Jadar Resources

ASX RELEASE: 7 October 2021

# SHAW RIVER TENEMENT GRANTED - INITIAL RECONNAISSANCE COMPLETED

**Highlights:**

- **E45/5849 "Shaw River" tenement now granted.**
- **Initial geological reconnaissance and sampling of known tin-tantalum mineralisation and previously mapped pegmatite occurrences completed.**
- **Over 50 line-kilometres covered identifying a considerable number of individual pegmatites up to 15m in width.**
- **A total of 31 samples collected from pegmatite and stream samples draining pegmatite awaiting assay results.**
- **Number of indices for highly fractionated pegmatites confirms fractionation has reached the highest order and expectation of lithium and caesium to be present.**
- **Only 20% of tenement covered by reconnaissance work – considerable potential for additional pegmatite occurrences throughout tenement.**

Jadar Resources Limited (ASX:JDR) ("**Jadar**", the "**Company**") is pleased to announce that the Shaw River Exploration Licence 45/5849 has been granted. The tenement comprises 22 sub-blocks or 70 square kilometres and covers several areas of historic tin-tantalum workings. Granting of the tenement will allow the Company to accelerate exploration activities and undertake advanced exploration work.

Initial geological reconnaissance and sampling has also been completed[1]. Several areas of historic alluvial and hard rock tin-tantalum mining were visited to verify proximal pegmatite occurrences as documented by previous geological mapping.

The initial reconnaissance, covering over 50 line-kilometres, encountered a considerable number of individual pegmatites that were sampled (Figure 1). Results are expected in approximately four weeks.

The well-known and publicised close association of lithium with tantalum within pegmatite genesis raises expectation that the pegmatites may also contain lithium.

[1] ASX release 1st October 2021, "Field Work Commences at Shaw River Project"

