 2PGE+Au in 2.1 million tonnes, respectively.

Qualified Person ("QP")
The technical information in this news release has been prepared in accordance with Canadian regulatory requirements set out in NI 43-101 and reviewed and approved by Thiago Diniz, P.Geo., ValOre's QP and Vice President of Exploration.

About ValOre Metals Corp.
ValOre Metals Corp. (TSX-V: VO, OTCQB: KVLQF, Frankfurt: KEQ0) is a Canadian company with a team aiming to deploy capital and knowledge on projects which benefit from substantial prior investment by previous owners, existence of high-value mineralization on a large scale, and the possibility of adding tangible value through exploration and innovation.

ValOre's Pedra Branca Platinum Group Elements Project comprises 45 exploration licenses covering a total area of 51,096 hectares (126,260 acres) in northeastern Brazil. At Pedra Branca, 7 distinct PGE+Au deposit areas host, in aggregate, a 2022 NI 43-101 inferred resource of 2.198 Moz 2PGE+Au contained in 63.6 Mt grading 1.08 g/t 2PGE+Au. ValOre's team believes the Pedra Branca project has significant exploration discovery and resource expansion potential. (CLICK HERE to download 2022 technical report* and CLICK HERE for news release dated March 24, 2022).

*The 2022 Technical Report is entitled "Independent Technical Report -Mineral Resource Update on the Pedra Branca PGE Project, Ceará State, Brazil" was prepared as a National Instrument 43-101 Technical Report on behalf of ValOre Metals Corp. with an effective date of March 08, 2022. The 2022 Technical Report by Independent qualified persons, Fábio Valério (P.Geo.) and Porfirio Cabaleiro (P.Eng.), of GE21, commissioned to complete the mineral resource estimate while Chris Kaye of Mine and Quarry Engineering Services Inc. (MQes), was commissioned to review the metallurgical information. The Mineral Resource estimates were prepared in accordance with the CIM Standards, and the CIM Guidelines, using geostatistical, plus economic and mining parameters appropriate to the deposit. Mineral Resources, which are not mineral reserves, do not have demonstrated economic viability, and may be materially affected by environmental, permitting, legal, marketing, and other relevant issues. Mineral Resources are based upon a cut-off grade of 0.4 g/t PGE+Au, correlated to Pd_eq grade of 0.35 g/t, and were limited by an economic pit built in Geovia Whittle 4.3 software and following the geometric and economic parameters as disclosed in the 2022 NI 43-101 Technical Report,

For further information about ValOre Metals Corp., or this news release, please visit our website at www.valoremetals.com or contact Investor Relations at 778-819-4484, or by email at contact@valoremetals.com.

ValOre Metals Corp. is a proud member of Discovery Group. For more information please visit: http://www.discoverygroup.ca/

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

This news release contains "forward-looking statements" within the meaning of applicable securities laws. Although ValOre believes that the expectations reflected in its forward-looking statements are reasonable, such statements have been based on factors and assumptions concerning future events that may prove to be inaccurate. These factors and assumptions are based upon currently available information to ValOre. Such statements are subject to known and unknown risks, uncertainties and other factors that could influence actual results or events and cause actual results or events to differ materially from those stated, anticipated or implied in the forward-looking statements. A number of important factors including those set forth in other public filings could cause actual outcomes and results to differ materially from those expressed in these forward-looking statements. Factors that could cause the actual results to differ materially from those in forward-looking statements include the future operations of ValOre and economic factors. Readers are cautioned to not place undue reliance on forward-looking statements. The statements in this press release are made as of the date of this release and, except as required by applicable law, ValOre does not undertake any obligation to publicly update or to revise any of the included forward-looking statements,

whether as a result of new information, future events or otherwise. ValOre undertakes no obligation to comment on analyses, expectations or statements made by third parties in respect of ValOre, or its financial or operating results or (as applicable), their securities.

_____

[1] https://doi.org/10.1111/1758-2229.70261
[2] https://doi.org/10.1007/s00253-022-12085-9