Phase II HLS Testwork Across CV5 Indicates Applicability of DMS Flowsheet

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Highlights

- Heavy Liquid Separation ("HLS") testwork on eleven (11) core sample composites indicate that a Dense Media Separation ("DMS") process is applicable to the greater CV5 Pegmatite body.
    - HLS sample head grades ranged from 0.67% to 2.73% Li_2O, resulting in an average spodumene concentrate grade of 5.98% Li_2O at 77% recovery.
- Results affirm previous HLS and DMS results and bolster confidence that a simple DMS driven flowsheet, without the need of flotation, is applicable to the greater CV5 Pegmatite.
- Testwork indicates that a marketable spodumene concentrate exceeding 5.5% Li_2O at high 70's recovery is achievable using a DMS process.
- Five (5) composite samples have been selected from the CV13 Pegmatite for HLS testing to evaluate the potential of DMS on this material.

Mineral Process Consultant and Project Steering Group member, Brett Grosvenor, comments: *"The results of this HLS testwork, which encompasses a wider sampling of the overall CV5 Pegmatite, are very positive and give us a strong confidence that DMS will be applicable to the CV5 Pegmatite as a whole. These results demonstrate similar liberation and process characteristics are present across the pegmatite body at various depths along its length, along with high lithium recoveries in-line with the prior HLS and DMS work. Collectively, the results of the test program provide a strong 'vote of confidence' in a simple DMS process plant design without the need for flotation."*

SYDNEY, Australia, Feb. 21, 2023 -- Patriot Battery Metals Inc. (the "Company" or "Patriot") (TSX-V: PMET) (ASX: PMT) (OTCQX: PMETF) (FSE: R9GA) is pleased to announce the results of the Heavy Liquid Separation ("HLS") Phase II testwork program on CV5 Pegmatite material, completed as follow-up to the successful Phase I HLS and Dense Media Separation ("DMS") testwork program (see news release dated December 19th, 2022).

The prior Phase I HLS and DMS testwork, completed on CV5 Pegmatite material from drill holes CF21-001 and 002, affirm that bench scale HLS testing is a cost-effective way to rapidly assess the applicability of larger scale DMS processing, which is more reflective of an operating and continuous process (Table 1). As a next step, the HLS testwork program was expanded (i.e., Phase II) with the objective to assess the liberation and recovery characteristics of spodumene at different locations within the CV5 Pegmatite - along strike and at depth - which in turn would assess the applicability of DMS to the CV5 Pegmatite as a whole. To accomplish this, a total of eleven (11), ~10 m core length, quarter-core composite samples were selected from varied depths and locations laterally along the CV5 Pegmatite and each run through an HLS plus magnetic separation process.

Head grades for the samples ranged from 0.67% to 2.73% Li_2O, averaging 1.48% Li_2O, and included varied amounts of mica and tourmaline to further assess their impact on the process. In order to provide a baseline assessment of HLS performance, a single cut size of 2.85 SG was used, with the sink product (spodumene fraction) then run through a simple magnetic separation circuit to remove lingering high-iron gangue minerals (e.g., amphibole). The test program was completed by SGS Canada Inc. at their facility in Lakefield, ON, where the prior testwork for the Project was also completed.

The results, presented in Table 1, are very encouraging with all but the lowest grade sample exceeding 5.5% Li_2O to a peak of 6.58% Li_2O spodumene concentrate, with recoveries ranging from 73 to 86%. Including the lowest grade sample, the average over all eleven (11) core composites graded 5.98% Li_2O at 77% recovery, in line with the prior DMS results of 5.8% Li_2O and 79% recovery. The targeted objective was to achieve a 5.5%+ Li_2O spodumene concentrate at >70% recovery, and therefore the test program was highly successful. Further the conditions remain unoptimized for this testwork with no blending considered.

