



PILBARA MINERALS

LIMITED

ABN 95 112 425 788

ASX Announcement

3 June 2015

Re-issue of ASX Release

Further to our release of earlier today, we enclose an amended presentation including additional information and inclusion of a clarification statement regarding exploration targets.

**Alan Boys
Company Secretary
Pilbara Minerals Limited**



PILBARA MINERALS
LIMITED

Production, Cash Flow, Growth

An emerging Australian strategic metals producer – June 2015 Investor Update

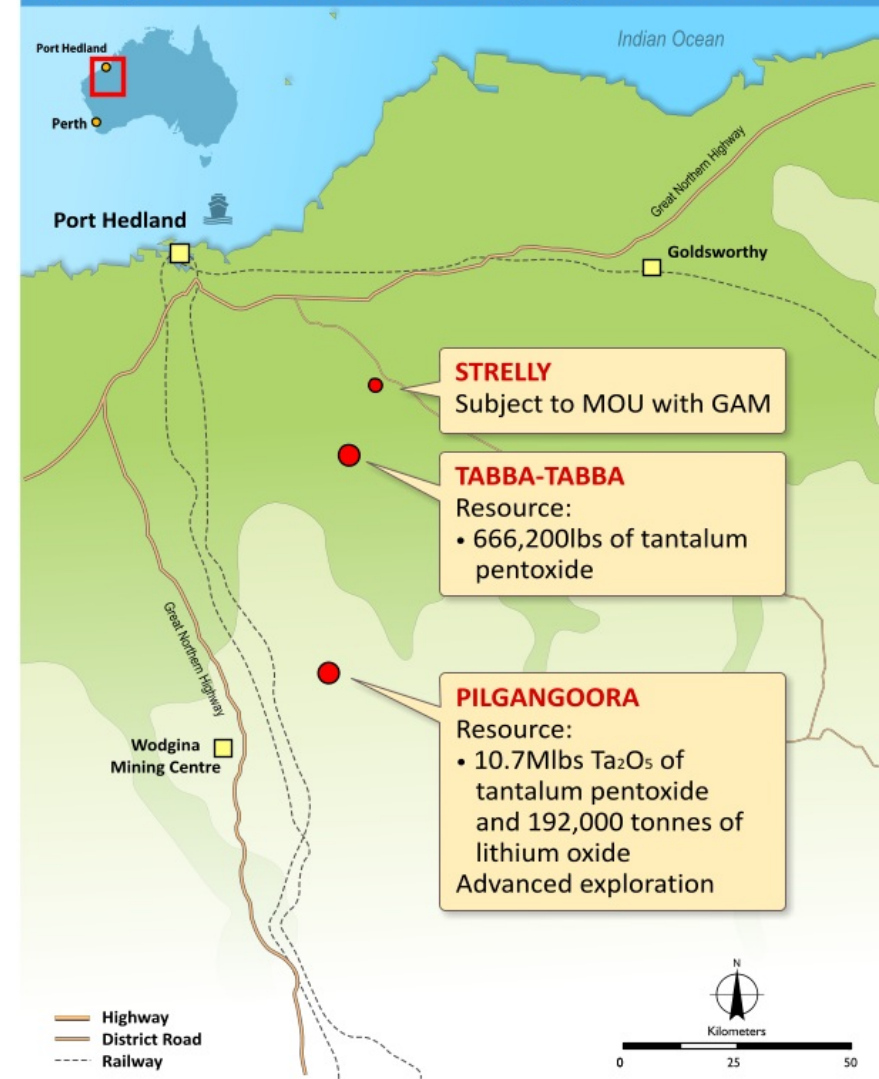
Project Summary



- An emerging, low-cost producer of tantalum and lithium
- Portfolio of two substantial near-production assets in the Pilbara
- Located within 100km of Port Hedland – excellent infrastructure
- Imminent production and cash flow from Tabba Tabba Tantalum Project – 50/50 JV with Nagrom:
 - *Mining commencing Q3 2015*
 - *Low capital intensity, strong economics, secured off-take*
 - *Mine life growth potential within Tabba Tabba region*
- 100% ownership of the world class Pilgangoora Project, located 55km from Tabba Tabba:
 - *World class lithium-tantalum resource with substantial upside*

Pilbara Minerals will produce ~10% of global tantalum production once Tabba Tabba is in production...