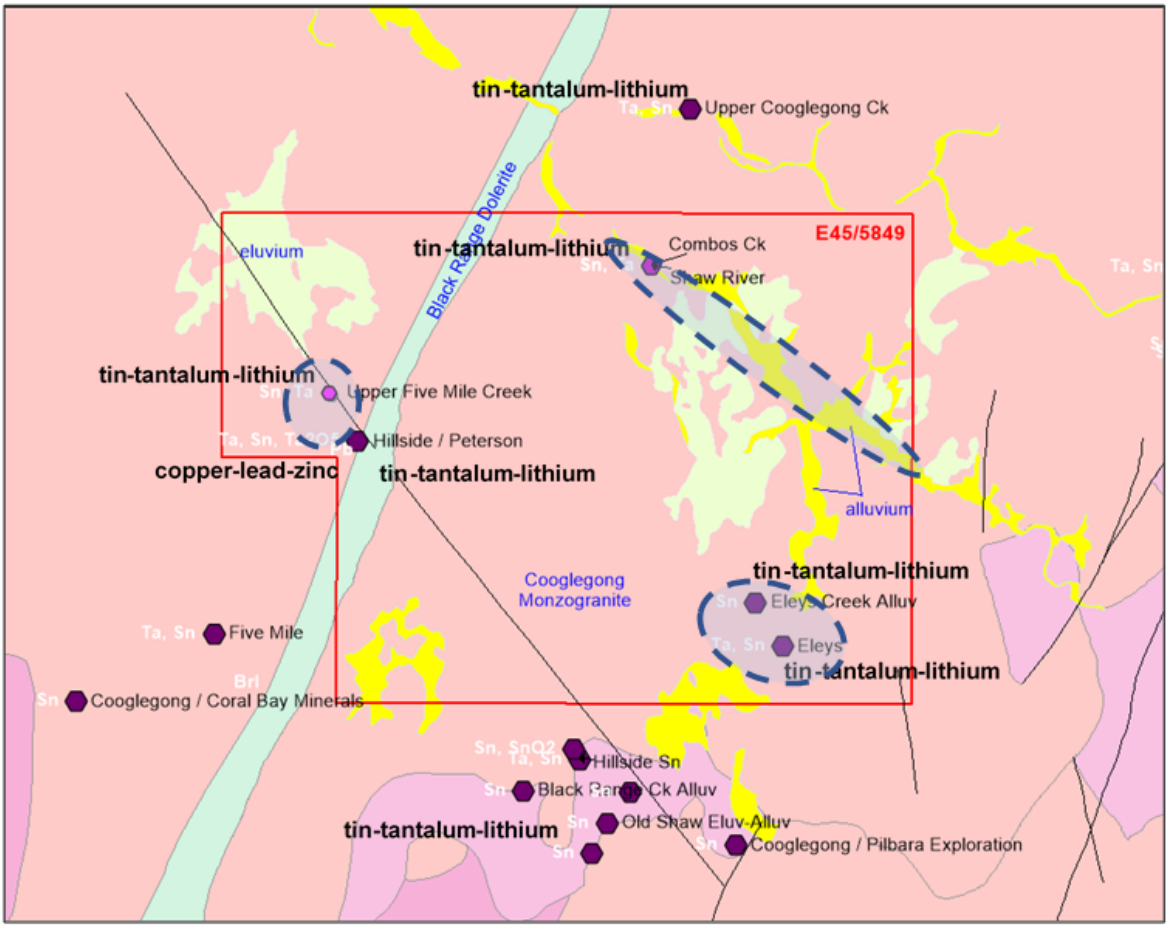


***Figure 1 - Areas of initial geological reconnaissance and sampling, highlighted in blue.***

In the Eleys area (refer to Figure 1), observed pegmatites presented as relative wide visible outcrops of up to 15m although extent could not be verified due to sandy surface cover. Twelve samples were collected in this area.

***Figure 2. Partially exposed pegmatite outcrop in Eleys Creek.***

The Shaw River/Combo's Creek mining area was accessed traversing by foot along the creek from the southeast (refer to Figure 1). A considerable number of pegmatites were observed within the stream bed during the approach to Combo's Creek. Observed pegmatites exhibit the classical large crystals of feldspar, muscovite mica and quartz (Figure 3). Eleven samples were collected at Combo's Creek and along the stream accessing the prospect.

***Figure 3. Pegmatite sample 2,250m southeast of Combo's Creek.***

At Upper Five Mile Creek (refer to Figure 1), several carved out shallow trenches, north and south of the creek, targeting an area between two quartz ridges was observed (Figure 4). A small pegmatite outcrop was encountered, however the historic work appeared to have targeted the more fine-grained greisen as a tin source, in addition to the tantalite sourced from the pegmatite areas. Three samples representing greisen, pegmatite and stream sediments were collected.

***Figure 4: Upper Five Mile Creek, trench in between two quartz ridges, with creek in foreground.***

The Hillside/Petersen area is characterised by a number of shallow trenches or potential dug-in "sluices" to channel the prospective concentrate with the aid of gravity downhill to potentially separate the target commodities. A number of pegmatite bodies were observed over a distance of around 300m between Hillside - Peterson and Hillside Lead (Mindex) occurrences. No visible galena was observed in the Hillside Lead occurrence, however very light muscovite as well as some concentrated gossan / oxides were encountered and sampled.

A considerable number of indices for highly fractionated pegmatites, including zoning and historic workings for tin and tantalum, confirms fractionation has reached the highest fractionation order and there is expectation of lithium and caesium to be present (Figure 5).

Studies by Hulsbosch (2013)[2], determined from field and geochemical data of pegmatite zonation, point to the existence of a chemical zonation within the granite magma chamber prior to the pegmatite emplacement. The pegmatite zones become gradually enriched in incompatible elements due to fractionation, starting with Be (beryl), Li (spodumene, elbaite, lepidolite), Rb-Cs (in feldspars and muscovite-lepidolite series), Nb-Ta (columbite-tantalite mineralisation) and Sn (cassiterite mineralisation) outward from the granite.