Collectively, the Phase II HLS testwork demonstrates that the CV5 Pegmatite shares similar liberation and process characteristics across the majority of the pegmatite body defined to date, at various depths along its length. Further, the work indicates that a marketable spodumene concentrate exceeding 5.5% Li_2O at high recovery is achievable using a DMS process. With the ability to produce marketable spodumene concentrate at recoveries between 70 and 80%, the results of the test program provide a strong indication that a simple DMS processing plant design, without the need for flotation, will be the base case for the Project.

Table 1: Summary of HLS testwork results at the CV5 Pegmatite
https://www.globenewswire.com/NewsRoom/AttachmentNg/8fa1585d-6196-4695-95ff-e806865ffa1b

The coarse-grained nature of the mineralization at CV5 allows for strong mineral liberation and recovery at relatively coarse crush sizes. For the CV5 Pegmatite this has resulted in high spodumene recoveries into the final DMS (+ non-magnetic) concentrate at a coarse crush size of -9.5 mm. In lithium pegmatite mineral processing, a coarse crush size is strongly preferred to a smaller crush size (or grinding) as it requires a reduced power consumption and less equipment. Additionally, the benefits of DMS (± magnetic separation) compared to flotation are considerable and include relatively lower CAPEX and OPEX, reduced reagent needs, coarser product and tailings, quicker operational start-up, and overall, less technical risk. Additionally, DMS is a much more environmentally sustainable process when compared to traditional flotation intensive processes.

The next phase of the flowsheet development is anticipated to be completed on a 1-2 tonne composite sample comprised of drill core from the CV5 Pegmatite. The location of this area is not yet confirmed as the CV5 Pegmatite remains to be fully delineated and, therefore, advanced pit shells are not yet complete.

Additionally, due to the positive results of the initial drill testing at the CV13 Pegmatite cluster as well as the interpreted potential present (see news release dated February 13th, 2023), the Company has selected five (5) ~10 m core-length sample composites for preliminary HLS testing. The data collected will provide a preliminary evaluation of process variability (spodumene liberation and recovery) at a coarse crush size using the same HLS parameters from the CV5 Pegmatite test program. The results will also provide an indication as to the applicability of a DMS process at the CV13 Pegmatite and if joint processing with the CV5 Pegmatite material may be possible.

Figure 1: Distribution of samples collected for Phase I and II HLS/DMS testwork
https://www.globenewswire.com/NewsRoom/AttachmentNg/2abd57b9-4513-44b8-90fb-ff8e3200d073

About the CV Lithium Trend

The CV Lithium Trend is an emerging spodumene pegmatite district discovered by the Company in 2017 and spans more than 25-km across the Corvette Property. The core area includes an approximate 2.6 km long spodumene pegmatite (the 'CV5 Pegmatite') and multiple proximal secondary spodumene pegmatite lenses. This corridor has returned drill intercepts of 156.9 m at 2.12% Li_2O, including 25.0 m at 5.04% Li_2O or 5.0 m at 6.36% Li_2O (CV22-083), 159.7 m at 1.65% Li_2O (CV22-042), 131.2 m at 1.96% Li_2O (CV22-100), and 52.2 m at 3.34% Li_2O, including 15.0 m at 5.10% Li_2O (CV22-093).

To date, six (6) distinct clusters of lithium pegmatite have been discovered across the Property - CV5 Pegmatite and associated lenses, CV4, CV8-12, CV9, CV10, and the recently discovered CV13. Given the proximity of some pegmatite outcrops to each other, as well as the shallow till cover in the area, it is probable that some of the outcrops may reflect a discontinuous surface exposure of a single, larger pegmatite 'outcrop' subsurface. Further, the high number of well-mineralized pegmatites along the trend indicate a strong potential for a series of relatively closely spaced/stacked, sub-parallel, and sizable spodumene-bearing pegmatite bodies, with significant lateral and depth extent, to be present.

