



# PILBARA MINERALS LIMITED

ASX ANNOUNCEMENT

11<sup>th</sup> March, 2015

ACN 112-425-788

## RE-COMMENCEMENT OF DRILLING AT PILGANGOORA TANTALUM-LITHIUM PROJECT AND TABBA TABBA PERMITTING UPDATE

*NEW PHASE OF DRILLING UNDERWAY AT PILGANGOORA TARGETING FURTHER RESOURCE GROWTH*

### *HIGHLIGHTS:*

- Reverse Circulation (RC) drilling has re-commenced at the Pilgangoora Lithium-Tantalum Project (100% PLS) in WA's Pilbara region, with an initial program of 2,400m designed to in-fill and extend the known high-grade lithium resource outlined in the recently released resource upgrade.
- New phase of drilling supports Pilbara's objective of developing a globally significant hard-rock lithium-tantalum project at Pilgangoora.
- Project permitting for the Tabba Tabba Tantalum Project is proceeding, with no further issues to be addressed and the final Works Approval, Mine Proposal and Mine Closure Plan are expected to be received shortly.
- Pilbara expects all necessary approvals to be in place to facilitate the start of production at Tabba Tabba during May 2015.

Further to the JORC Mineral Resource upgrade announced earlier this week, Australian strategic metals company Pilbara Minerals Ltd (ASX: PLS) is pleased to advise that a new phase of drilling has commenced at its 100%-owned **Pilgangoora Lithium-Tantalum Project** in Western Australia's Pilbara region.

Initial drilling at Pilgangoora was designed to in-fill areas of the known Inferred Resource. The current Pilgangoora Tantalum-Lithium resource area, which lies within E45/2232 (see Figure 1), now comprises Indicated and Inferred Resources totalling **21.7Mt @ 0.022% Ta<sub>2</sub>O<sub>5</sub>** (tantalite) containing **10.7Mlbs Ta<sub>2</sub>O<sub>5</sub>** and a Lithium Resource of 16.6Mt @ 1.16% Li<sub>2</sub>O (spodumene) containing 192,000 tonnes of lithium (see ASX Release – 9<sup>th</sup> March).

The updated resource included the results of the first phase of in-fill and extensional drilling completed prior to Christmas. The new program, which commenced yesterday, will initially comprise 2,400m of drilling and will be focused on the modelled domains with significant lithium mineralisation.

These central zones of pegmatite, applying a > 1% Li<sub>2</sub>O cut-off, total Inferred and Indicated of Resources of **10.25Mt @ 1.44% Li<sub>2</sub>O containing 147,000 tonnes of lithium oxide**.

Pilbara's Executive Director, Mr Neil Biddle, said the new phase of drilling would initially focus on growing the Company's high-grade, high-value lithium resources.

"We are pleased that drilling is underway again to further expand our resource inventory at the Pilgangoora Tantalum-Lithium Project, building on the significant resource upgrade announced earlier this week," he said.

“This forms part of our longer term strategy to pursue company-changing growth through exploration at Pilgangoora, which is already emerging as one of the largest hard rock lithium-tantalum deposits in the world based on the updated resource published earlier this week. We believe there is significant potential to build further on this resource, and we look forward to the results of the current drilling, which will begin to flow in the coming weeks.”

“The continued rapid growth of the Pilgangoora Project complements our near-production story at the Tabba Tabba Tantalum Project, which will deliver near-term cash-flow to support our longer term growth objectives,” Mr Biddle added.

### **Pilgangoora drilling**

The Initial RC drilling will focus on the current resource area from 7671500mN (see Figure 1 attached) and work north concentrating on the zones or higher grade pegmatite lenses that make up the bulk of the current lithium resource. The previous drilling was completed on wide spacings on lines 50-100m apart, with the more detailed drilling expected to improve and extend resource model.

The drilling rig will then move onto extensional drilling in Southern Zone. The Southern Zone has not previously been included in the resource model due to a lack of drilling and Li<sub>2</sub>O assays.