Pilbara Minerals' emerging strategic metals portfolio: on the doorstep of Port Hedland





Nagrom

- World-recognised metallurgical laboratory and tantalum processing specialists since 1978
- Nagrom metallurgical staff will operate Tabba Tabba plant, ensuring optimum recovery and profit

Global Advanced Metals (GAM)

- **Leading vertically integrated and conflict-free provider** of high purity / high performance tantalum products to the electronics, aerospace, automotive, chemical manufacturing and other industries
- Off-take partner for Tabba Tabba concentrate (5-year term)

**5 Year Mining and
Off-take Agreement
with GAM**



GLOBAL
ADVANCED METALS



**50/50
Development and Mining
Joint Venture**

Tabba Tabba Tantalum Project



- Very high grade tantalum project
- Four Mining Licences granted: M45/354; M45/375; M45/376 and M45/377
- Environmental approvals completed, operating permits due now
- Fully funded, capex of only \$8.0 million (\$7.0m already spent)
- Mine in construction
 - *Processing plant construction complete*
 - *Mine Camp construction complete*
 - *Mining start-up Q3 2015*
- Imminent cash flow
 - *Forecast to generate \$18 million of EBITDA in first year*
 - *Secure 5-year off-take with Global Advanced Metals*
 - *Excellent potential to increase project reserves to at least 5 year mine life*
 - *Mineral Resource of 666,200 lb of contained tantalite*



Tabba Tabba pit outline



Water dam proposed for processing water

Tantalum – Rare and Highly Valuable Metal



- Classified as a rare or specialty metal
- **Refined tantalum (99.999% Ta)** has a market value between **US\$400-500,000 per tonne**
- Tantalite, Ta_2O_5 , has an approximate market value of **US\$200,000 per tonne**
- Largest deposits located in **Australia**, Brazil and Africa
- Major use in **electronics**, especially for capacitors = ~50% of global production (tablets, smartphones, cameras, etc)
- Also used for chemical and nuclear power plants, **airplanes** and missiles – may also substitute for platinum
- Global tantalum market forecast to grow by up to **60% to ~2,000 tonnes** by 2016 from ~1,300 tonnes currently
- Two major refiners globally: **Global Advanced Metals** (GAM) and HC Starck. GAM is PLS' off-take partner



Global Advanced Metals is one of the world's leading suppliers of tantalum products. Its tantalum operations are vertically integrated from the mining and processing of ore into concentrates, through to the manufacturing of capacitor powders and metallurgical products. GAM operates the Greenbushes tantalum mine in Western Australia

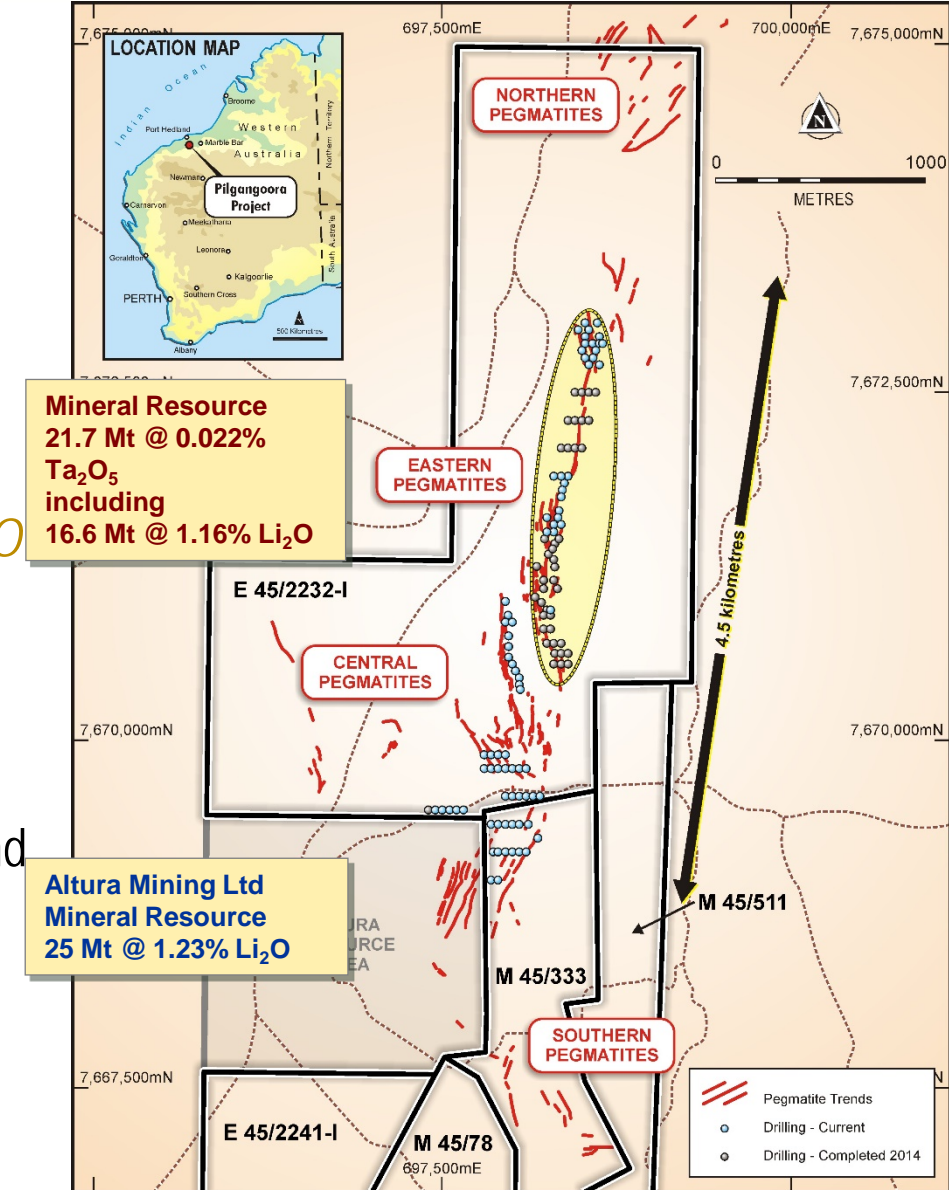
Pilbara Minerals will account for ~10% of global tantalum production once Tabba Tabba is in production...

