# Patriot Achieves 79% Recovery in Dense Media Separation Test Work on the CV5 Pegmatite, Corvette Property, Quebec

***December 19, 2022 – Vancouver, BC, Canada*** ***December 20, 2022 – Sydney, Australia***

**Highlights**

- Preliminary Dense Media Separation ("DMS") followed by magnetic separation on drill core from the CV5 Pegmatite produces marketable spodumene concentrate at high lithium recovery
    - **79% recovery to produce 5.8% $Li_2O$ spodumene concentrate with low $Fe_2O_3$ (0.60%)**
- Results affirm previous Heavy Liquid Separation ("HLS") tests and indicate a strong potential for a DMS driven flowsheet without the need of flotation
- An HLS screening program is nearing completion and will assess the liberation and recovery characteristics at different locations of the CV5 Pegmatite along strike and at depth

**Patriot Battery Metals Inc. (the "Company" or "Patriot") (TSX-V: PMET) (ASX: PMT) (OTCQX: PMETF) (FSE: R9GA)** is pleased to announce the results of preliminary Dense Media Separation ("DMS") testwork on drill core material collected from the CV5 spodumene pegmatite at the Corvette Property (the 'Property' or 'Project'), located in the James Bay Region of Quebec.


Figure 1: Spodumene concentrate (DMS + Non-Magnetic fractions) – **5.8% $Li_2O$** and **0.60% $Fe_2O_3$** at **79% recovery**

The metallurgical test program for the Project is being completed by SGS Canada Inc. at their facility in Lakefield, ON, and is focused on industry standard and cost-effective processing techniques applicable to spodumene pegmatite. The prior scoping Heavy Liquid Separation ("HLS") test work indicates strong potential for DMS to be applicable to the process flowsheet for the CV5 Pegmatite (see news release dated August 4th, 2022) and therefore, a DMS operational run was subsequently completed (Figure 2).

A total of approximately 143 kg of composited drill core, from drill holes CF21-001 and 002, was processed through a DMS and magnetic separation circuit, producing approximately 20 kg of **marketable spodumene concentrate grading 5.8% $Li_2O$ at 79% recovery**, and with a **low iron content (0.60% $Fe_2O_3$)** (Figure 1 and 2). Therefore, the DMS process run was highly successful and affirms the preliminary results from the HLS tests as first reported in news release dated August 4th, 2022.

**Mineral Process Consultant and Project Steering Group member, Brett Grosvenor, comments:**

***"The results of this preliminary DMS testwork are impressive and more importantly they strongly support a simple DMS processing plant without the need for flotation. The high recovery and grade achieved during this preliminary DMS are on par or better than some of the world's leading hard rock lithium developments that I have previously been involved in. Maintaining a simple process flowsheet will ultimately assist with the approvals process and de-risking of the operation of the Corvette Lithium Project."***

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 has been initiated and includes the collection of eleven (11), ~10 m core length, quarter-core composite samples from different depths and locations laterally along the CV5 Pegmatite. The samples will be used for a preliminary evaluation of process variability (spodumene liberation and recovery) at a coarse crush size using the HLS test method. The results will provide a good indication as to the applicability of DMS throughout the CV5 Pegmatite body as is currently defined.


Figure 2: Close-up of spodumene concentrate (DMS + Non-Magnetic fractions) – 5.8% $Li_2O$ and 0.60% $Fe_2O_3$ at 79% recovery

