



ASX/Media Announcement

27 April 2018

MARCH 2018 QUARTERLY ACTIVITIES REPORT

Excellent construction and mine development progress puts Pilbara Minerals on track for Q2 production at Pilgangoora; landmark deal with POSCO underpins long-term growth runway

PROJECT DEVELOPMENT

- Plant construction and mine development activities progressed rapidly on multiple fronts, with the Stage 1 (2Mtpa) Pilgangoora Project on track to commence wet plant commissioning in Q2 2018 and deliver first spodumene concentrate by late Q2.
- Mining well underway for both the Stage 1 and DSO operations. First DSO mine gate sales expected in Q2.
- Pre-Feasibility Study ("PFS") on the Stage 2 5Mtpa Expansion delivers exceptional financial outcomes and robust economics, demonstrating a compelling case for the expansion to proceed once initial Stage 1 production is achieved.
- Definitive Feasibility Study ("DFS") on the Stage 2 Expansion on track for completion by mid-2018, paving the way for Stage 2 funding and a Final Investment Decision in Q3 2018.

EXPLORATION

- Exploration RC drilling program targeting further Resource and Reserve growth in the Central, Eastern and Monster Domains concluded subsequent to Quarter-end with a total of 85 holes drilled for 17,309m.
- Outstanding drilling results continue to demonstrate the world-class endowment of the Pilgangoora deposit with new zones of high-grade pegmatite mineralisation identified at Monster and Central.
- Pending access and regulatory approvals, non-ground disturbing exploration activities are scheduled to commence at Mt Francisco in Q2 2018 and drilling from Q3 2018.

CORPORATE

- Landmark agreements executed with POSCO, establishing a long-term strategic relationship with the multibillion dollar South Korean conglomerate and a first-mover position in the fast-growing South Korean lithium raw materials market.
- The POSCO agreements include a A\$79.6M direct equity investment and a binding Stage 2 off-take agreement for 80ktpa of chemical grade spodumene concentrate, increasing to 240ktpa upon establishment of Pilbara's joint venture participation in a proposed downstream lithium chemicals conversion plant in South Korea.
- First draw-down completed under the US\$100M senior secured bond issue, following satisfaction of all conditions precedent including a cost-to-complete test.
- Cash balance at 31 March 2018 of \$134.7M (31 December 2017: \$71.97M), exclusive of undrawn Bond proceeds of A\$67.3M. Proceeds from POSCO's equity investment of A\$79.6M was received on 29 March 2018.

SUBSEQUENT TO THE QUARTER

 Experienced mining and finance professional Sally-Anne Layman joins the Pilbara Board as John Young, a founding Director of Pilbara, steps-down.





Figure 1 – Process plant overview as at 12 April 2018

1. OVERVIEW

Australian lithium developer Pilbara Minerals Limited (ASX: PLS) ("Pilbara", "Pilbara Minerals", or "the Company") is pleased to advise that it continued to make rapid progress during the quarter ended 31 March 2018 ("Quarter") towards its objective of becoming a premier long-term supplier of both chemical and technical grade spodumene concentrates and tantalum at its 100%-owned Pilgangoora Lithium-Tantalum Project.

Pilbara Minerals' Managing Director and CEO, Ken Brinsden, said:

"The strong progress that we've made so far this year has brought Pilbara to the cusp of achieving our longheld goal of becoming a major new low-cost supplier of lithium raw materials to global markets. Plant commissioning at Pilgangoora is now just weeks away and we remain on track to achieve our first ever production of spodumene concentrate during the June Quarter – making this a very exciting time for everyone involved with the company.

"Huge progress was achieved with project construction and mine development during the March quarter, with a peak construction and production workforce of approximately 650 currently on site as we complete construction at the plant and prepare to start wet commissioning.

"In addition, we have delivered a series of key milestones in preparation for the proposed Stage 2 Expansion of the Project, with a pre-feasibility study completed during the March quarter delivering outstanding technical and economic outcomes. The team is now well underway with a definitive feasibility study for the 5Mtpa Expansion Project, which is on-track for delivery by mid-year, ahead of completing Stage 2 funding with a Final Investment Decision expected during Q3.

"The proposed Stage 2 Expansion at Pilgangoora has been significantly bolstered by the wide-ranging strategic relationship which we have secured with the South Korean industrial conglomerate POSCO. This multi-faceted agreement further de-risks our balance sheet as we move into the commissioning phase for Stage 1, underpins our Stage 2 expansion plans and, importantly, gives us a first-mover advantage in the burgeoning North Asian lithium markets. POSCO's decision to come on board as a strategic investor, long-term off-take partner and future downstream processing joint venture partner represents a major endorsement of the Company and its growth strategy.

"The coming quarter is shaping up as a watershed period in Pilbara's history, as we complete the final steps to commence Stage 1 production, and also lay the foundations for the proposed Stage 2 Expansion, to cement the Pilgangoora Project's emergence as a major new supplier of lithium raw materials."



2. SAFETY PERFORMANCE

Safety performance for the Quarter was generally positive given the increased volume of construction and production activities on site.

The Quarter ended with a total recordable injury frequency rate ("TRIFR") of 5.8. This was an increase from the previous quarter performance that had completed with a TRIFR of 3.2.

3. PROJECT DEVELOPMENT

3.1 Project Construction

Construction of the Stage 1 Pilgangoora Project continued to progress strongly during the Quarter, with a peak project workforce of approximately 650 on site at Quarter-end. The successful execution and delivery of the Project remains Pilbara's primary objective with the aim of becoming a significant Australian lithium producer in 2018.

Construction and development of the Pilgangoora Project is progressing well and remains on schedule to commence wet plant commissioning in Q2 2018 and deliver first spodumene concentrate in late Q2 2018.