Pilgangoora Lithium-Tantalite Project – PLS 100%



- 100% owned world class Lithium and Tantalite resource within contiguous block of 3 Mining Licences, 2 Exploration Licences
- Indicated and Inferred Resource of 23.8Mt @ 0.021% Ta_2O_5 containing 11.3Mlb of Ta_2O_5 , including 20.48Mt @ 1.16% Li_2O containing 237,000t of lithium
- Significant potential to increase resource through in-fill and step-out drilling
 - *Exploration Target* of 50-60 Mt @ 200-300ppm Ta_2O_5 and 1.2-1.5% Li_2O*
 - *RC and Diamond drilling planned for full year 2015 - 2016 focusing on rapid resource growth over 4kms of strike potential remains to be tested.*
- Metallurgy underway on Five Continents, bulk samples being tested in Australia, Germany and China; Spodumene samples being tested in North and South America for conversion to Lithium carbonate and lithium hydroxide

Exploration Target:* The potential quantities and grades are conceptual in nature and there has been insufficient exploration to date to define a Mineral Resource. It is not certain that further exploration will result in the determination of a Mineral Resource under the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code" (JORC 2012). The Exploration Target is not being reported as part of any Mineral Resource or Ore Reserve.



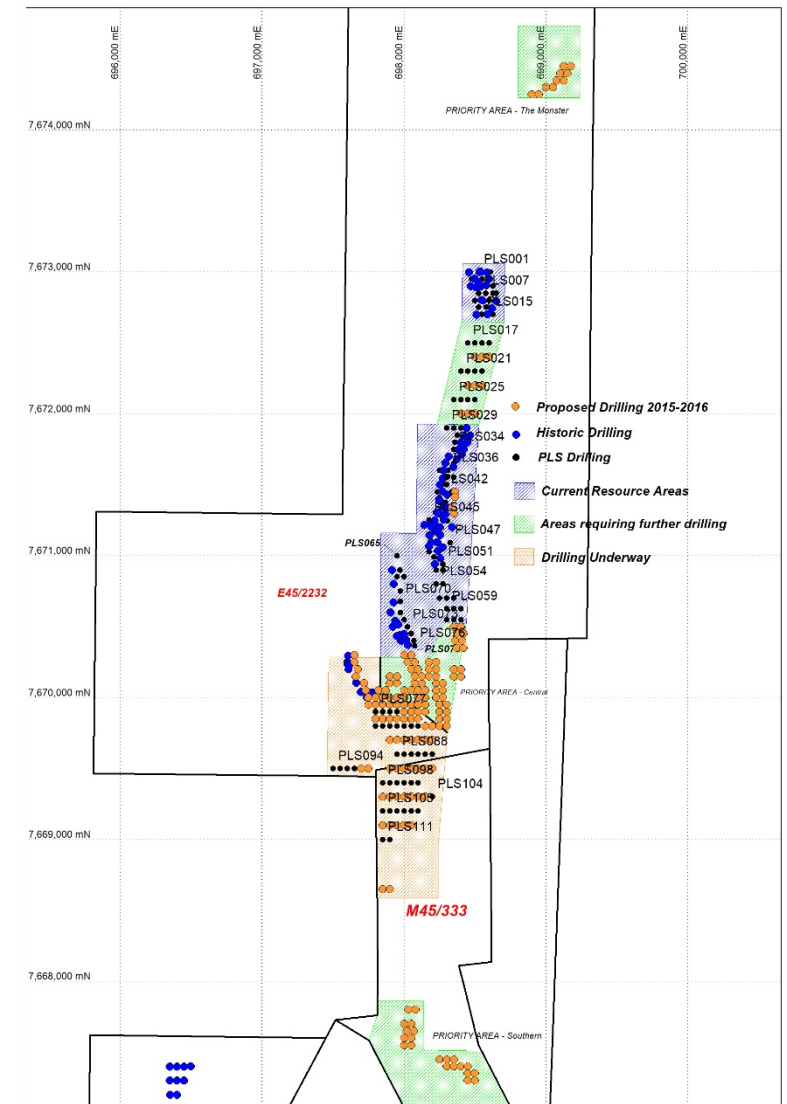
Pilgangoora Lithium-Tantalite Project – PLS 100%