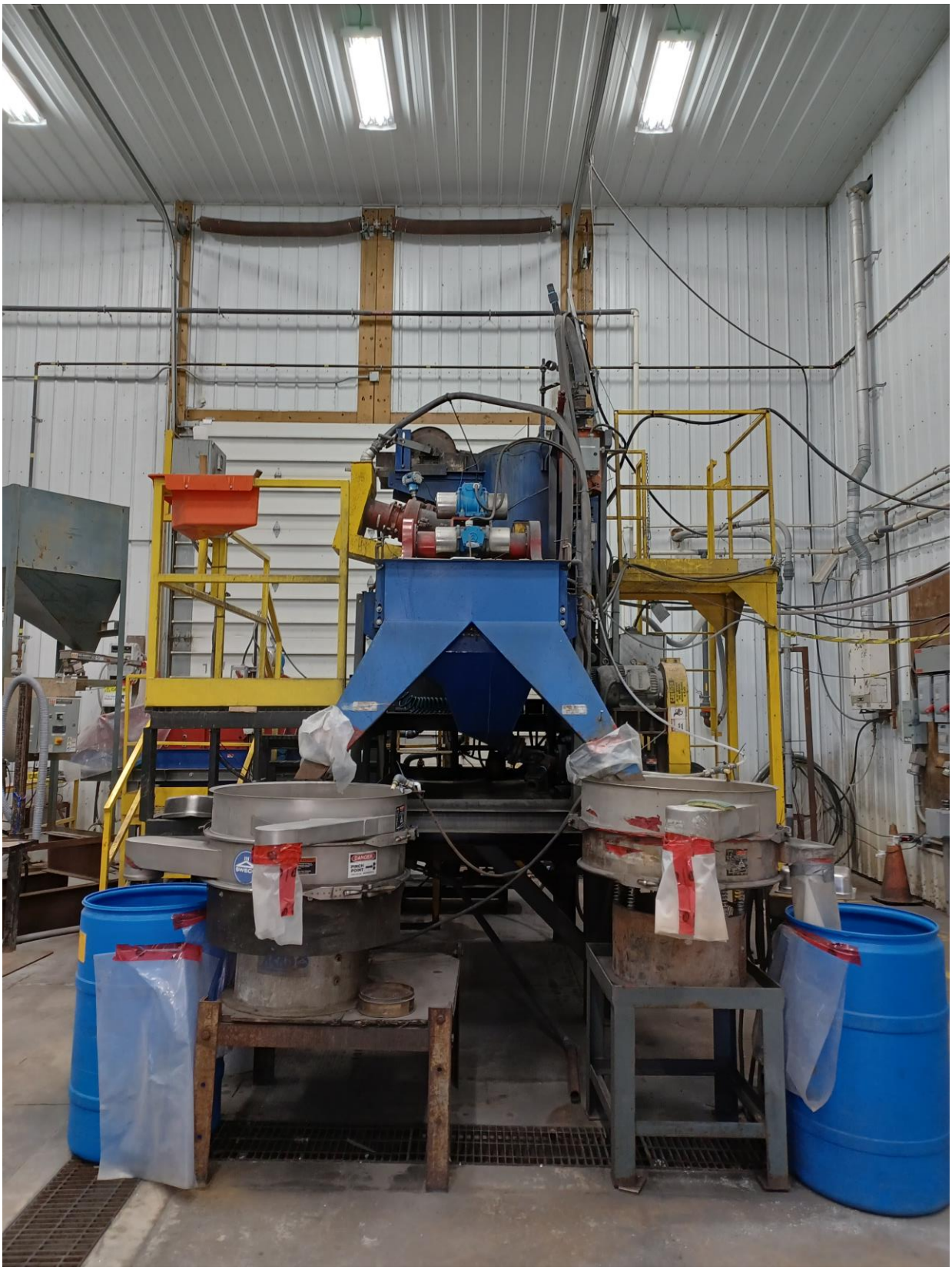

Figure 3: DMS circuit set-up at SGS Lakefield, Ontario, Canada

**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 2.2 km long spodumene pegmatite (the 'CV5 Pegmatite') and multiple proximal secondary spodumene pegmatite lenses. This corridor has returned drill intercepts of 159.7 m at 1.65% $Li_2O$ and 193 ppm $Ta_2O_5$ (CV22-042), 152.8 m at 1.22% $Li_2O$ and 138 ppm $Ta_2O_5$ (CV22-030), 86.2 m at 2.13% $Li_2O$ and 163 ppm $Ta_2O_5$ (CV22-044), and 70.1 m at 2.22% $Li_2O$ and 147 ppm $Ta_2O_5$, including 40.7 m at 3.01% $Li_2O$ and 160 ppm $Ta_2O_5$ (CV22-017).