The process plant civil works are largely complete with over 4,666m³ of concrete poured to date. Structural steel and mechanical works were the primary activity for the plant during the Quarter. All structural steel has been delivered to site and over 1,050 tonnes erected. Electrical and control works have commenced with all switch rooms delivered and installed.

The crusher plant continues to make good progress with completion of civil works and mechanical assembly.

Construction and commissioning of the power plant was completed during the Quarter.



Figure 2 - Ball mill and gravity circuit





Figure 3 – Flotation circuit and cyclone cluster



Figure 4 – HPGR Feed conveyor installed at Pilgangoora

3.2 Mining

Mine development continued with the development of both the Central Pit supporting the Stage 1 development and the mine gate Direct Shipping Ore (DSO) operation at Monster Pit.

Other critical infrastructure was progressed during the Quarter including tails management facility construction, crushed ore stockpile backfill, crusher pocket backfill, and mine access roads.





Figure 5 – Mining progressing at Central Pit



Figure 6 – DSO operations at Monster Pit

3.3 Award of Key Contracts and Personnel

All major contracts have been awarded, except for the haulage contract which is expected to be awarded imminently. Activities for the period focused on operational readiness tasks, including progressing orders for plant consumables, employment of plant operations staff, and maintenance planning.

3.4 5Mtpa, Stage 2 Pre-Feasibility Study

During the Quarter, Pilbara completed the PFS (refer ASX announcement dated 13 February 2018) to assess the 5Mtpa Expansion of the Pilgangoora Project, delivering exceptional financial outcomes and robust economics.

The results outlined a compelling business case for commencing the construction and development of the 5Mtpa Expansion shortly after the commencement of first concentrate and the initial ramp-up of spodumene concentrate production from the Stage 1, 2Mtpa operation.



A summary of the key Stage 2 (5Mtpa) PFS financial outcomes is provided in **Table 1** below.

Table 1 - 5Mtpa PFS Key Financial Outcomes

Study Outcomes	PFS - 5Mtpa Base case
Reserve Estimate	80 Mt
Estimated Mine Life	17 years
LOM Project revenue (real)	A\$11.5 billion
LOM Project EBITDA (real)	A\$6.5 billion
Stage 2 Development Capital	A\$207 million
Post-tax NPV ¹ _{10%}	A\$2.1 billion
Internal Rate of Return (IRR)	56%
LOM cash operating costs ² (real, net of Ta ₂ O ₅ credits)	US\$225/tonne CIF ³
Project payback	3 years
LOM Average Annual EBITDA (real)	A\$382 million per annum
LOM assumed spodumene concentrate price (real)	US\$594/tonne CIF ³
LOM assumed tantalite price (real)	US\$89/pound FOB
First 5 years cash operating costs ² (real, net of Ta ₂ O ₅ credits)	US\$210/tonne CIF ³
First 5 years average annual EBITDA (real) including production ramp	A\$370 million per annum

¹ Valuation date of 1 January 2018 at after tax nominal discount of 10%.

³ CIF ("Cost Insurance and Freight") (Incoterm) is a trade term requiring the seller to deliver goods onboard at port of shipment, plus cover the cost of transport and transit insurance to the destination port.



Figure 7 – Aerial photograph of current construction progress of Stage 1 with Stage 2 3D model overlay (Stage 1 shown in orange, Stage 2 shown in blue)

Pilbara Minerals is currently targeting Q4 2019 for first production from the proposed Stage 2 Expansion of the Project and will be delivered to an aggressive development schedule to take advantage of robust market demand.

Building off the outcomes and results from the PFS, a DFS is expected to be completed by mid-2018, with certain detailed engineering work and the award of long-lead procurement contracts for key plant equipment expected to be undertaken ahead of a Final Investment Decision expected by Q3 2018.

An overall indicative timeline of delivery for the Stage 2 expansion outlining key activities through to commissioning and production is provided in **Figure 8** below.

² Cash operating costs include all mining, processing, transport, state and private royalties, native title costs, port, shipping/freight and site based general and administration costs, an allocation of corporate administration/overhead cost and are net of Ta₂O₅ by-product credits.



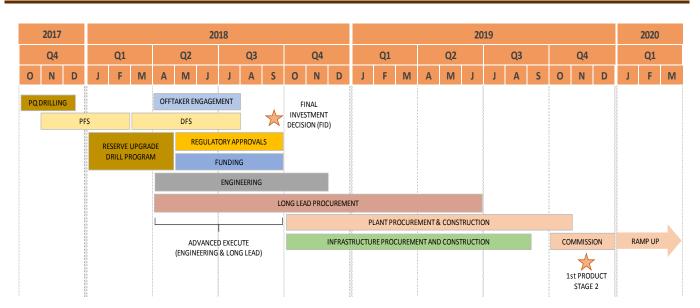


Figure 8 – Stage 2 Project indicative delivery timeline

Full details of the PFS results were provided in the Company's ASX announcement dated 13 February 2018.

4. SALES, MARKETING AND STRATEGIC DEVELOPMENT

4.1 Off-take, Funding and Downstream Processing Agreement with POSCO

During the Quarter, Pilbara entered into a broad-based strategic relationship with leading South Korean industrial conglomerate POSCO encompassing long-term off-take, strategic funding and joint venture participation in a downstream conversion plant in South Korea which provides Pilbara a first-mover position in this fast-growing market.