Exploration Target* of 50-60 Mt @ 200-300ppm Ta_2O_5 and 1.2-1.2-1.5% Li_2O

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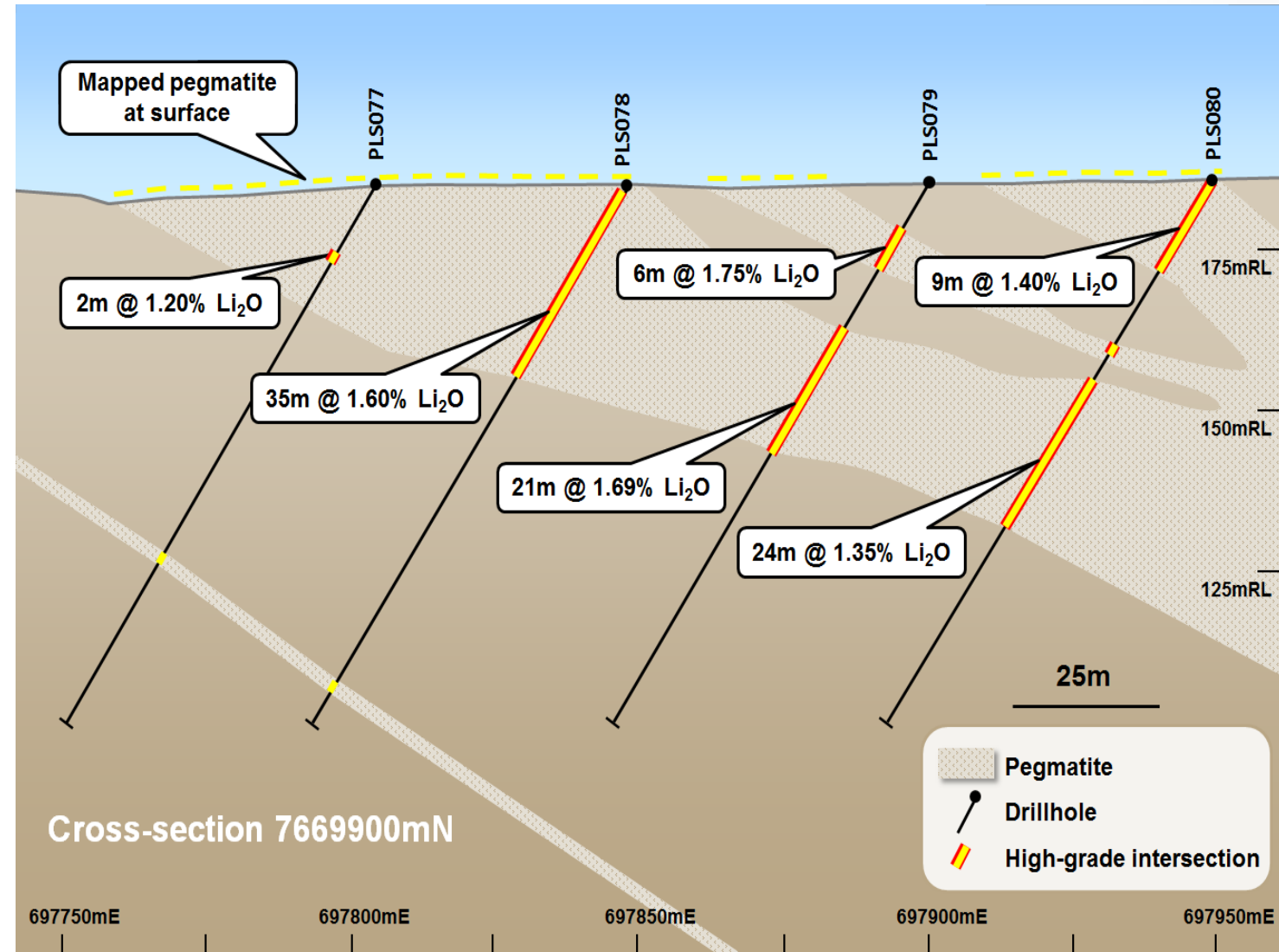
- 37 holes completed in May 2015 for 3716m, a further 32 planned in June 2015 for approximately 2370m.
- 190 RC holes and 6 Diamond holes planned for full year 2015 -2016 focusing on rapid resource growth over 4kms of strike potential remains to be tested.
- Broad Intersections and high grade results returned from areas outside of defined resources.



