

Phase II HLS Testwork Across CV5 Indicates Applicability of DMS Flowsheet

February 21, 2023 - Vancouver, BC, Canada

February 22, 2023 – Sydney, Australia

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% Li₂O, resulting in an average spodumene concentrate grade of 5.98% Li₂O 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% Li₂O 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."

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% Li₂O, averaging 1.48% Li₂O, 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% Li₂O to a peak of 6.58% Li₂O 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% Li₂O at 77% recovery, in line with the prior DMS results of 5.8% Li₂O and 79% recovery. The targeted objective was to achieve a 5.5%+ Li₂O 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% Li₂O 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

				Head	2.85 SG	(Sink) Follo	owed by
				Grade	Mag	netic Separ	ation
	Sample ID	Drill Hole	Test Method	Li ₂ O (%)	Li ₂ O (%)	Fe ₂ O ₃ (%)	Li Recovery
	HLS-COMP-001	CV22-017	HLS	1.40	6.15	0.61	80.5
	HLS-COMP-002	CV22-019	HLS	1.16	6.13	0.78	76.0
	HLS-COMP-003	CV22-025	HLS	1.14	5.74	1.14	79.3
	HLS-COMP-004	CV22-035	HLS	1.33	5.93	0.52	80.0
	HLS-COMP-005	CV22-038	HLS	1.68	6.17	0.71	81.6
Phase II	HLS-COMP-006	CV22-040	HLS	0.67	5.03	0.93	56.5
	HLS-COMP-007	CV22-042	HLS	1.57	6.21	0.56	74.7
	HLS-COMP-008	CV22-048	HLS	1.35	6.04	0.62	77.3
	HLS-COMP-009	CV22-052	HLS	2.04	6.58	0.72	86.0
	HLS-COMP-010	CV22-054	HLS	1.20	5.50	1.04	72.7
	HLS-COMP-011	CV22-070	HLS	2.73	6.34	0.95	85.6
	AVERAGE			1.48	5.98	0.78	77.3
Phase I	CF21-001Met + CF21-002Met Composite	CF21-001 & 002	HLS	1.08	6.22	0.60	77.7
riiase i	CF21-001Met + CF21-002Met Composite	CF21-001 & 002	& DMS	1.08	5.77	0.62	79.0
(1) Food ==							
(1) Feed samples quarter-core NQ at ~9.5 mm crush size, +850 μm fraction							

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 13^{th} , 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.

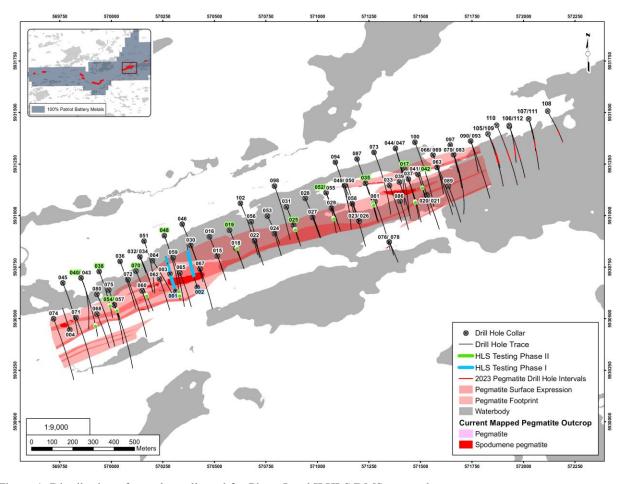


Figure 1: Distribution of samples collected for Phase I and II HLS/DMS testwork



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% Li₂O, including 25.0 m at 5.04% Li₂O or 5.0 m at 6.36% Li₂O (CV22-083), 159.7 m at 1.65% Li₂O (CV22-042), 131.2 m at 1.96% Li₂O (CV22-100), and 52.2 m at 3.34% Li₂O, including 15.0 m at 5.10% Li₂O (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% Li₂O, including 25.0 m at 5.04% Li₂O or 5.0 m at 6.36% Li₂O (CV22-083), 159.7 m at 1.65% Li₂O (CV22-042), 131.2 m at 1.96% Li₂O (CV22-100), and 52.2 m at 3.34% Li₂O, including 15.0 m at 5.10% Li₂O (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 Mayen 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 and ww

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	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Core sampling protocols met or exceeded industry standard practices. The HLS samples were comprised of saw-cut, quarter-core intervals and collected from eleven (11) different holes as presented in Table 1 herein this news release. The HLS samples are collectively considered an appropriate test approach to evaluate DMS at the greater CV5 Pegmatite as a whole. Samples were selected to be as representative as practical.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	The samples utilized quarter-core NQ size drill core
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	N/a – metallurgical testing reported in this release
Logging	Whether core and chip samples have been geologically and geotechnically	N/a – metallurgical testing reported in this release