The landmark agreements encompassed:

- a binding life-of-mine off-take agreement with POSCO for an initial 80,000tpa of chemical grade spodumene concentrate (SC6.0 basis) from the 5Mtpa, Stage 2 Pilgangoora Project, increasing up to 240,000tpa upon Pilbara's minimum participation of 30% in a downstream joint venture conversion plant in South Korea. Spodumene concentrate pricing will be on commercial terms based on battery grade hydroxide and carbonate pricing in South Korean import and (future) export markets; and
- a binding subscription agreement executed with POSCO and its wholly-owned subsidiary, POSCO Australia Limited, for an immediate upfront A\$79.6M direct equity investment at A\$0.97 per share the first by a South Korean manufacturer of lithium-ion battery materials into an upstream spodumene concentrate producer. Funds from the A\$79.6M direct equity investment were received from POSCO on 29 March 2018. The POSCO funds are unrestricted in their application. With Stage 1 of the capital development at Pilgangoora fully funded, the proceeds from the A\$79.6M equity investment will provide further working capital support to the Stage 1 project ramp-up and assist acceleration plans to bring the Stage 2 (5Mtpa) Expansion of the Project into production as soon as possible.

With a market capitalisation of ~US\$29.5 billion, POSCO is one of South Korea's largest conglomerates, listed on the Korean Stock Exchange and with operations spanning the steel, engineering and construction, trading and battery minerals sectors. POSCO has extensive operations across the globe, including in Australia, with more than 132,000 employees.

POSCO is rapidly expanding its capabilities in the production of battery grade products and cathode materials for the burgeoning battery materials market in the Asian region.

The relationship is significant for both POSCO and Pilbara. For POSCO, it represents the first direct investment by a South Korean manufacturer of lithium-ion battery materials into an upstream supplier of spodumene concentrate, facilitating the further commercialisation of its proven PosLX extraction technology.



For Pilbara Minerals, the relationship marks an important strategic expansion into North Asia, diversifying its customer base outside of the Chinese market and further expanding its global network of Tier 1 strategic partners to support its growth objectives to become a leading global supplier of lithium raw materials.

The Stage 2 off-take agreement with POSCO accounts for up to 30% of the expanded production capacity from the Pilgangoora Project following the Stage 2 Expansion and is earmarked for supply into a jointly-owned downstream processing conversion facility located in South Korea, in which Pilbara would hold a minimum investment of 30%. POSCO have agreed to provide to Pilbara Minerals an unsecured convertible bond totalling A\$79.6M on attractive terms to fund Pilbara's 30% participation in the Downstream Joint Venture.

Further detail regarding the strategic agreements with POSCO was provided in the Company's ASX announcement dated 28 February 2018.

5. EXPLORATION

5.1 Pilgangoora Resource Extension Drilling

The Company completed the Stage 2 exploration RC drilling programs at the Pilgangoora Project subsequent to the March Quarter, with results continuing to demonstrate the world-class endowment of the Pilgangoora deposit.



Figure 9 – Exploration RC Drilling at the Central Pit Area

Drilling has primarily targeted the down dip and strike extensions of pegmatite domains within the Central and Eastern Pit areas along with the new Monster northwest prospect. All up, a total of 85 holes were drilled for 17,309 metres. Drill hole collars are shown on **Figure 10** below.



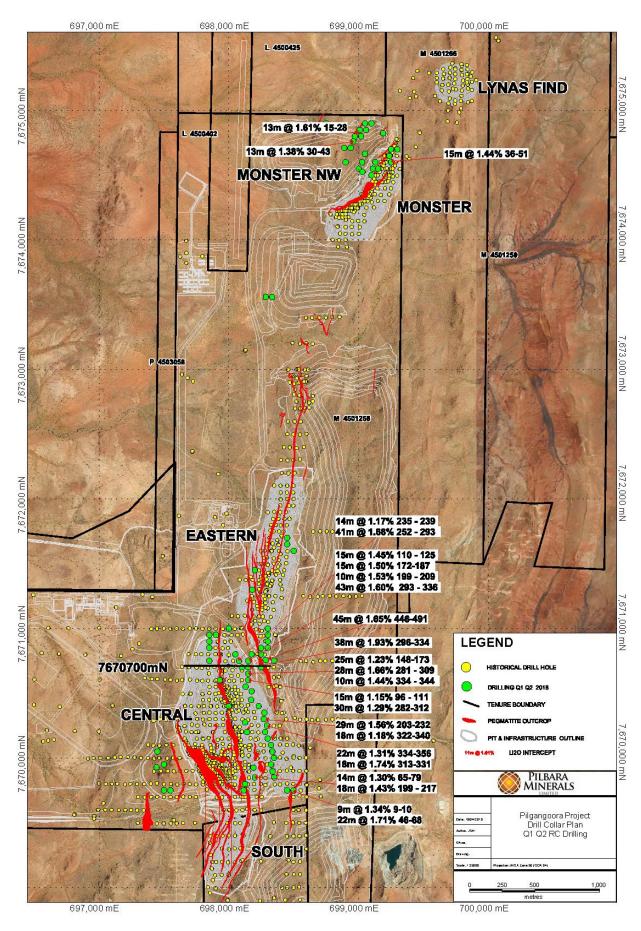


Figure 10 – Drill hole location plan



As shown in **Figure 11** below, new zones of thick high-grade pegmatite mineralisation were intersected adjacent to and below the current reserve in the Central Pit area. Select results to date from the Central domain include the following:

- 47m @ 1.72% Li2O and 78ppm Ta2O5 from 253m (PLS1112)
- 38m @ 1.93% Li2O and 118ppm Ta2O5 from 296m (PLS1122)
- 34m @ 1.80% Li2O and 106ppm Ta2O5 from 195m (PLS1182)
- 31m @ 1.76% Li2O and 67ppm Ta2O5 from 323m (PLS1111)
- 45m @ 1.65% Li2O and 56ppm Ta2O5 from 446m (PLS1078)