Qualified/Competent Person

The information in this news release that relates to exploration results for the Corvette Property is based on, and fairly represents, information compiled by Mr. Darren L. Smith, M.Sc., P.Geo., who is a Qualified Person as defined by National Instrument 43-101, and member in good standing with the Ordre des Géologues du Québec (Geologist Permit number 1968), and with the Association of Professional Engineers and

Geoscientists of Alberta (member number 87868). Mr. Smith has reviewed and approved the technical information in this news release.

Mr. Smith is Vice President of Exploration for Patriot Battery Metals Inc. and Nevada Lithium Resources Inc., Vice President of Exploration and Director for Ophir Gold Corp, and a Senior Geologist and Project Manager with Dahrouge Geological Consulting Ltd. Mr. Smith holds common shares and options in the Company.

Mr. Smith has sufficient experience, which is relevant to the style of mineralization, type of deposit under consideration, and to the activities being undertaken to qualify as a Competent Person as described by the JORC Code, 2012. Mr. Smith consents to the inclusion in this news release of the matters based on his information in the form and context in which it appears.

About Patriot Battery Metals Inc.

Patriot Battery Metals Inc. is a mineral exploration company focused on the acquisition and development of mineral properties containing battery, base, and precious metals.

The Company's flagship asset is the 100% owned Corvette Property, located proximal to the Trans-Taiga Road and powerline infrastructural corridor in the James Bay Region of Québec. The land package hosts significant lithium potential highlighted by the 2.6 km long CV5 spodumene pegmatite with drill intercepts of 156.9 m at 2.12% Li_2O, including 25.0 m at 5.04% Li_2O or 5.0 m at 6.36% Li_2O (CV22-083), 159.7 m at 1.65% Li_2O (CV22-042), 131.2 m at 1.96% Li_2O (CV22-100), and 52.2 m at 3.34% Li_2O, including 15.0 m at 5.10% Li_2O (CV22-093). Additionally, the Property hosts the Golden Gap Trend with grab samples of 3.1 to 108.9 g/t Au from outcrop and 7 m at 10.5 g/t Au in drill hole, and the Maven Trend with 8.15% Cu, 1.33 g/t Au, and 171 g/t Ag in outcrop.

The Company also holds 100% ownership of the Freeman Creek Gold Property in Idaho, USA which hosts two prospective gold prospects - the Gold Dyke Prospect with a 2020 drill hole intersection of 12 m at 4.11 g/t Au and 33.0 g/t Ag, and the Carmen Creek Prospect with surface sample results including 25.5 g/t Au, 159 g/t Ag, and 9.75% Cu.

The Company's other assets include the Pontax Lithium-Gold Property, QC; and the Hidden Lake Lithium Property, NWT, where the Company maintains a 40% interest, as well as several other assets in Canada.

For further information, please contact us at info@patriotbatterymetals.com Tel: +1 (604) 279-8709, or visit www.patriotbatterymetals.com. Please also refer to the Company's continuous disclosure filings, available under its profile at www.sedar.com, for available exploration data.

This news release has been approved by the Board of Directors,

"*BLAIR WAY*"

Blair Way, President, CEO, & Director

Disclaimer for Forward-Looking Information

This news release contains forward-looking statements and other statements that are not historical facts. Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expects" and similar expressions. All statements other than statements of historical fact, included in this news release are forward-looking statements that involve risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the Company's expectations include the results of further exploration and testing, and other risks detailed from time to time in the filings made by the Company with securities regulators, available at www.sedar.com. The reader is cautioned that assumptions used in the preparation of any forward-looking

information may prove to be incorrect. Events or circumstances may cause actual results to differ materially from those predicted, as a result of numerous known and unknown risks, uncertainties, and other factors, many of which are beyond the control of the Company. The reader is cautioned not to place undue reliance on any forward-looking information. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement. The forward-looking statements contained in this news release are made as of the date of this news release and the Company will update or revise publicly any of the included forward-looking statements as expressly required by applicable law.