Exploration results from this work are expected to be available in April 2014. Pilbara has set a longer-term objective of defining a significant hard rock lithium and tantalum resource. Pilbara has updated its **Exploration Target<sup>1</sup>** to **25 – 35 million tonnes @ 200 - 250ppm Ta<sub>2</sub>O<sub>5</sub> and 1.2-1.5% Li<sub>2</sub>O** (see ASX Release: 9<sup>th</sup> March, Pilbara Reports Significant Upgrade to Tantalum-Lithium Resource at Pilgangoora).

### **Tabba Tabba Tantalum Project – Permitting Update**

In response to recent inquiries from shareholders, the Company is also pleased to provide the following update on the permitting process for its Tabba Tabba Tantalum Project (a 50/50 incorporated joint venture between Pilbara and Nagrom & Co.), located 75km south-east of Port Hedland in WA’s Pilbara region.

The permitting process for Tabba Tabba, which is being managed by Nagrom, is well advanced and the final review by the Department of Environment (DER) is underway. The permitting process has taken longer than initially expected due to additional queries and requests for further tailings characterisation test-work from the DER.

Specialist test-work has been completed (L.E.A.F leaching tests) and all data has been supplied. All results reconfirmed that the process tailings are benign. Queries raised by the various Government departments have now been addressed, and Nagrom is expected to resubmit the Mine Proposal for final approval within the next week.

It is expected that the Works Approval and operating licence will be issued shortly, allowing the commencement of site works, the installation of extra water monitoring and water bores and pump testing by Rockwater (hydrogeological consultants). This is the final stage of work required to issue the water extraction licence.

At this stage, the Company still expects all the necessary approvals to be in place to facilitate the commencement of production during May 2015

## **Background – Pilgangoora Lithium- Tantalum Project**

The Pilgangoora Lithium-Tantalum Project is located about 25km north-east of the world-class Wodgina Tantalum mine owned by Global Advanced Metals Wodgina (GAMW) and 82km SSE of Port Hedland.

Pilgangoora includes several tin–tantallite alluvial and eluvial placer deposits which have been mined intermittently since 1947. The Project comprises two Exploration Licences (E45/2232 and E45/2241) and three Mining Leases (M45/78, M45/333 and M45/511), covering an area of 31km<sup>2</sup>.

The Pilgangoora pegmatite field comprises a series of extremely fractionated dykes and veins up to 15m thick within the immediate drilling area (Figure 2). These dykes and veins dip to the east at 45-60° and thicken slightly with depth, are parallel to sub-parallel to the main schistose fabric within the greenstones and are typically separated by 20-30m horizontally.

The Project is immediately north of and along strike from Altura Mining Limited's (ASX: AJM) Pilgangoora Lithium Deposit. GAMW completed RC drilling on EL45/2232 between 2008 and 2012, as well as broader-spaced drilling over the 3.2km strike length of the main pegmatite field on EL45/2232.

### **More Information:**

#### **What is Tantalum?**

The primary source of tantalum is from minerals such as tantalite, columbite, wodginite and microlite contained in pegmatite ore bodies. The largest deposits are located in Australia, Brazil and Africa. Tantalum's **major use is** in the production of electronic components, **especially for capacitors**, with additional use in components for chemical plants, nuclear power plants, airplanes and missiles. It is also used as a substitute for platinum.

The tantalum market is boutique in size with around 1,300 tonnes required each year. However the market is rapidly growing due to capacitor use in wireless and handheld devices. PLS's Tabba Tabba Project could supply approximately 7% of the annual market consumption over two years. There are two major buyers of tantalum raw product worldwide: HC Stark and Global Advanced Metals.

#### **About Lithium**

Lithium is a soft silvery white metal and has the highest electrochemical potential of all metals. In nature it occurs as compounds within hard rock deposits and salt brines. Lithium and its chemical compounds have a wide range of beneficial properties resulting in numerous chemical and technical uses. A key growth area is its use in lithium batteries as a power source for a wide range of applications including electric bikes, motor vehicles, buses, trucks and taxis.