Criteria	JORC Code explanation	Commentary
	 logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Core sampling protocols met or exceeded industry standard practices The HLS samples were comprised of saw-cut, quarter-core intervals and collected from eleven (11) different holes as presented in Table 1 herein this news release. Sample size is considered appropriate for the test method at lab scale
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 All core samples collected were shipped to SGS Canada's Metallurgical laboratory in Lakefield, ON SGS (Lakefield) was responsible for selecting the appropriate analytical method (NaO2 fusion followed by ICP-OES) and ensuring adequate QAQC was satisfied, and the Company has relied upon such practice. SGS (Lakefield) is a wellestablished metallurgical and analytical laboratory serving mineral exploration industry and is independent of the Company The assay techniques are considered appropriate for the nature and type of mineralization present, and result in a total digestion and assay for the elements of interest
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	Assays were compiled and verified by SGS Canada, an analytical laboratory that is independent of the Company



Criteria	JORC Code explanation	Commentary
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	N/a – metallurgical testing reported in this release
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 The HLS samples were comprised of ~10 m corelength, quarter-core composites at targeted locations within the CV5 Pegmatite, which would allow assessment of liberation and recovery characteristics at varied depths and locations along strike.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	N/a – metallurgical testing reported in this release
Sample security	The measures taken to ensure sample security.	Samples were collected by Company staff or its consultants following specific protocols governing sample collection and handling. Core samples were bagged, placed in large supersacs for added security, palleted, and shipped by third party transport to SGS Lakefield, ON, being tracked during shipment. Upon arrival at the laboratory, the samples were cross-referenced with the shipping manifest to confirm all samples were accounted for. At the laboratory, sample bags are evaluated for tampering.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	N/a – metallurgical testing reported in this release

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	 Type, reference name/number, loc and ownership including agreeme material issues with third parties s 	nts or located in the James Bay Region of Quebec with



Criteria JOR	C Code explanation	Commentary
tenure status	joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	 Property is located approximately 10-15 km south of the Trans-Taiga Road and powerline infrastructure corridor. The Company holds 100% interest in the Property subject to various royalty obligations depending on original acquisition agreements. DG Resources Management holds a 2% NSR (no buyback) on 76 claims, D.B.A. Canadian Mining House holds a 2% NSR on 50 claims (half buyback for \$2M) and Osisko Gold Royalties holds a sliding scale NSR of 1.5-3.5% on precious metals, and 2% on all other products, over 111 claims. The Property does not overlap any sensitive environmental areas or parks, or historical sites to the knowledge of the Company. There are no known hinderances to operating at the Property, apart from the goose hunting season (April 20th to May 20th) where the communities request no drilling or flying be completed. Claim expiry dates range from July 2023 to July 2025.
Exploration don by other parties		N/a – metallurgical testing reported in this release
Geology	Deposit type, geological setting and style of mineralisation.	 The Property is situated within the Lac Guyer Greenstone Belt, considered part of the larger La Grande River Greenstone Belt and is dominated by volcanic rocks metamorphosed to amphibolite facies. The claim block is dominantly underlain by the Guyer Group (basaltic amphibolite, iron formation) and the Corvette Formation (amphibolite of intermediate to mafic volcanics). Several occurrences of ultramafic rocks (peridotite, pyroxenite, komatiite?) as well as felsic volcanics (tuffs) are also mapped over areas of the Property. The basaltic amphibolite rocks that trend east-west (generally south dipping) through this region are bordered to the north by the Magin Formation (conglomerate and wacke) and to the south by an assemblage of tonalite, granodiorite, and diorite. Several regional-scale Proterozoic gabbroic dykes also cut through portions of the Property (Lac Spirt Dykes, Senneterre Dykes). The geologic setting is prospective for gold, silver, base metals, platinum group elements, and lithium over several different deposit styles including orogenic gold (Au), volcanogenic massive sulfide (Cu, Au, Ag), komatiite-ultramafic (Au, Ag, PGE, Ni, Cu, Co), and pegmatite (Li,





Criteria JORC	Code explanation (Commentary
	 maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	N/a – metallurgical testing reported in this release
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	N/a – metallurgical testing reported in this release
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock	 The Company has completed preliminary metallurgical testing comprised of HLS and DMS and magnetic testing, which has produced 5.8+% Li2O spodumene concentrates at >70% recovery. The data suggests potential for a DMS only operation to be applicable to the project.



Criteria JORC Cod	e explanation	Commentary
	characteristics; potential deleteriou or contaminating substances.	ıs
Further work •	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	