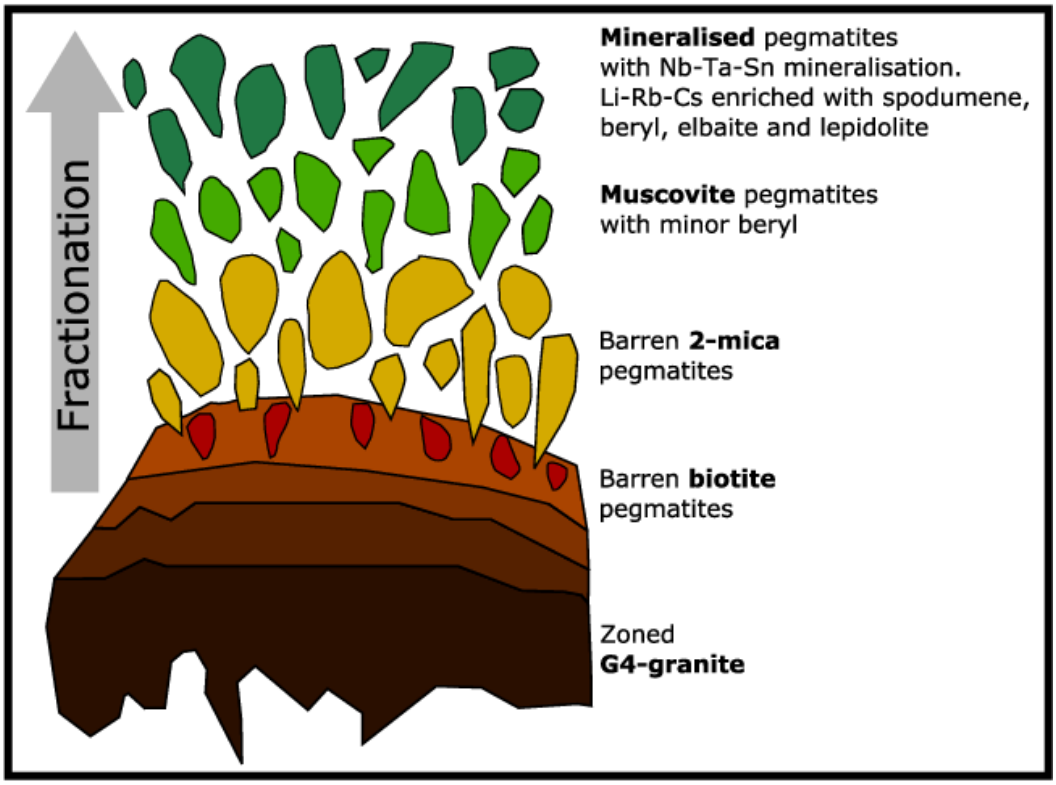


***Figure 5. Pegmatite zonation and fractionization and incompatible element enrichment.[2]***

[2] HULSBOSCH et al, 2013, Petrographic and mineralogical characterisation of fractionated pegmatites culminating in the Nb-Ta-Sn pegmatites of the Gatumba area.

To date, only approximately 20% of the tenement has been visited. A total of 31 samples from pegmatite or stream samples draining pegmatite occurrences were collected during the recent reconnaissance work. Considering the relatively small percentage of the tenement area covered, primarily observing outcrop along streambeds, a substantial additional number of pegmatite occurrences may be expected throughout the tenement area.

Jadar recently announced an agreement to acquire 80% of the Shaw River Project in the East Pilbara region of Western Australia from Calatos Pty Ltd[3]. The acquisition strategically expands Jadar's portfolio of mining assets to service the battery technology and high growth electronics sectors.

**Jadar Resources' Executive Director, Adrian Paul, commented:**

*"The initial field work has been successful in demonstrating widespread occurrences of pegmatite within the Shaw River tenement. As the tenement has now been granted, Jadar will accelerate exploration activities to determine the full potential for lithium-tantalum-tin mineralisation. I am excited as to the potential of the Project, considering its location in a region with demonstrated significant lithium-tantalum endowment."*

The Shaw River Project, located 220km from Port Hedland and 70km from Marble Bar, comprises a granted exploration license comprising 22 blocks. The area has a strong history with successful mining of alluvial tin and tantalum as part of the Shaw River Tin Field and demonstrated potential for lithium and rare earth minerals.

The Shaw River Project complements Jadar's existing lithium assets located in Austria, which are being collaboratively developed with European Lithium Limited (ASX:EUR), and Jadar's 22% interest in Balkan Mining and Minerals (ASX:BMM), the holder of Serbian lithium assets.

*The geological information and photos for this release were provided by Ralf Kriege of geological consultants Geoboxinternational. Ralf and his team undertook the recent field work at Shaw River.*

**ENDS**

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*This ASX announcement was authorised for release by the Board of Jadar Resources Limited.*

[3] ASX release 16 September, "Jadar Acquires East Pilbara Lithium, Tin & Tantalum Assets"

**Forward Looking Statement**

Forward Looking Statements regarding Jadar´s plans with respect to its mineral properties and programs are forward-looking statements. There can be no assurance that Jadar's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that Jadar will be able to confirm the presence of additional mineral resources, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of Jadar's mineral properties. The performance of Jadar may be influenced by a number of factors which are outside the control of the Company and its Directors, staff, and contractors. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the company's prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

**Competent Person's Statement**

The information in this announcement that relates to the Shaw River Project, is based on information compiled by Mr Erik Norum who is a Member of the Australian Institute of Geoscientists. Mr Norum is contracted to Jadar. Mr Norum has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Norum consents to the inclusion in this announcement of the matters based on information in the form and context in which it appears.