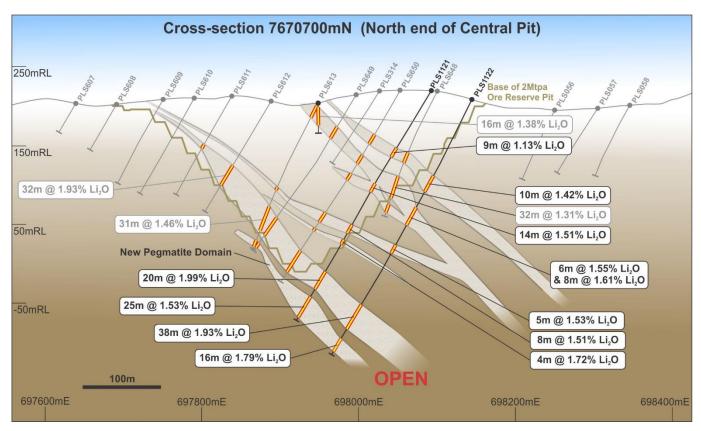


Figure 11 - Cross-section 7670700mN

Significant results were also returned from a new pegmatite dyke located approximately 200m north west of Monster. Results include the following:

- 13m @ 1.38% Li2O and 114ppm Ta2O5 from 30m (PLS1166)
- 13m @ 1.61% Li2O and 130ppm Ta2O5 from 15m (PLS1156)

A full compilation of results received to date is included in **Appendix 3**. Given the Company's exploration success in in the 2018 drill program, including drilling later in the program from the significant new pegmatite domains below the Central pit and adjacent to the Monster pit, the remaining assays are expected early May. On receipt of the remaining assay data, the geological model will be finalised and an updated Mineral Resource Estimate will be released soon thereafter.

All exploration drilling data and drill hole results from the program are being compiled and will form the basis of an expanded Mineral Resource due for release in Q2 2018. This is anticipated to be followed by an updated Ore Reserve estimate for the Stage 2 Expansion project by mid-2018.



5.2 Mt Francisco

The Company has submitted an application for an Entry Permit to Mt Francisco to enable exploration activity. The application has been reviewed by the Aboriginal Lands Trust Board, who have passed a recommendation to the Minister for Aboriginal Affairs. The Company is awaiting consideration of the recommendation by the Minister.

The Company is currently in negotiations about entering into a Land Access Agreement with Mugarinya Community Association Inc, the Aboriginal occupier and lessee of Crown Reserve 31428 in which the Mt Francisco tenement is located, as well as a Heritage Agreement with the registered Native Title Claim Group, the Kariyarra People, whose claim area includes Mt Francisco. Subsequent to the Quarter-end, a meeting of the Kariyarra Working Group was held on 11 April 2018 in Port Hedland, where the Company was invited to present its exploration program and there were productive discussions in respect of the draft Heritage Agreement.

Pending the progress of access and regulatory approvals in the coming weeks, non-ground disturbing exploration activities are scheduled to commence at Mt Francisco in Q2 2018 and drilling from Q3 2018.

6. CORPORATE

6.1 POSCO Equity Investment

During the Quarter, the first step in Pilbara's broad-based strategic relationship with leading South Korean industrial conglomerate POSCO was completed (refer above), with the Company welcoming POSCO as a 4.75% shareholder in the Company following receipt of funds totalling A\$79.6M.

The equity funds received will support the planned A\$207M expansion of Stage 2 of the Pilgangoora Project to 5Mtpa.

6.2 Successful First Draw-down from Bond

During the Quarter, Pilbara completed the first draw-down under its US\$100M senior secured bond issue, having satisfied all conditions precedent including a customary cost-to-complete test.

The draw-down represented approximately 50% of the total US\$100M bond issue, with all proceeds from the drawdown to be applied towards project construction and plant commissioning costs.

The Company expects to make its next drawdown under the senior secured bond during May 2018.

6.3 Stage 2 Funding

During the Quarter, the Company commenced engagement with both Ganfeng and Great Wall Motor Company in relation to their interest in accessing additional Stage 2 concentrate production in return for a co-commitment to provide funding for the Stage 2 Expansion. Based on these discussions, the Company is targeting finalising the detailed documentation in support of funding for the Stage 2 Expansion, including obtaining bond holder consent, prior to a Final Investment Decision being made for Stage 2 by the Company in Q3 2018.

6.4 Cash Balance

The Company had an unrestricted cash balance of \$134.7M as at 31 March 2018 (\$71.97M as at 31 December 2017), which balance excludes the A\$67.3M of undrawn Bond proceeds available for project construction and plant commissioning costs. During the Quarter, the Company received cash proceeds of A\$79.6M from POSCO's equity investment and \$63.1M from the first drawdown of the senior secured bond facility.

Major items of expenditure during the Quarter included \$73.7M on the construction and development of Stage 1 of the Pilgangoora Project, \$3.9M in interest and financing payments largely associated with the secured USD Bond facility, \$2.2M on administration and corporate costs and \$1.6M on exploration and evaluation work in relation to the Pilgangoora Project (including associated feasibility studies).



More 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 one of the world's premier lithium development projects. 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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COMPETENT PERSONS STATEMENTS

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 Holmes (Exploration Manager of Pilbara Minerals Limited). Mr Holmes is a shareholder of Pilbara Minerals. Mr Holmes is a member of the Australasian Institute of Geoscientists 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 Holmes consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

The Company confirms it is not aware of any new information or data that materially affects the information included in the 25 January 2017 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 resource announcement made on 25 January 2017.

The Company confirms it is not aware of any new information or data that materially affects the information included in the 29 June 2017 Pilgangoora Ore Reserve Estimate and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its resource announcement made on 29 June 2017.

FORWARD LOOKING STATEMENTS AND IMPORTANT NOTICE

This announcement 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 announcement are to Australian currency, unless otherwise stated.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.