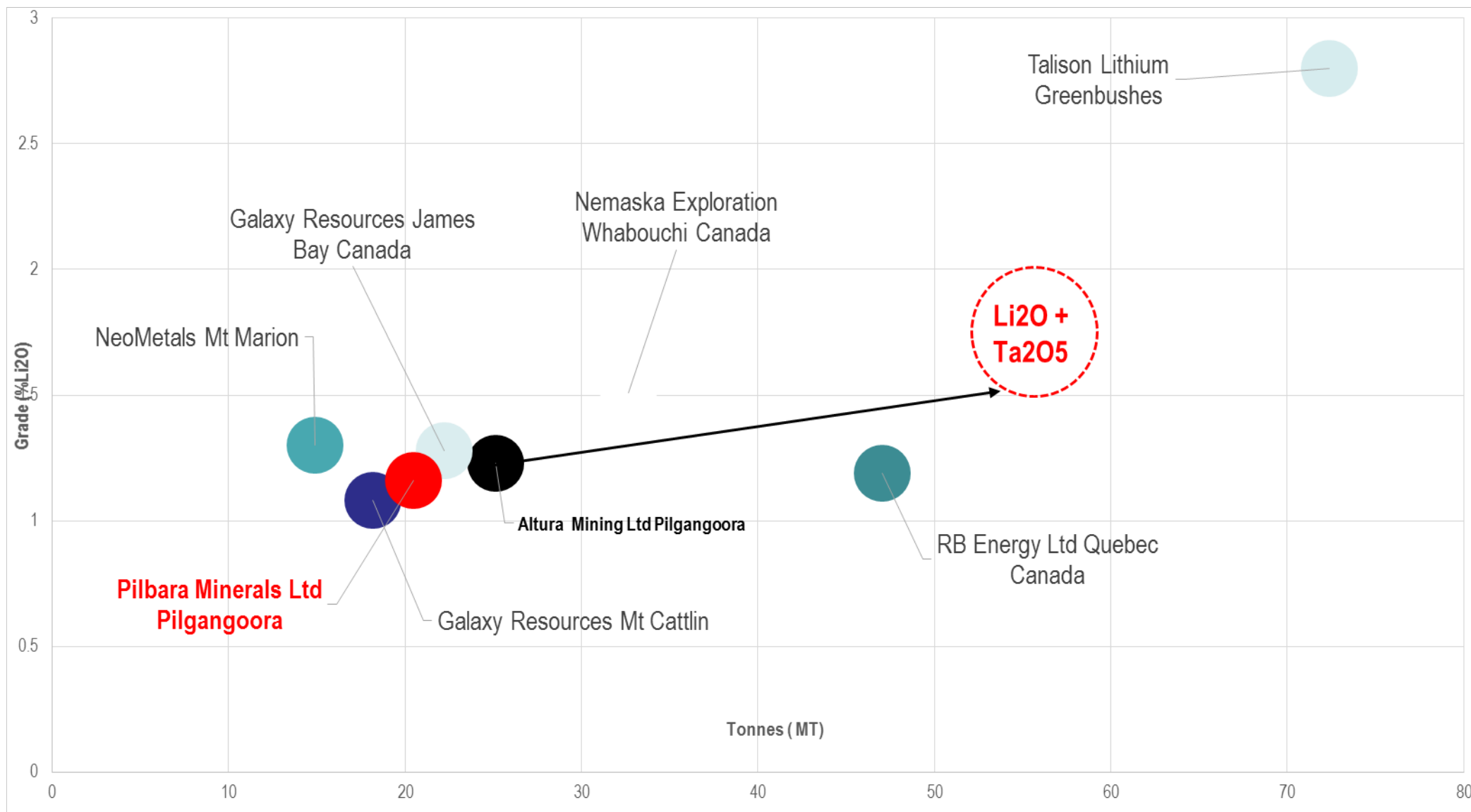
Southern Pegmatite – Typical X-Section



- Broad Intersections of High Grade Lithia from near surface
- 35m @ 1.60% from surface
21m @ 1.69% from 28metres
24m @ 1.35% from 30metres
09m @ 1.40% from surface
06m @ 1.75% from 5 metres
- Current infill drill program over 1km x 200m will bring southern pegmatite's into JORC Resource category



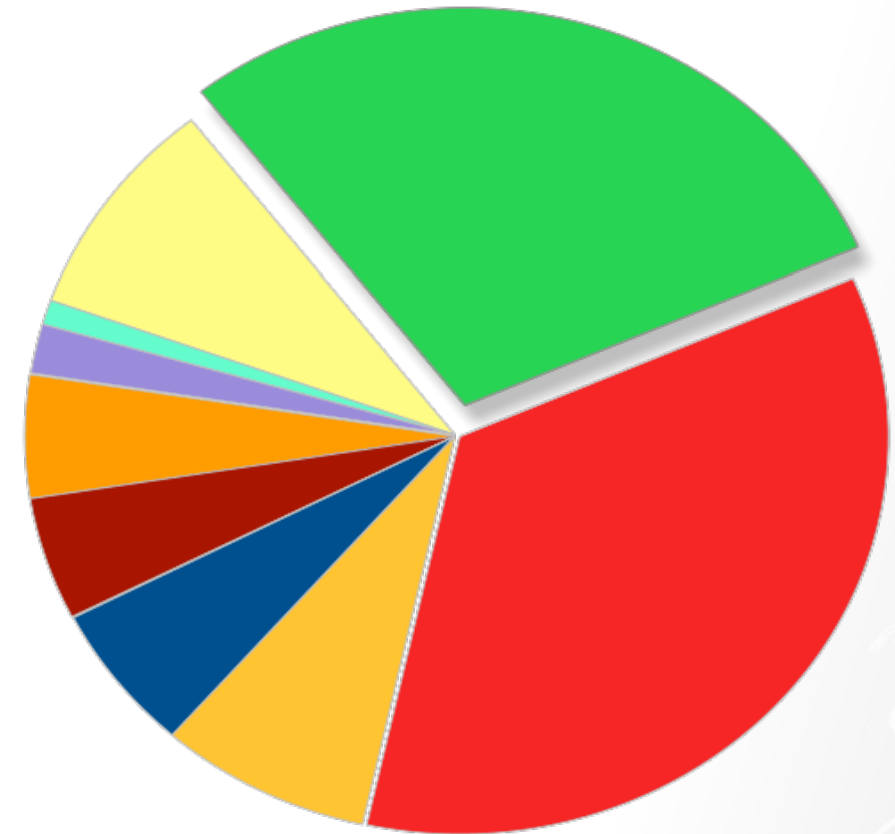
Industry Benchmark of Pilgangoora Lithium-Tantalite Project



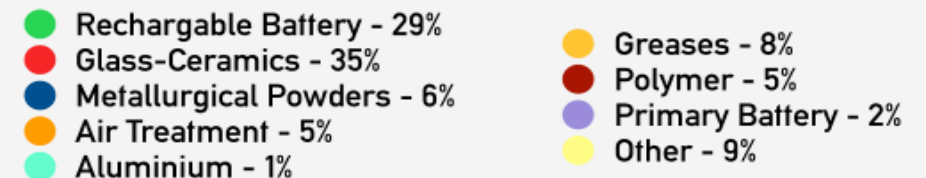


- Pilgangoora spodumene concentrates meet the precursor metallurgical specifications of the entire range of lithium products.
- Spodumene Concentrate Grade : 6.5% Li_2O , 0.09% iron oxides, all other oxide content within highest quality range of specifications

Pilgangoora Spodumene Concentrate potentially meets the specifications of the entire Lithium market



