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**The following is an *Inside Briefing* interview with
Pilbara Minerals Managing Director and CEO, Mr Ken Brinsden**

In this interview, Ken Brinsden provides an update on the leading Australian lithium developer Pilbara Minerals Limited (ASX: PLS; market capitalisation: ~\$750 million – 1.144 billion shares on issue), including:

- *Why soaring battery demand and a shortage of new supply is likely to continue to drive the lithium market for some time to come;*
- *Describing some parallels between the iron ore market of ~2002-2004 and today's lithium market;*
- *Why Pilbara's Pilgangoora Lithium-Tantalum Project is in a league of its own as one of the world's leading lithium development projects;*
- *Pilbara's clear step-by-step strategy to secure project funding by the December quarter of this year;*
- *An update on the status of the Pilgangoora Definitive Feasibility Study and off-take agreements;*
- *The opportunities for Pilbara to move into downstream processing of lithium in the future; and*
- *Key news-flow and share price catalysts over the next 12 months.*

Inside Briefing: Lithium has been one of the best-performing commodities of the past year, yet there is no shortage of skeptics saying that the "lithium rush" will be short-lived. Are they right?

Ken Brinsden: Pilbara's team, especially our founding directors Neil Biddle and John Young, have developed a very sophisticated knowledge of the lithium market, its intricacies and opportunities. This has been supplemented by attending several major global lithium and battery forums in the USA and Asia, meetings with numerous customers and end-users around the world and extensive marketing and investor trips.

As a result of this, I can say with much conviction that the lithium market is undergoing a transformational period of growth. I can see some significant parallels between the lithium market now and the iron ore market in the early 2000's, when analysts and investors consistently under-estimated the capacity of China to rapidly replicate steel-making capacity across the nation. This rapid growth in steel-making capacity resulted in a massive surge in demand for the raw material, iron ore. Australia, of course, was a huge beneficiary of this process given its dominant status as a supplier.

While there is significant expansion proposed to support electric vehicle and power storage solutions through the Western world – and that is well understood by the industry analysts – I believe many of them are under-estimating the gathering momentum in China as the battery technology gets replicated and adopted for the mass production of buses, cars and bicycles, as well as for off-grid battery-storage solutions linked to renewable energy. This will drive a similar surge in demand for the lithium materials required to produce lithium-ion batteries. And, once again, Pilbara Minerals and Australia more broadly are in the box seat to benefit because of our world-class lithium resources in the premier mining location of the Pilbara.

We concur with the supply/demand forecasts which are widely available from independent industry analysts, as well as some investment banks. For the most part they have a common view: that a lot more demand is emerging for lithium raw materials over the next decade. And, with the more capital intensive brine projects in South America requiring a longer lead-time to ramp-up to full production capacity, there are actually very few cost-effective projects able to meet this demand growth, and then to incrementally expand as the market continues to expand – particularly over the next 3-5 years.

Against this demand backdrop, the consensus view is that pricing will remain stronger than the historical norm for the foreseeable future. And the projects best placed to meet the supply gap will be the hard rock (spodumene) projects like Pilgangoora.

Inside Briefing: What sets Pilgangoora apart from the many lithium projects which are now being promoted by junior companies on the ASX and TSX? Why can it lay claim to being “the world’s leading lithium development project”?

Ken Brinsden: Pilbara first identified Pilgangoora as a company-making opportunity more than two years ago – well before the recent hype surrounding the lithium sector. In a CEO interview with *Inside Briefing* back in September 2014, Neil Biddle noted that the lithium market was growing at an annual rate of 12% with batteries still only accounting for about 35% of the raw material demand. Events since then have only further confirmed the dominance of Lithium Ion battery technology and its widespread adoption in the transport and storage sectors. The significance of Spodumene technical products and its applications in ceramics, glassware and pharmaceuticals – for which hard rock spodumene is the preferred source of supply, should also not be underestimated.

He said at the time he believed there was “definitely room in the market for another large hard rock lithium resource, with the key advantages of Pilgangoora being its location just 100km from Port Hedland, via a major transport corridor”. If anything, the only things that have changed since then have been the size and quality of the resource as we’ve drilled it out, and the growing scale of the market opportunity.

Pilgangoora is a world-class asset in every respect. It sits in a fantastic location – a great mining-friendly jurisdiction just 100km from the world’s biggest and most efficient export port and on the doorstep of state-of-the-art downstream infrastructure. It is a Tier-1 resource in terms of grade and tonnage – and could well become the biggest hard rock spodumene deposit in the world as a result of drill programs currently underway. It offers scalability to meet rapidly growing demand over a very long mine life. And it will sit at the bottom of the global cost curve because of the grade of the lithium and the presence of tantalite, which will be a valuable by-product credit.