Appendix 1 - Tenement Table as at 31 March 2018

				PLS beneficial holding at commencement	PLS beneficial holding at
Lease	Location	Status	Registered Holder	of period	end of period
			d APPLICATIONS AT COMMENCEMENT OF T	•	
E45/2241	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
E45/3560	Pinnacle	Granted	PILBARA MINERALS LTD	100%	100%
E45/3648	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
E45/4523	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
E45/4624	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
E45/4633	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
E45/4640	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
E45/4648	Pinga	Granted	PILBARA MINERALS LTD	100%	100%
E45/4689	Pilgangoora	Granted	DAKOTA MINERALS LIMITED	100%	100%
E45/4270	Mt Francisco	Granted	PILBARA MINERALS LTD / ATLAS IRON LTD	51%	51%
L45/388	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/396	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/402	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/403	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/411	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/413	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/414	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/417	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/421	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
L45/425	Pilgangoora DSO	Granted	PILBARA MINERALS LTD	100%	100%
L45/426	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/429	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
L45/430	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
L45/434	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
M45/1256	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
M45/1264	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
M45/1266	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
M45/333	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
M45/511	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
M45/78	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
P45/2783	Pilgangoora	Granted	DAKOTA MINERALS LIMITED	100%	100%
P45/3058	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
			CATIONS MADE DURING THE QUARTER		
-	-	-	-	-	-
			ENTS DISPOSED OF DURING THE QUARTER		
-	-	-	-	-	-



Appendix 2 – Drill Hole Collar Table

Hole ID	East GDA94	North GDA94	RL	Dip	Azimuth	Depth
PLS1078A	698284	7670757	199	-60	270	494
PLS1078A PLS1111	698293	7670250	227	-60	270	370
PLS1111 PLS1112		7670230	230	-60	270	334
PLS1112 PLS1113	698125 698271	7670273	224	-60	270	376
PLS1113 PLS1114	698263	7670291	219		270	364
				-60	270	
PLS1115	698219	7670387	224	-60	270	502 388
PLS1116	698157	7670438	217	-60		
PLS1117	698159	7670503	210	-60	270	352
PLS1118	698124	7670535	218	-60	270	352
PLS1119	698148	7670583	214	-60	270	496
PLS1120	698146	7670634	202	-60	270	352
PLS1121	698093	7670684	219	-60	270	340
PLS1122	698146	7670691	207	-60	270	370
PLS1123	698077	7670734	214	-60	270	310
PLS1124	698146	7670737	204	-60	270	382
PLS1125	698342	7670737	207	-60	270	175
PLS1126	697847	7670734	202	-60	270	252
PLS1127	698048	7670791	207	-60	270	347
PLS1128	698248	7670786	201	-60	270	64
PLS1130	698246	7670837	200	-60	270	50
PLS1131	698297	7670836	198	-60	270	110
PLS1132	697848	7670835	195	-60	270	76
PLS1133	698297	7670886	199	-70	270	124
PLS1134	697846	7670885	190	-60	270	70
PLS1135	697851	7670935	188	-60	270	150
PLS1136	697893	7670938	190	-60	270	150
PLS1137	698300	7670936	196	-70	270	124
PLS1138	698302	7670985	205	-60	270	120
PLS1139	698177	7671288	190	-60	270	150
PLS1140	698197	7671437	190	-60	270	104
PLS1141	698498	7671589	199	-60	270	254
PLS1142	698449	7671635	203	-60	270	208
PLS1143	698450	7671682	200	-60	270	154
PLS1144	699099	7674501	203	-60	270	100
PLS1145	699032	7674526	198	-60	270	100
PLS1146	698992	7674547	201	-60	270	60
PLS1148	699147	7674556	206	-60	270	100
PLS1149	698900	7674600	202	-60	270	100
PLS1150	699028	7674601	206	-60	270	60
PLS1152	699250	7674601	208	-60	270	140
PLS1153	698884	7674711	199	-60	270	103
PLS1154	699249	7674703	200	-60	270	80
PLS1155	699300	7674702	205	-60	270	120
PLS1156	698966	7674798	195	-60	270	60
PLS1157	699015	7674803	207	-60	270	100
PLS1158	699190	7674827	209	-60	270	60
PLS1159	699011	7674850	198	-60	270	60
PLS1160	699060	7674851	200	-60	270	82
PLS1161	698745	7674901	223	-60	270	108



Hole ID	East GDA94	North GDA94	RL	Dip	Azimuth	Metres
PLS1162	699044	7674903	196	-60	270	60
PLS1163	699100	7674900	193	-60	270	106
PLS1164	699052	7674667	210	-60	270	60
PLS1166	698961	7674759	197	-60	270	100
PLS1167	698500	7669750	185	-60	270	85
PLS1168	697550	7669750	188	-60	270	75
PLS1169	697500	7669750	194	-60	270	48
PLS1170	698450	7669750	185	-60	270	60
PLS1171	698115	7669750	183	-60	270	148
PLS1172	698125	7669800	186	-60	270	150
PLS1173	698350	7669850	203	-60	270	334
PLS1174	698200	7669850	197	-60	270	220
PLS1175	698325	7669950	209	-70	270	352
PLS1176	697443	7669929	210	-60	270	94
PLS1177	697500	7669950	214	-60	270	100
PLS1178	698190	7669925	209	-60	270	292
PLS1179	698337	7670050	229	-60	270	388
PLS1180	697450	7670050	200	-60	270	82
PLS1181	698325	7670100	237	-60	270	412
PLS1182	698299	7670150	233	-60	270	259
PLS1182A	698299	7670150	233	-60	270	382
PLS1183	698140	7670200	224	-60	270	412
PLS1184	699238	7674650	200	-60	270	80
PLS1185	699130	7674600	200	-60	270	80
PLS1186	699110	7674550	200	-60	270	80
PLS1187	698940	7674710	200	-60	270	100
PLS1188	698280	7670200	200	-60	270	502
PLS1189	698350	7670000	200	-60	270	424
PLS1194	698000	7670400	200	-60	270	358
PLS1195	697930	7670600	200	-60	270	350
PLS1196	698000	7671000	200	-60	270	276
PLS1200	698337	7669896	200	-60	270	328
PLS1201	698285	7673560	200	-60	270	64
PLS1202	698335	7673560	200	-60	270	100
PLS1203	698250	7670700	200	-60	270	472
PLS1204	698175	7670800	200	-60	270	400



