

Freeman Gold Commences Phase Four Metalurgical Test Work In Support Of Feasibility Study At The Lemhi Gold Project

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VANCOUVER, April 14, 2025 - [Freeman Gold Corp.](#) (TSXV: FMAN) (OTCQB: FMANF) (FSE: 3WU) ("Freeman" or the "Company") is pleased to announce that it has awarded the Feasibility metallurgical test work contract to Base Metallurgical Laboratories Ltd. ("Base Met"), Kamloops, British Columbia, Canada. The test work is part of a fourth phase of metallurgical test work at the Lemhi Gold Project ("Lemhi" the "Project" or "Property"). The results will be used in conjunction with the previous three phases as part of the recently commissioned feasibility study being completed by Ausenco (see Freeman's news release dated February 10, 2025).

Freeman's metallurgical test work that commenced in 2021 has demonstrated that Lemhi mineralization has favourable characteristics that include:

- Lemhi mineralization has very low resistance to breakage;
- Testing indicates up to 58 per cent ("%") of the coarse gold can be recovered through gravity concentration;
- Greater than (>) 95% of contained gold is recoverable using a traditional Carbon-In-Leach ("CIL") process;
- An optimized flowsheet has been designed that consists of a grind target of 150 micron ("µm"), a gravity circuit and a retention cyanide leaching. This flowsheet produced combined gold recoveries of 97.5 % and 96.3%;
- Some lower gold recoveries were evident on feeds with higher copper ("Cu") content. The bench scale testing to remove a Cu-silver ("Ag")-gold ("Au") concentrate allowed the float tails to increase the gold leach recoveries back to project average levels;
- Test work provided acceptable discharge chemistry and the most optimized reagent dosages showed that the material is not acid generating.
 - Weak acid dissociable ("WAD") cyanide levels were effectively reduced from 305 milligrams per litre ("mg/L") to 1 mg/L in 30 minutes of slurry retention time;
- Reagent consumption of sodium cyanide, lime, sodium metabisulphite, copper sulphate, flocculant, hydrochloric acid and sodium hydroxide and activated carbon are estimated to be US\$4.26 per tonne milled;
- This fourth phase of testing aims to refine these positive results for inclusion in the upcoming Feasibility Study.

Dean Besserer, Vice President of Exploration, stated, "Metallurgical testing to date at Lemhi has shown exceptional metal recovery response in terms of recovery percentages and rates, as well as reagent use and consumption. This new testing campaign by Base Met will refine results to meet the requirements of our Feasibility Study, currently being prepared by Ausenco."

The 20 samples submitted to Base Met for test work are a mix of crushed assay rejects and halved drill core. Testing will include three production composites from the Main Pit, Beauty Zone, and SW Zone to assess variability in mineralization over the mine life as outlined in the 2023 Preliminary Economic Assessment ("PEA"). Furthermore, work aims to refine the operating parameters for the PEA flowsheet that utilizes a CIL processing facility (see Freeman's news release dated October 16, 2024).

The 2025 4th Phase metallurgical test work program will consist of:

- Measuring comminution characteristics including SMC, Bond Drop Weight Index ("B_{Mi}") and Abrasion index;
- Assessing Bond Ball Mill Work Index of each variability sample to determine the energy requirements during ball mill grinding;
- Measuring the chemical and mineral contents of the feed samples;
- Representative sub-samples from each variability sample will be submitted for head assays for the following analyses: silver, copper, iron ("Fe"), sulphur ("S"), carbon ("C"), and mercury ("Hg");
- A Bulk Mineral Analysis ("BMA") using industry standard scanning electron microscope ("SEM") techniques will be conducted on each variability sample to obtain quantitative mineral composition data and determine sulphur deportment;
- A program of bench scale metallurgical tests will be conducted on the samples to confirm the suitability of 3 production composites to processing techniques determined through previous test programs;
- Evaluate the response of 3 production composites to processing techniques determined through previous test programs including:
 - Whole sample leaching with sodium cyanide;
 - Gravity concentration plus Sodium Cyanide ("NaCN") leaching;
 - A series of laboratory mill grind calibrations to establish grinding times required for leach testing. Evaluate the response of cyanide detoxification on a leached composite sample including cyanide destruction testing;
- Apply the developed flowsheet to an estimated 20 variability samples;
- Evaluate the dynamic settling characteristics of a composite pre-leach sample;
- Evaluate the dynamic settling and filtering characteristics of detoxified composite samples;
- Prepare a filtered tailings sample for Jenike & Johanson ("J&J") material handling test work.

Prior Metallurgical Test Work

2023 Metallurgical Test Work (Phase 3)

Freeman submitted two shipments of drill core to refine process development aspects of the Lemhi Project to Base Met. Two master composites were created from the drill core, and each composite was assayed for gold in duplicate. Master Comp 1 ("MC1") and Master Comp 2 ("MC2") contained 1.94 and 1.18 grams per tonne gold, ("g/t Au") respectively. Metallurgical testing included gravity tests on MC1 and development cyanide leaching on each MC1 and MC2. An oxygen uptake rate ("OUR") test and 10 kg bulk gravity and cyanide test were also completed using MC2 to generate feed cyanide destruction and solid-liquid separation optimization testing. Gravity gold concentrate generated were submitted to intensive cyanidation leaching test to assess leachability of the gravity recoverable gold for each composite (see Freeman's new release dated July 31, 2023).