As a company we are resource developers, not speculators. We’ve been involved in this exciting and rapidly emerging sector now for several years – and we’re in it for the long haul, not a short-term burst of market excitement and hype. I do think the lithium market is very exciting and it’s growing fast, but clearly there will only be room for a few new entrants in addition to the existing players. Those that survive and prosper will be those with low-cost, high-quality, long-life projects. We will be one of those players.

Inside Briefing: Pilbara published a positive Pre-Feasibility Study in March which confirmed the technical and financial viability of a 2Mtpa development at Pilgangoora. What areas of the project do you expect will be changed, enhanced or improved as part of the current Definitive Feasibility Study (DFS)?

Ken Brinsden: The Definitive Feasibility Study is going very well and we've been able to secure the best available resources (both within Pilbara and externally) to deliver the best possible result, on time and on budget. Major elements include resource in-fill and extensional drill programs, environmental and heritage surveys and geotechnical studies, which are all largely complete and in the documentation phase.

The last major package is the pilot-scale testwork program, which is well underway. Once we have the updated Mineral Resource and Ore Reserve – which should be finalized in July – work will commence on the financial modelling. Our expectation is that we will publish the final DFS results in August.

In terms of changes or improvements from the PFS, it's a bit too early to be too specific but I think we've made it pretty clear from our announcements that the market can expect further increases in Mineral Resources and Ore Reserves as the foundation for the DFS. The other key change will be incorporation of more definitive pricing, both in terms of capital and operating costs and in terms of the configuration and pricing for our product suite – which will have the benefit of detailed pilot plant testwork. All of this information should flow through into improved financial and economic outcomes.

Inside Briefing: Recent drilling has revealed significant extensions to the known mineralization at Pilgangoora, allowing Pilbara to upgrade its Exploration Target. Why are these results significant and when do you expect to publish an updated resource estimate for the project?

Ken Brinsden: Pilgangoora is already acknowledged as the world's second largest known hard rock spodumene deposit. Since our last resource update, we have completed a further 30,000m of RC and diamond drilling (as a matter of interest, since acquiring the project Pilbara has completed a total of approximately 70,000m of RC and diamond drilling at the project).

This additional drilling is expected to take the resource to another level. We have expanded our Exploration Target for the project to reflect this, and we expect to finalise all of this work to the required level of JORC compliance over the next 3-5 weeks.

Inside Briefing: Pilbara already has MOU's in place with eight customers, covering all of the projected output from Pilgangoora. When do you expect to be able to convert these MOU's into binding off-take agreements and can you provide some insight into the likely terms and structure of these agreements?

Ken Brinsden: We have been clear in our desire to complete the majority of our off-take positions on or before the release of the DFS in August. That's important as we consider the final financing arrangements prior to the expected commencement of major construction works before the end of the year.

We currently have negotiations underway with a number of parties, and these could all be described as being "well advanced". I can't provide any more specifics around the structure of these arrangements at this point, but I can assure you that our objective is to secure binding off-take arrangements which collectively will cover the majority of our projected output (with scope to increase above this level, including the potential for mine capacity expansion in the future).

I can also assure you that our customers are extremely keen to finalise these agreements as quickly as possible, however like all things in the mining game time invested now in establishing the right relationships should provide further benefits in the future.

Inside Briefing: What was the assumed product pricing and product mix used in the Pre-Feasibility Study and how do you expect this to change in the DFS?

Ken Brinsden: The PFS used what we believe is a conservative view of pricing, assuming a price for spodumene concentrate of approximately US\$450 a tonne FOB for 6% spodumene concentrate. That was based on the views of Roskill, a leading independent industry analyst.

Based on public data currently available, spodumene concentrate is currently fetching significantly higher prices, of around US\$600 a tonne. That augurs well for the project economics and likely provides significant leverage to improved financial outcomes within the DFS.

That said, the best outcome for shareholders in the long-run is to ensure that the Company is wholly focused on cost rather than price. At the Pilgangoora Project we think we have the platform to create one of the lowest cost hard-rock operations globally, ensuring the business is set-up for whatever circumstances might arise in lithium raw material markets.

Inside Briefing: How much tantalite will be produced as a by-product at Pilgangoora and what is the significance of this product stream in global terms? What is tantalum used for and what is the outlook for this market, particularly given the Company's decision to shelve the small-scale Tabba Tabba tantalum project?

Ken Brinsden: Tantalum is a valuable metal used mainly in capacitors for consumer electronics, especially where long battery life and high performance is required – such as in smartphones, tablets and laptops. Since mid-2015, the market price for tantalum fell quite sharply due to declines in global demand as well as increased levels of supply out of Africa. It was against this backdrop that we made decision earlier this year to shelve the Tabba Tabba Project, which is a high-grade but very small resource.

The other key factor driving our thinking is that the economics of producing tantalite concentrate as a by-product at Pilgangoora are vastly superior compared with a small-scale and relatively high-risk operation such as Tabba Tabba. Our March PFS indicated that we could produce around 274,000 pounds of tantalite concentrate per annum from Pilgangoora – which is a valuable and significant by-product revenue stream.