Appendix 3 - Table of Results

Hole ID	From (m)	To (m)	Thickness (m)	Li2O %	Ta2O5 (ppm)
PLS1078	446	491	45	1.65	56
PLS1111	334	356	22	1.31	59
PLS1111	313	331	18	1.74	62.78
PLS1111	228	238	10	0.93	89.6
PLS1111	211	220	9	1.33	122.22
PLS1111	359	366	7	1.9	62
PLS1111	223	225	2	0.95	72
PLS1111	67	68	1	1.32	105
PLS1112	79	89	10	1.78	83
PLS1112	120	128	8	1.66	74.13
PLS1112	167	184	17	1.16	90.24
PLS1112	206	212	6	1.55	57.83
PLS1112	234	238	4	1.88	99.75
PLS1112	253	301	48	1.7	80.5
PLS1112	324	325	1	0.51	56
PLS1113	203	232	29	1.56	91.62
PLS1113	322	340	18	1.18	71.83
PLS1113	62	67	5	2.08	158.2
PLS1113	174	177	3	1.38	61
PLS1113	346	349	3	1.03	52.33
PLS1113	184	187	3	0.68	103
PLS1113	257	259	2	1.28	82.5
PLS1113	363	365	2	0.81	67
PLS1113	371	372	1	0.7	48
PLS1113	353	354	1	0.54	47
PLS1114	323	354	31	1.76	67.61
PLS1114	205	226	21	1.24	90.81
PLS1114	178	186	8	1.62	80.38
PLS1114	168	175	7	1.57	58.14
PLS1114	51	57	6	1.93	143
PLS1114	247	251	4	0.91	115.5
PLS1115	327	348	21	1.78	64.62
PLS1115	361	377	16	1.62	66.5
PLS1115	147	160	13	1.55	64.46
PLS1115	302	313	11	1.07	145.36
PLS1115	208	215	7	1.3	104.29
PLS1115	45	48	3	1.85	244.67
PLS1115	178	181	3	0.51	62
PLS1115	171	173	2	1.54	60.5
PLS1115	231	233	2	0.75	57
PLS1115	399	422	23	1.56	81.78
PLS1116	103	129	26	0.96	60.35
PLS1116	281	300	19	1.88	111.74
PLS1116	349	363	14	1.56	86.29
PLS1116	303	317	14	1.51	71.71
PLS1116	176	189	13	0.95	57.38
PLS1116	160	170	10	1.15	81.8
PLS1116	373	381	8	2.04	66.5
PLS1116	326	332	6	0.98	46
PLS1116 PLS1116			3	1.29	
LFOILID	384	387	<u> </u>	1.29	118



Hole ID	From (m)	To (m)	Thickness (m)	Li20 %	Ta2O5 (ppm)
PLS1116	223	224	1	1.38	8
PLS1116	231	232	1	0.59	2
PLS1117	284	326	42	1.41	92.12
PLS1117	160	179	19	1.37	92.29
PLS1117	112	123	11	1.46	84.18
PLS1117	187	194	7	1.65	73
PLS1117	126	129	3	1.94	54.33
PLS1117 PLS1117	233	235	2	1.25	53.5
PLS1117	277	298	21	1.49	87.62
	331	347	16	+	
PLS1118		1		0.76	84.13
PLS1118	127	140	13	1.51	121.38
PLS1118	265	274	9	0.92	95.56
PLS1118	102	107	5	1.6	73.6
PLS1118	213	217	4	1.24	111.75
PLS1118	175	178	3	1.3	80
PLS1118	110	111	1	1.33	63
PLS1118	166	167	1	0.54	113
PLS1119	282	312	30	1.29	76.17
PLS1119	96	111	15	1.15	111.27
PLS1119	341	354	13	1.24	76.23
PLS1119	185	193	8	1.41	77
PLS1119	148	153	5	0.7	62.6
PLS1119	233	236	3	1.51	131.67
PLS1119	358	360	2	1.64	70.5
PLS1119	197	199	2	1.3	105.5
PLS1120	281	309	28	1.66	61.86
PLS1120	148	173	25	1.23	101.72
PLS1120	334	348	14	1.4	95.57
PLS1120	125	132	7	1.12	77.14
PLS1120	138	144	6	0.78	120.17
PLS1120	101	104	3	1	141.33
PLS1120	229	231	2	0.88	175.5
PLS1120	202	203	1	1.57	199
PLS1120	236	237	1	0.67	154
PLS1120	176	177	1	0.6	93
PLS1121	312	337	25	1.53	105.28
PLS1121	268	288	20	1.99	66.15
	135	149	14		76.93
PLS1121				1.51	
PLS1121	248	261	13	1.7	83.38
PLS1121	87	96	9	1.13	114.11
PLS1121	199	207	8	1.51	90.13
PLS1121	217	221	4	1.72	161.25
PLS1121	238	239	1	0.82	309
PLS1121	229	230	1	0.79	180
PLS1121	39	40	1	0.53	112
PLS1122	296	334	38	1.93	118.32
PLS1122	346	362	16	1.79	67.06
PLS1122	123	133	10	1.42	74.1
PLS1122	173	181	8	1.61	86.75
PLS1122	247	254	7	1.16	212.57
PLS1122	157	163	6	1.55	119.5