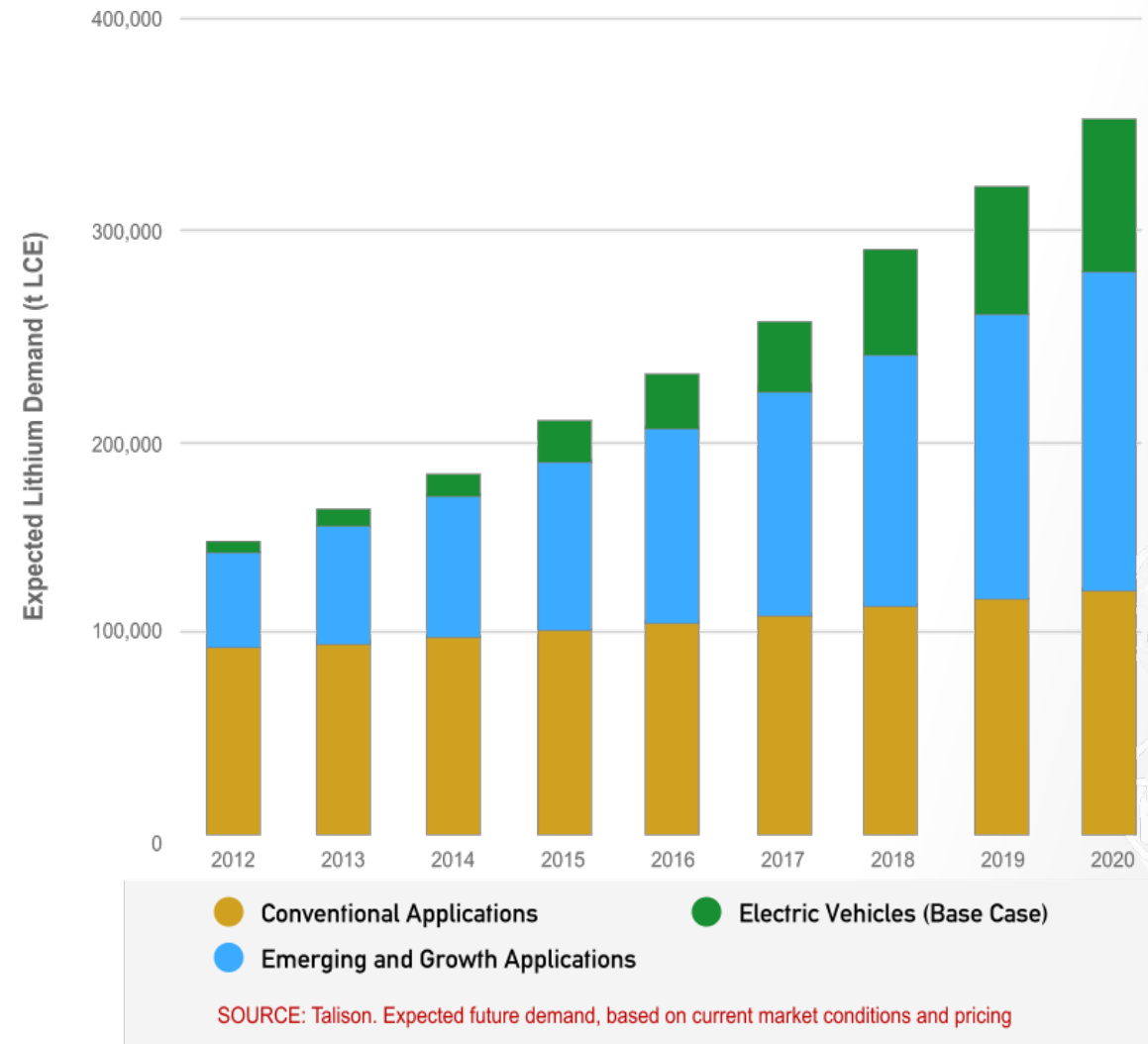
SOURCE: ROSKILL 2013





Lithium-ion batteries driving demand

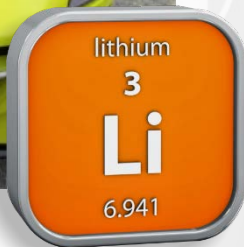
- Energy dense consumer batteries
 - *20%+ annual growth since 2000*
 - *Currently 30% of global market*
- Electric Vehicles
 - *Currently <1% of global market*
 - *Growth accelerated expected from 2015*
- Large format batteries for electricity grid stabilisation
 - *Potentially significant future demand*
- Conventional applications
 - *Currently 70% of global market*
 - *Glass & Ceramics typically use technical-grade concentrate*



Motor Vehicle Lithium Demand



- Tesla's electric car sales are up 55% from last year...
- With a current market cap of \$26BN USD, Tesla is widely tipped to be the first company to take electric cars to the masses.
- Rumours abound that software giant Apple, after revolutionising home computers, phones and watches, wants to make electric cars also.
- Richard Branson has hinted that his mega corporation Virgin may also have a crack at electric cars – they are sending people to space after all.
- German auto maker BMW has a successful electric car on the market, along with a hybrid coupe.
- Rival German Mercedes is also planning a suite of electric vehicles.
- The race for electric car dominance is in full swing and hotly contested.
- Whichever company can put an electric car in the most garages across the world stands to generate billions of dollars in revenue for decades to come...