No securities regulatory authority or stock exchange has reviewed nor accepts responsibility for the adequacy or accuracy of the content of this news release.

Appendix 1 - JORC Code 2012 Table 1 information required by ASX Listing Rule 5.7.1

Section 1 - Sampling Techniques and Data

Criteria	JORC Code explanation
Sampling techniques	● *Nature and quality of sampling (eg cut channels, random ch* ● *Include reference to measures taken to ensure sample repre* ● *Aspects of the determination of mineralisation that are Mate* ● *In cases where 'industry standard' work has been done this*
Drilling techniques	● *Drill type (eg core, reverse circulation, open-hole hammer, r*
Drill sample recovery	● *Method of recording and assessing core and chip sample re* ● *Measures taken to maximise sample recovery and ensure re* ● *Whether a relationship exists between sample recovery and*
Logging	● *Whether core and chip samples have been geologically and* ● *Whether logging is qualitative or quantitative in nature. Core* ● *The total length and percentage of the relevant intersections*
Sub-sampling techniques and sample preparation	● *If core, whether cut or sawn and whether quarter, half or all* ● *If non-core, whether riffled, tube sampled, rotary split, etc an* ● *For all sample types, the nature, quality and appropriateness* ● *Quality control procedures adopted for all sub-sampling stag* ● *Measures taken to ensure that the sampling is representativ* ● *Whether sample sizes are appropriate to the grain size of th*
Quality of assay data and laboratory tests	● *The nature, quality and appropriateness of the assaying and* ● *For geophysical tools, spectrometers, handheld XRF instrum* ● *Nature of quality control procedures adopted (eg standards,*
Verification of sampling and assaying	● *The verification of significant intersections by either indepen* ● *The use of twinned holes.* ● *Documentation of primary data, data entry procedures, data* ● *Discuss any adjustment to assay data.*
Location of data points	● *Accuracy and quality of surveys used to locate drill holes (co* ● *Specification of the grid system used.* ● *Quality and adequacy of topographic control.*

Data spacing and distribution	● *Data spacing for reporting of Exploration Results.* ● *Whether the data spacing and distribution is sufficient to est* ● *Whether sample compositing has been applied.*
Orientation of data in relation to geological structure	● *Whether the orientation of sampling achieves unbiased sam* ● *If the relationship between the drilling orientation and the ori*
Sample security	● *The measures taken to ensure sample security.*
Audits or reviews	● *The results of any audits or reviews of sampling techniques*

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status		● The Corvette Property is comprised of 417 clai ● *The Company holds 100% interest in the Prop* ● *The property is not overlain by any significant e* ● Claim expiry dates range from July 2023 to July
Exploration done by other parties		● *Acknowledgment and appraisal of exploration*
Geology		● The Property is situated within the Lac Guyer G ● The geologic setting is prospective for gold, silv ● *Deposit type, geological setting and style of mi* ● The lithium pegmatites at Corvette are LCT Pe
Drill hole Information		● *A summary of all information material to the un* ● *easting and northing of the drill hole colla* ● *elevation or RL (Reduced Level - elevatio* ● N/a – *no drill results reported in this relea* ● *down hole length and interception depth* ● *hole length.* ● *If the exclusion of this information is justified or*
Data aggregation methods		● *In reporting Exploration Results, weighting ave* ● *Where aggregate intercepts incorporate short* ● *The assumptions used for any reporting of met*
Relationship between mineralisation widths and intercept lengths		● *These relationships are particularly important in* ● *The geometry of the mineralisation with respe* ● *If it is not known and only the down hole length*
Diagrams		● *Appropriate maps and sections (with scales) ea*

Balanced reporting	● *Where metallurgical testing of all Exploration*
Other substantive exploration data	● *The Company has completed preliminary mete*
Further work	● *The nature and scale of planned further work (e* ● *The Company intends to complete mineral proc* ● *Diagrams clearly highlighting the areas of poss*