Cyanide leach testing evaluated the effect of grind size between 110 and 175 µm on gold recoveries using gravity and Carbon-in-Leach circuits. Results showed limited variance in leach performance with increased grind size. Based on the results, an optimized flowsheet was selected which consists of a grind target of 150 micron ("µm"), a gravity circuit and 24-hour retention cyanide leaching. This flowsheet produced combined gold recoveries of 97.5 % and 96.3% for MC1 and MC2 respectively. Furthermore, leaching with and without activated carbon (i.e. direct leach vs. CIL) did not show evidence of preg-robing conditions.

In addition, 20 kg of material from sample MC1 was subjected to Extended Gravity Recoverable Gold ("EGRG") testing to determine gravity recovery amenability. Test results contained a high level of gravity recoverable gold of 58%. These high range results suggest that the inclusion of a gravity gold concentration would enhance recoveries and lower costs and was included in the preliminary feasibility study.

2021-22 Metallurgical Test Program (Phase 1 and 2)

SGS Mineral Services, Burnaby, B.C., ("SGS") performed metallurgical laboratory testing beginning in January 2021 and ending in January 2022. The laboratory study used a total of 38 drill hole intervals and composite samples. Initial optimization test work began on archived assay rejects originating from 2012 diamond drill core and then proceeding to 2020 PQ diamond drill core intervals (Phase 1) and, finally, testing 26 variability composite drill core samples originating from 2020 assay rejects (Phase 2). These samples were used for comminution, gravity recovery, leaching, and liquid/solid separation studies, as well as ongoing environmental evaluation.

Gold cyanidation extractions averaged 95%, based on 38 variability samples, with head grades ranging from 0.2 g/t to 10.9 g/t Au, and averaging 1.02 g/t Au. Samples were collected over a large spatial area considered representative of the 2020 maiden mineral resource (see Freeman's news release dated July 8, 2021). The results were based on process operating conditions that are suitable for a conventional CIL tank leaching process. This included a grind of 80% passing particle size ("P₈₀") 106 microns, with a leach retention time of approximately 36 hours, following gravity pre-treatment.

The laboratory testing used composite samples averaging close to the predicted current resource grade of 1.01 g/t Au resulting in average gold extractions of 95%. This comprised of a wide range of potential mill feed grades of between 0.2 g/t to 10.9 g/t resulting in 91% to 99% gold leach dissolution. Gold recovery continued to hold up well even below potential cut-off grade material. This included down to the lowest grade sample at 0.19 g/t Au, which resulted in 89% gold leach dissolution. Cyanide tailing residues typically analyzed <0.5 g/t Au and were often below detection limit of 0.02 g/t Au.

Pre-treatment of the leach feed by gravity concentration using a Knelson Concentrator suggests on average 1/3 of the gold might be recovered into rougher gravity concentrate that is suitable for intense cyanidation. This is relevant given the corresponding head analyses indicates a significant portion of gold can occur as coarse particles.

Laboratory data also suggested that sulphide bearing material that is occasionally identified in the current resource (Maiden Resource), including pyrite and chalcopyrite intervals, could produce a potentially marketable flotation concentrate containing gold and copper. Flotation tailing would then be forwarded as feed to the CIL leach process resulting in overall process recoveries in line with whole rock tank leaching.

Freeman also announces that it has granted stock options ("Stock Options") to certain directors, officers and consultants of the Company to acquire an aggregate of 4,850,000 common shares in the capital of the

Company (the "Shares") at an exercise price of \$0.12 per Share, in accordance with the terms and conditions of the Company's stock option plan. The Stock Options fully vest on the date of the grant and are exercisable for a five-year term expiring April 14, 2030.

About the Company and Project

Freeman Gold Corp. is a mineral exploration company focused on the development of its 100% owned Lemhi Gold property. The Project comprises 30 square kilometres of highly prospective land, hosting a near-surface oxide gold resource. The pit constrained National Instrument 43-101 ("NI 43-101") compliant mineral resource estimate is comprised of 988,100 ounces gold ("oz Au") at 1.0 gram per tonne ("g/t") in 30.02 million tonnes (4.7 million tonnes Measured (168,800 oz) & 25.5 million tonnes Indicated (819,300 oz)) and 256,000 oz Au at 1.04 g/t Au in 7.63 million tonnes (Inferred). The Company is focused on growing and advancing the Project towards a production decision. To date, 525 drill holes and 92,696 m of drilling has historically been completed (Murray K., Elfen, S.C., Mehrfert, P., Millard, J., Cooper, Schulte, M., Dufresne, M., NI 43-101 Technical Report and Preliminary Economic Assessment, dated November 20, 2023;

https://freemangoldcorp.com/wp-content/uploads/2024/07/Preliminary-Economic-Assessment_24.08.15.pdf).

The recently updated price sensitivity analysis (see Freeman's news release dated April 9, 2025) shows a PEA with an after-tax net present value (5%) of US\$329 million and an internal rate of return of 28.2% using a base case gold price of US\$2,200/oz; Average annual gold production of 75,900 oz Au for a total life-of-mine of 11.2 years payable output of 851,900 oz Au; life-of-mine cash costs of US\$925/oz Au; and, all-in sustaining costs of US\$1,105/oz Au using an initial capital expenditure of US\$215 million*.

* Note: Mineral resources that are not mineral reserves do not have demonstrated economic viability. The preliminary economic assessment is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.

The technical content of this release has been reviewed and approved by Dean Besserer, P. Geo., VP Exploration of the Company and a Qualified Person as defined by the NI 43-101.

On Behalf of the Company
Bassam Moubarak
Chief Executive Officer

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statements and information contained in this news release concerning these items. The Company does not assume any obligation to update the forward-looking statements, except as required by applicable securities laws.

SOURCE Freeman Gold Corp.

Contact

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