Capital Structure	ASX: PLS
Shares on issue (proforma)	635 million
Convertible notes	1.05m @ \$1.00 each (expy 9/15 & 11/15) 5.7m @ \$1.00 each (expy 12/16 & 1/17) proforma
Unlisted Options	39 million (expy 3/17 @3c) 71.25 million (expy 12/16 & 1/17) proforma
Market capitalisation	\$32 million @ 5¢
Top 20 shareholders	40%
Board & Management	13%
Cash at 1/6/15 (proforma)	\$7.0 million
Proforma based on announced placement and convertible note issue. Convertible note issue subject to completion of documentation and approval by shareholders.	



Highly experienced management team with strong experience in exploration, mining and corporate management

- **Tony Leibowitz, Chairman** – Fellow of The Institute of Chartered Accountants in Australia, over 30 years professional experience and previously a senior partner with Price Waterhouse Coopers in corporate finance and investment banking
- **Neil Biddle, Director** – Geologist and Corporate Member of the AusIMM with over 30 years professional and management experience in the global exploration and mining industry. Since 1987, Mr Biddle has served as Managing Director and Exploration Manager of several ASX-listed companies
- **Robert G Adamson, Non-Executive Director** – Geologist with over 40 years experience, served in technical, managerial and board positions with several publicly-listed exploration and mining companies in Australia, South Africa, New Zealand, South Korea, Canada and the Philippines
- **John Young, Exploration Manager** – Geologist and Corporate Member of the AusIMM with over 25 years experience in the global exploration and mining industry. Ten years direct experience managing tantalite, tungsten and molybdenite projects

Disclaimer and Competent Person's Statement



Disclaimer

- This presentation may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although the company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. They may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein. All references to dollars (\$) and cents in this presentation are to Australian currency, unless otherwise stated.
- Investors should make and rely upon their own enquires and assessments before deciding to acquire or deal in the Company's securities.

Competent Person Statement

- The information in this report that relates to Mineral Resources is based on information compiled by Mr Lauritz Barnes, (Consultant with Mitchell River Group Pty Ltd) and Mr John Young (Executive and Chief Geologist of Pilbara Minerals Limited). Mr Young is a shareholder of Pilbara Minerals. Mr Barnes and Mr Young are members of the Australasian Institute of Mining and Metallurgy and have 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 is the Competent Person for the database, geological model and completed the site inspection. Mr Barnes is the Competent Person for the database and the resource estimation. Mr Barnes and Mr Young consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

Pilbara Minerals Resource and Reserve Tables



• Tabba Resource and Reserve Tables

Category		Tonnage(Kt)	Ta ₂ O ₅ (ppm)	Ta ₂ O ₅ (Mlbs)
Measured	Ta ₂ O ₅	35.1	1380	107,125
Indicated	Ta ₂ O ₅	187.0	1020	418,925
Inferred	Ta ₂ O ₅	96.0	660	140,150
TOTAL	Ta ₂ O ₅	318.1	950	666,200

Reserves	Tonnes	Ta ₂ O ₅ ppm	Nb ₂ O ₅
Proved	32,000	1,420	294
Probable Plus inferred	129,000	1,249	292
Total	162,000	1,240	292

• Pilgangoora Resource table

Category		Tonnage	Ta ₂ O ₅ (ppm)	Li ₂ O (%)	Ta ₂ O ₅ (T)	Ta ₂ O ₅ (Mlbs)	Li ₂ O (T)
Indicated	Ta ₂ O ₅	5,994,292	235		1,409	3.1	
	Li ₂ O	4,692,385		1.38			64,823
Inferred	Ta ₂ O ₅	15,713,942	220		3,452	7.6	
	Li ₂ O	11,927,784		1.07			127,462
TOTAL	Ta ₂ O ₅	21,708,234	224		4,862	10.7	
	Li ₂ O	16,620,169		1.16			192,286