Hole ID	From (m)	To (m)	Thickness (m)	Li20 %	Ta2O5 (ppm)
PLS1122	238	243	5	1.92	203.6
PLS1122	110	114	4	0.88	75
PLS1122	166	167	1	0.78	129
PLS1123	252	293	41	1.68	73.54
PLS1123	77	91	14	1.39	103.14
PLS1123	235	249	14	1.17	98.57
PLS1123	119	132	13	1.19	219.69
PLS1123	193	201	8	1.31	54.13
PLS1123	136	142	6	0.57	65.83
PLS1123	215	218	3	1.21	235.67
PLS1123	298	300	2	1.27	90.5
PLS1124	293	336	43	1.6	173.72
PLS1124	172	187	15	1.5	96.33
PLS1124	110	125	15	1.45	137.33
PLS1124	199	209	10	1.53	88.3
PLS1124	249	256	7	1.39	 06.3 151.29
			5		
PLS1124	145	150		0.86	69.4
PLS1124	239	243	4	1.4	103
PLS1124	154	156	2	1.25	76.5
PLS1124	269	270	1	0.8	96
PLS1124	226	227	1	0.66	109
PLS1125	156	165	9	1.83	108.56
PLS1125	85	88	3	1.48	240.67
PLS1126	71	80	9	1.56	161.11
PLS1126	141	144	3	0.8	55.33
PLS1127	238	270	32	1.4	93
PLS1127	108	125	17	1.06	143
PLS1127	217	228	11	1.38	85.27
PLS1127	73	78	5	1.74	145.2
PLS1127	137	140	3	8.0	61
PLS1127	184	187	3	0.76	13
PLS1127	199	201	2	0.64	138
PLS1127	178	179	1	0.93	60
PLS1127	191	192	1	0.68	125
PLS1127	234	235	1	0.57	15
PLS1128	16	35	19	1.56	225
PLS1128	48	50	2	1.07	211.5
PLS1130	25	38	13	1.47	186.92
PLS1130	46	48	2	1.27	196
PLS1130	18	19	1	1.51	578
PLS1131	95	104	9	2.59	198.56
PLS1131	73	79	6	1.25	198.33
PLS1131	39	40	1	0.8	166
PLS1132	66	72	6	1.26	249.83
PLS1133	113	120	7	1.23	173.14
PLS1133	42	47	5	0.79	202.6
PLS1133	86	88	2	1.45	217.5
PLS1134	58	60	2	1.11	173.5
PLS1135	119	121	2	0.86	67.5
	73	74	1		
PLS1135	13	/4	l l	1.63	110



Hole ID	From (m)	To (m)	Thickness (m)	Li20 %	Ta2O5 (ppm)
PLS1136	134	138	4	0.75	30.75
PLS1137	107	121	14	1.61	179
PLS1137	30	35	5	0.95	183.2
PLS1137	99	103	4	1.38	132.75
PLS1137	18	20	2	1.51	219
PLS1138	85	94	9	1.58	178.67
PLS1138	38	44	6	1.11	263.17
PLS1138	98	102	4	1.38	181.75
PLS1138	76	79	3	1.33	144.33
PLS1138	19	21	2	0.79	52
PLS1139	20	30	10	0.76	159.6
PLS1139	8	13	5	0.65	151
PLS1139	76	77	1	1.21	388
PLS1139 PLS1140	53			2	200.8
		58	5		
PLS1140	19	20	1	0.94	346
PLS1140	95	96	1	0.51	335
PLS1141	142	154	12	1.34	182.75
PLS1141	243	247	4	1.42	141
PLS1141	224	227	3	1.29	117
PLS1141	217	220	3	0.81	94
PLS1141	209	211	2	0.95	427
PLS1141	188	189	1	1.9	431
PLS1142	129	147	18	1.62	172.67
PLS1142	98	106	8	1.41	252.13
PLS1142	163	171	8	1.24	192.75
PLS1142	195	199	4	0.93	137.5
PLS1142	153	155	2	1.67	304
PLS1143	127	149	22	1.77	224.68
PLS1143	94	104	10	1.71	194.1
PLS1143	43	46	3	0.93	745.67
PLS1144	47	48	1	0.63	100
PLS1146	29	31	2	1.27	139.5
PLS1146	0	1	1	1	169
PLS1148	49	64	15	0.96	196.27
PLS1148	38	39	1	0.53	0.5
PLS1152	36	51	15	1.44	94.33
PLS1152	92	105	13	0.7	129.62
PLS1156	15	28	13	1.61	128
PLS1156	3	7	4	1.21	135.5
PLS1156	51	53	2	2.28	343
PLS1157	55	68	13	1	144.08
PLS1157	38	45	7	0.79	133.29
PLS1157	48	52	4	1	48
PLS1159	16	25	9	1.13	97.67
PLS1159	28	30	2	1.23	161.5
PLS1162	24	25	1	0.85	53
PLS1166	30	43	13	1.38	114.54
PLS1166	47	50	3	1.13	100.67
PLS1167	46	68	22	1.71	80.41
PLS1167	10	19	9	1.34	113.67
PLS1167	23	25	2	0.9	80.5
1 LOTTO!	20			0.0	00.0