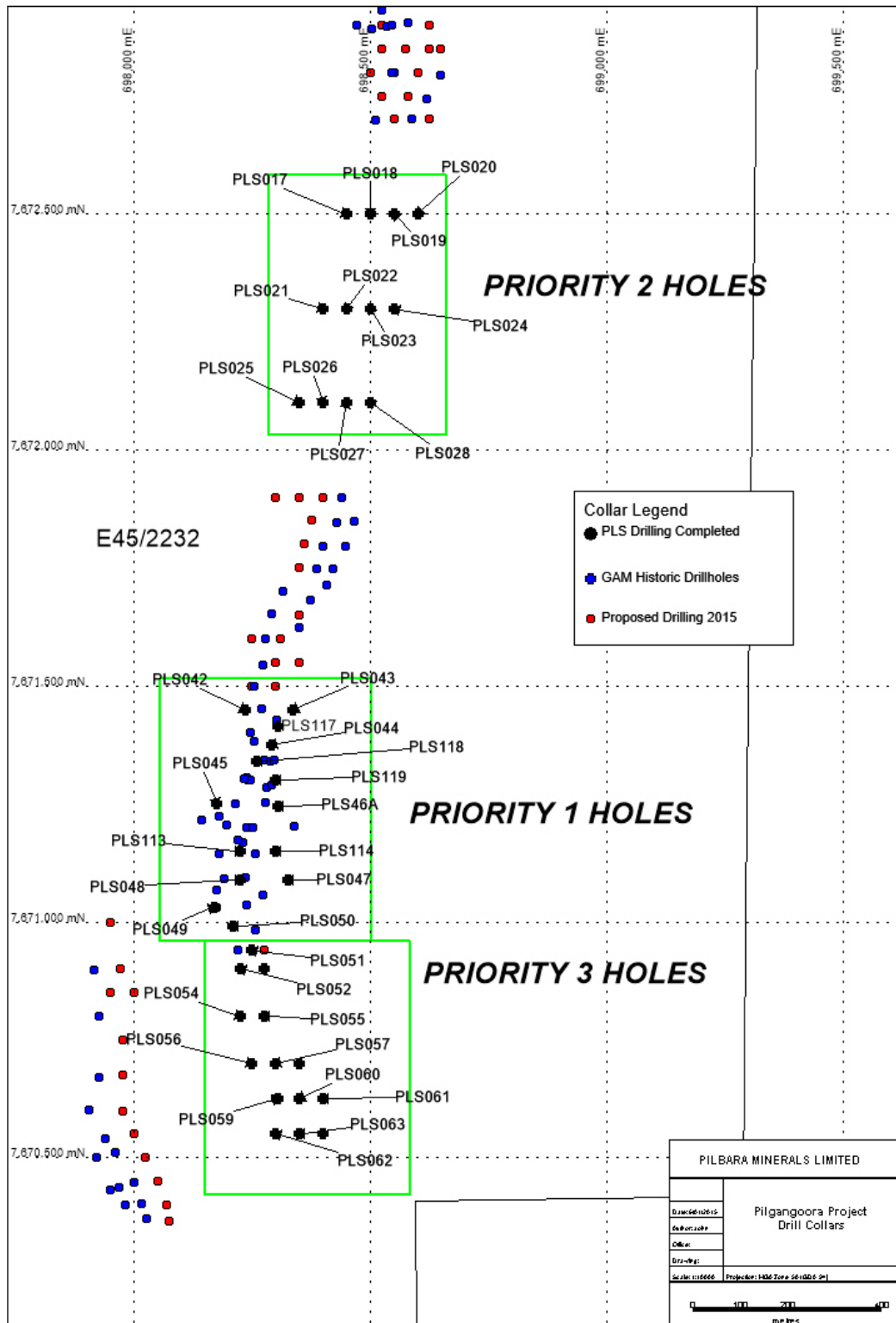


Figure 1 – Pilgangoora RC Collar Locations within Exploration Licence E45/2232

**Contact:**

Neil Biddle  
Director  
Ph 0418 915 752

--- ENDS ---

**Competent Person's Statement**

*The Company confirms it is not aware of any new information or data that materially affects the information included in the March 9, 2015 Pilgangoora Mineral Resource Estimate and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its maiden resource announcement made on March 9<sup>th</sup> 2015..*

*The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr John Young (Executive and Chief Geologist of Pilbara Minerals Limited). Mr Young is a shareholder of Pilbara Minerals. Mr Young is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Young consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.*