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 disclosure in this news release.

Mr. Smith is Vice President of Exploration for Patriot Battery Metals Inc. (the "Company") 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 2.2 km long CV5 spodumene pegmatite with drill intercepts of 159.7 m at 1.65% $Li_2O$ and 193 ppm $Ta_2O_5$ (CV22-042), and 70.1 m at 2.22% $Li_2O$ and 147 ppm $Ta_2O_5$, including 40.7 m at 3.01% $Li_2O$ and 160 ppm $Ta_2O_5$ (CV22-017). 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.

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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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<br>• The DMS sample was comprised of saw-cut, quarter-core intervals and collected from drill holes CF21-001 and 002<br>• The DMS sample was comprised of a total 242.5 m (core length) over (2) drill holes separated by approximately 100 m (CV21-001 and 002) and is considered representative of the material directly below the CV5 Pegmatite as it includes most of the pegmatite intersection(s) in those two holes. |
| *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.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *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.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Core sampling protocols met or exceeded industry standard practices<br>• The DMS sample was comprised of saw-cut, quarter-core intervals and collected from drill holes CF21-001 and 002<br>• The DMS sample was comprised of a total 242.5 m (core length) over (2) drill holes separated by approximately 100 m (CV21-001 and 002) and is considered representative of the material directly below the CV5 Pegmatite as it includes most of the pegmatite intersection(s) in those two holes.<br>• 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.*<br>• *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.*<br>• *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<br>• 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 well-established metallurgical and analytical laboratory serving mineral exploration industry and is independent of the Company<br>• 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.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *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.*<br>• *Specification of the grid system used.*<br>• *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.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • The DMS sample was comprised of a total 242.5 m (core length) over (2) drill holes separated by approximately 100 m (CV21-001 and 002) and is considered representative of the material directly below the CV5 Pegmatite as it includes most of the pegmatite intersection(s) in those two holes. |
| *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.*<br>• *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, location and ownership including agreements or material issues with third parties such as* | • The Corvette Property is comprised of 417 claims located in the James Bay Region of Quebec with all claims registered to the Company. The |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *tenure status* | *joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *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.<br>• 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.<br>• 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.<br>• Claim expiry dates range from July 2023 to July 2025. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration 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).<br>• 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 |
|---|---|---|
| | | Ta).<br>• Exploration of the Property has outlined three primary mineral exploration trends crossing dominantly east-west over large portions of the Property – Maven Trend (copper, gold, silver), Golden Trend (gold), and CV Trend (lithium, tantalum). Lithium mineralization at the Property is observed to occur within quartz-feldspar pegmatite (LCT Pegmatites), often exposed at surface as high relief 'whale-back' landforms. The pegmatite is often very coarse-grained and off-white in appearance, with darker sections commonly composed of mica and smoky quartz, and occasional tourmaline.<br>• The lithium pegmatites at Corvette are LCT Pegmatites. Preliminary mineralogical studies of the CV5, CV6, and CV12 pegmatites (based on 22 pegmatite core samples), coupled with field mineral identification and assays, indicate spodumene as the dominant lithium-bearing mineral (~98-99%) on the Property, with no significant petalite, lepidolite, lithium-phosphate minerals, or apatite present. The pegmatites at Corvette also carry significant tantalum values with tantalite indicated to be the mineral phase. |
| *Drill hole Information* | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | • N/a – metallurgical testing reported in this release |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques,* | • N/a – metallurgical testing reported in this release |

| 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.*<br>• *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.*<br>• *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.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • N/a – metallurgical testing reported in this release |
| *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 magnetic testing, which has produced 6+% Li2O spodumene concentrates at >70% recovery. The data suggests potential for a DMS only operation to be applicable to the project. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *characteristics; potential deleterious or contaminating substances.* | |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • The Company intends to complete additional mineral processing programs, including Heavy Liquid Separation (“HLS”) testwork, on multiple samples across the CV5 Pegmatite to assess process variability. |