



GRANT OF MINING LEASE AND KEY PERSONNEL UPDATE

Pilgangoora Mining Lease granted and Pilbara secures the expertise of Dr Wenbo Wang, one of Australia's foremost lithium oxide flotation process specialists

Australian lithium developer Pilbara Minerals Limited (ASX: PLS) ("Pilbara Minerals" or "the Company") is pleased to advise that Mining Lease M45/1256, being the main mining lease for the Pilgangoora Lithium–Tantalum Project, has now been granted by the Western Australian Department of Mines and Petroleum (DMP).

The granting of this Mining Lease follows the successful completion of several prerequisite steps comprising:

- the signing of a Native Title Agreement with the Njamal people, the traditional owners of the land (see ASX release on 13 December 2016); and
- the signing of an Access and Compensation Deed with the pastoral lease holders within the Project area.

Pilbara Minerals would like to thank the Western Australian Department of Mines and Petroleum for their expedited process in the grant of this key tenement. This combined with the strength of the Company's previous environmental, water and waste characterisation studies makes for a solid foundation for the balance of the Pilgangoora Project's approvals processes to commence major construction works and mining operations.

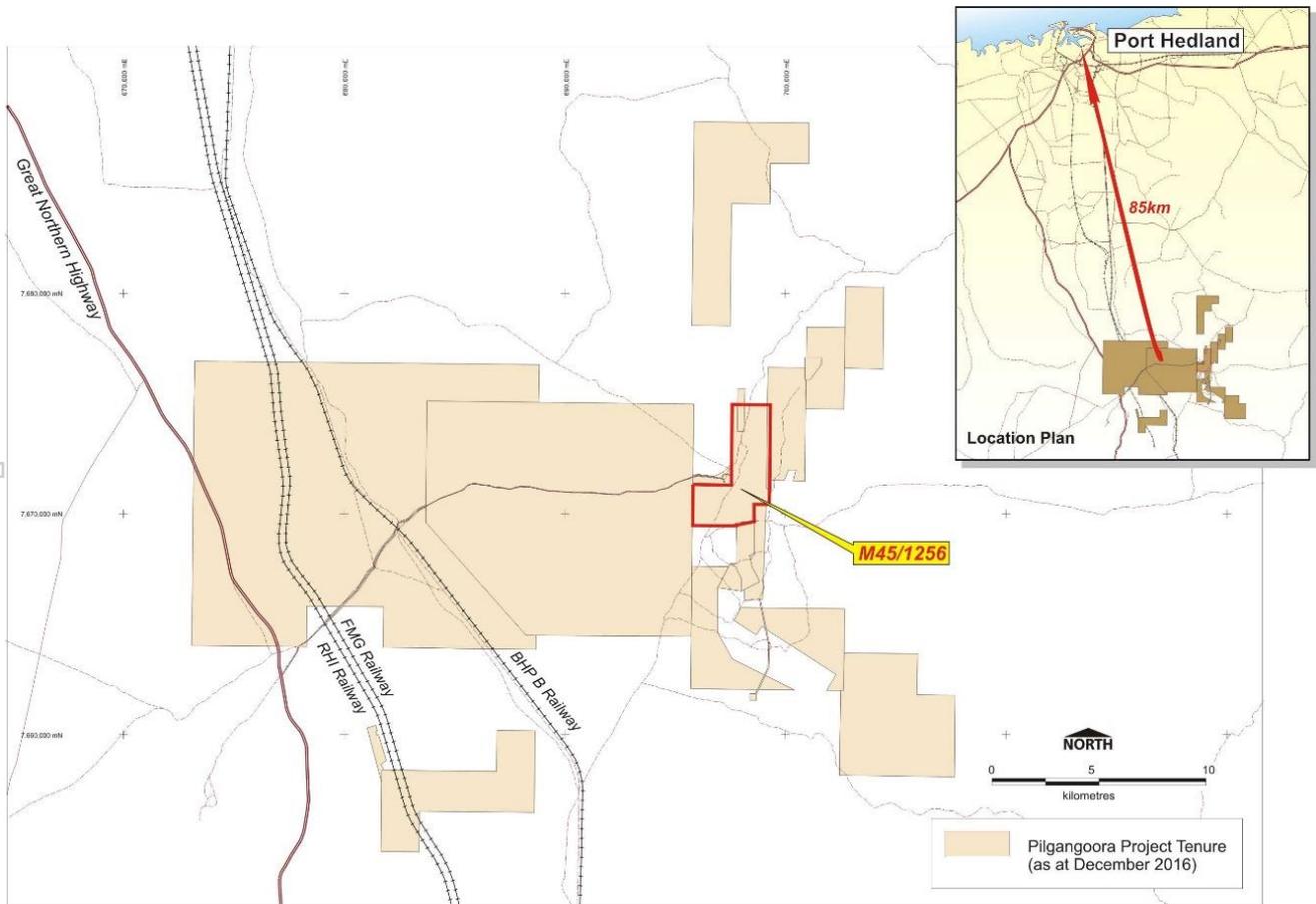


Figure 1: Core Mining Licence at Pilbara Mineral's Pilgangoora Project



ASX Release 20 December 2016

Pilbara Minerals is also pleased to advise of its success in securing the services of renowned lithium flotation specialist and long-serving Greenbushes lithium mine employee, Dr Wenbo Wang. Dr Wang will join Pilbara Minerals from mid-January 2017, providing key expertise in the optimisation and performance of the Pilgangoora plant testwork, design, commissioning and plant ramp-up.

Following completion of his doctorate in 2010, Dr Wang worked at Talison Lithium's Greenbushes Operation and was intimately involved in the commissioning of a new lithium processing plant and further optimising its performance. Both are key objectives in the near-term for Pilbara Minerals' Pilgangoora operation and access to such rare skills and experience is invaluable to the Company.

"Securing someone of Wenbo's experience and stature in Australia's lithium industry is a fantastic win for Pilbara, and places our already outstanding project front and centre for the next generation of large-scale and high quality spodumene production assets. His skills combined with the existing team at Pilbara makes for a formidable process plant operating team", said Ken Brinsden, Pilbara's Managing Director and CEO.

Pilbara Minerals also advises that the next resource update will be available on or before mid-January. Additional drilling success at the Pilgangoora Far-East prospect has meant further modelling requirements than originally planned, delaying the new resource calculation by approximately 2 weeks.

Additional Information:

ABOUT PILBARA MINERALS

Pilbara Minerals ("Pilbara" – ASX: PLS) is a mining and exploration company listed on the ASX, specialising in the exploration and development of the specialty metals Lithium and Tantalum. Pilbara owns 100% of the world class Pilgangoora Lithium-Tantalum project which is among the largest Spodumene (Lithium Aluminium Silicate) projects in the world. Pilgangoora is also one of the largest pegmatite hosted Tantalite resources in the world and Pilbara proposes to produce Tantalite as a by-product of its Spodumene production.

ABOUT LITHIUM

Lithium is a soft silvery white metal which is highly reactive and does not occur in nature in its elemental form. It has the highest electrochemical potential of all metals, a key property in its role in Lithium-ion batteries. In nature it occurs as compounds within hard rock deposits and salt brines. Lithium and its chemical compounds have a wide range of industrial applications 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 consumer electronics, power station-domestic-industrial storage, electric vehicles, power tools and almost every application where electricity is currently supplied by fossil fuels.

ABOUT TANTALUM

The Tantalum market is boutique in size with around 1,300 tonnes required each year. Its primary use is in capacitors for consumer electronics, particularly where long battery life and high performance is required such as smart phones, tablets and laptops.

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