Interest from industry participants seems to indicate that the tantalum market will see a reasonable recovery over the next 12-18 months as new applications for Tantalum become the norm in the electronics industry, and Pilgangoora will be well placed to be a player in this market. That said, we are not reliant on the tantalum price to allow us to move forward with the project.

Inside Briefing: Pilbara has recently completed a highly successful \$100 million capital raising. What financing structures are currently under consideration in terms of debt, further equity and/or off-take funding? What is the timetable to secure a suitable funding package for the project?

Ken Brinsden: As a result of the recent capital raising and continued cash in-flows from the conversion of in-the-money options, Pilbara has an exceptionally strong treasury position currently of approximately \$105 million and no debt. That puts us in a tremendous position as we advance discussions regarding project funding.

It's likely that our customers will be supportive in the fundraising efforts, and we expect that one or more of our off-takers will participate in the project funding in some shape or form. Once we have

finalized our off-take arrangements, we will then form a view about what's required for the remainder of the raising. We have had very strong interest and support from all sectors of the capital markets given Pilbara's status as the leading lithium development project.

Our single overriding objective will be to secure the best possible funding solution we can to support our Company's continued growth. Our timetable is to have our final project funding solution in place by early in the fourth quarter of this calendar year, so that we can push the button on major construction works before year-end.

Inside Briefing: What is the current status of the Pilgangoora Project in terms of permitting and native title negotiations? What are the key infrastructure and transportation requirements of the project and how will these be addressed? What are the key development risks for Pilgangoora?

Ken Brinsden: All of the environmental survey work is now completed and we have not found anything that would appear to challenge the progress of the projects regulatory approvals. We are currently deep into the process of Native Title negotiations and we have exchanged key economic and relationship terms. That should pave the way for us complete our Native Title agreements and to secure the grant of the Mining Lease by the third quarter of this year.

In terms of risk, there is always the chance that something pops up that presents a challenge. However, we have invested in the right level of work and employed the right skills to progress as efficiently as is possible. Keep in mind that the Pilbara needs great projects like Pilgangoora to further diversify its economic base and present new opportunities for the region and the State as a whole.

With access to such great infrastructure downstream of the project – including road and port assets – we are currently in the process of progressing contracting terms with key parties to facilitate access and use.

Inside Briefing: What future growth opportunities are available to Pilbara once Pilgangoora has come on stream? What growth opportunities are there for the company in terms of consolidation within the lithium sector or vertical integration and downstream processing?

Ken Brinsden: With such a great resource underpinning us, we don't really have a need for additional tonnes in the ground. The current Ore Reserve as published in the March PFS already supports a mine life of 15 years – and we expect that to increase significantly once we incorporate all of the results of the current drill programs. That means we should have sufficient material in our own right to underpin a very significant mine life as well as future production growth.

We have an important mine development to deliver on behalf of our shareholders over the coming 18 months, and that's the main game. That said, with margins as strong as they are in Carbonate and Hydroxide markets, there might be some merit in exploring the the value-added opportunity, within the right framework and down the track.

To that end, we have commenced discussions with off-take partners regarding the opportunity for Pilbara to participate in future downstream processing ventures. We recently commissioned an independent Scoping Study by a highly regarded global engineering firm into the opportunity to construct a lithium carbonate/hydroxide plant in Port Hedland in conjunction with partners. The results of this study were very positive, and it recommended advancing to a Feasibility Study and conducting a location study. I should stress that we wouldn't undertake this work in our own right as our focus

remains firmly on Pilgangoora, but we would consider pursuing such an opportunity with the right partners and in the right structure.

We have also been reviewing the latest R&D work into technologies which could lower the costs for converting spodumene into lithium carbonate and lithium hydroxide to ensure future competitiveness in terms of operating costs with the big brine projects. This conversion technology hasn't changed in over 50 years as, until now, lithium has not attracted the R&D investment required to revolutionise the conversion processes.

This situation is changing rapidly as a result of the transformational growth that is now occurring in the market, and I can see the potential for technology to drive a quantum shift in the industry. Just remember what the introduction of carbon-in-pulp processing did for the gold industry in the 1980s and with the potential for change like that you want to make sure you are keeping abreast of developments!

Inside Briefing: Can you briefly summarise the key upcoming news-flow and share price catalysts which investors should look out for over the next 6-12 months?

Ken Brinsden: The next six months will be a huge period of news-flow, and typically the time of greatest value uplift for an emerging mining company as we de-risk the project and put project funding in place. In short order, investors can expect to see a resource and reserve update in July, announcements on off-take over the next 2-3 months and the Pilgangoora Definitive Feasibility Study in August.

That will be followed in the third and fourth quarters (in equally short order) by permitting approvals, Native Title agreements and the grant of the Mining Lease, project financing and the start of construction. It's a hectic schedule, but we have the right people, the right resources and the right structures on place to achieve it. And we're all very motivated and excited about delivering on it.

ENDS

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