Hole ID	From (m)	To (m)	Thickness (m)	Li20 %	Ta2O5 (ppm)
PLS1168	48	65	17	1.68	84.88
PLS1170	32	52	20	1.57	84.35
PLS1170	23	28	5	1.13	133.4
PLS1172	55	72	17	1.09	79.29
PLS1172	127	143	16	1.55	84.56
PLS1174	199	217	18	1.43	82.89
PLS1174	65	79	14	1.3	107.86
PLS1174	134	143	9	1.31	85.33
PLS1174	88	96	8	1.37	58.75
PLS1178	65	78	13	1.66	113.38
PLS1179	330	361	31	1.56	57.68
PLS1179	78	86	8	2.3	85.63
PLS1179	224	230	6	0.84	65.5
PLS1179	211	216	5	1.38	75
PLS1179	322	327	5	1.09	66.6
PLS1179	220	221	1	0.69	148
PLS1182	76	81	5	1.55	172
PLS1182	161	168	7	1.46	171.57
PLS1182	193	194	1	0.96	59
PLS1182	210	227	17	1.16	120.18
PLS1182A	74	80	6	1.37	110.5
PLS1182A	195	229	34	1.8	106.09
PLS1182A	320	336	16	1.7	66.62
PLS1182A	340	341	1	0.55	7
PLS1182A	350	364	14	1.98	53.29
PLS1182A	372	377	5	1.44	56.4
PLS1183	51	87	36	1.69	118.44
PLS1183	100	111	11	1.74	57.36
PLS1183	152	166	14	1.57	59.5
PLS1183	198	208	10	1.23	69.8
PLS1183	211	218	7	1.7	116.43
PLS1183	237	239	2	1.32	99
PLS1183	244	250	6	1.52	66.83
PLS1183	256	258	2	0.85	70
PLS1183	300	306	6	0.94	37.83
PLS1183	399	403	4	0.73	59
PLS1188	63	64	1	0.57	128
PLS1188	105	107	2	1.44	485
PLS1188	134	136	2	1.3	275.5
PLS1188	166	168	2	1.06	91.5
PLS1188	194	224	30	1.6	100.43
PLS1188	307	321	14	1.52	82.93
PLS1188	324	346	22	1.64	76.09
PLS1188	352	358	6	0.91	52.67
PLS1188	386	390	4	1.68	86
PLS1194	0	12	12	1.07	137.58
PLS1194	73	74	1	0.75	430
PLS1194	125	151	26	1.58	222.88



Hole ID	From (m)	To (m)	Thickness (m)	Li20 %	Ta2O5 (ppm)
PLS1171	50	54	4	0.63	57.75
PLS1171	115	126	11	1.13	97
PLS1173	48	55	7	1.45	109.86
PLS1173	177	179	2	1.44	64
PLS1173	281	291	10	1.24	65.6
PLS1173	329	333	4	0.89	58
PLS1175	7	16	9	1.5	66.56
PLS1175	161	183	22	1.53	94.14
PLS1175	270	284	14	1.89	86.43
PLS1175	302	317	15	1.22	80.2
PLS1176	24	27	3	1.88	73.33
PLS1176	46	48	2	1.69	106.5
PLS1176	55	56	1	1.58	212
PLS1177	92	95	3	1.41	149.67
PLS1178	107	108	1	1.21	120
PLS1178	139	140	1	1.13	67
PLS1178	150	155	5	1.23	107.8
PLS1178	204	214	10	1.42	64.9
PLS1180	29	41	12	1.03	95.58
PLS1180	61	62	1	0.94	180
PLS1181	92	97	5	1.46	112.4
PLS1181	172	175	3	1.06	68.33
PLS1181	235	250	15	2.45	135.33
PLS1181	331	359	28	1.79	72.82
PLS1181	365	391	26	1.03	59
PLS1181	394	397	3	0.64	82
PLS1189	0	3	3	1.46	357.67
PLS1189	6	9	3	0.64	210.33
PLS1189	60	66	6	1.27	124.67
PLS1189	215	233	18	1.77	63.56
PLS1189	236	237	1	0.55	76
PLS1189	332	333	1	0.93	1
PLS1189	336	365	29	1.98	50.38
PLS1189	393	404	11	2.17	92.64
PLS1194	209	210	1	0.9	20
PLS1194	271	273	2	0.89	41
PLS1194	332	334	2	0.83	63.5
PLS1196	36	37	1	0.97	330
PLS1196	46	48	2	0.95	68.5
PLS1196	144	153	9	1.08	110.11
PLS1196	164	168	4	0.58	259.75
PLS1196	187	194	7	1.54	63.57
PLS1196	248	253	5	1.54	42.2
PLS1200	36	42	6	1.39	115.83
PLS1200	168	194	26	1.41	74.73
PLS1200	277	282	5	0.94	65
PLS1200	316	328	12	0.96	59



JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Pilbara Minerals Limited (PLS) have completed 85 RC drill holes for 17,309m . Results are being reported are for 73 exploration RC holes see Appendices 2 and 3.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	PLS RC holes were sampled every metre, with samples split on the rig using a cyclone splitter. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system. The cyclone splitter was configured to split the cuttings at 85% to waste (to be captured in 600mm x 900mm green plastic mining bags) and 15% to the sample port in draw-string calico sample bags (10-inch by 14-inch).
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	PLS holes were all RC, with samples split at the rig, samples are then sent to NAGROM Perth laboratory and analysed for a suite of 18 elements. Analysis was completed by XRF and ICP techniques.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple	RC Drilling was completed by Strike Drilling Pty Ltd using a KWL1000 truck mounted rig and Mt Magnet Drilling Pty Ltd using an RC300 track mounted Schramm drill rig. Drilling used a reverse



Criteria	JORC Code explanation	Commentary
	or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	circulation face sampling hammer. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Sample recovery was recorded as good for RC holes.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Whilst drilling through the pegmatite, rods were flushed with air after each 6 metre interval.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Samples were dry and recoveries are noted as "good."
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	1m samples were laid out in lines of 20 or 30 samples with cuttings collected and geologically logged for each interval and stored in 20 compartment plastic rock-chip trays with hole numbers and depth intervals marked (one compartment per 1m). Geological logging information was recorded directly onto digital logging system and information validated and transferred electronically to Database administrators in Perth. The rock-chip trays are to be stored on site at Pilgangoora.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging has primarily been quantitative.
	The total length and percentage of the relevant intersections logged.	The database contains lithological data for all holes in the database.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were generally dry and split at the rig using a cyclone splitter, which is appropriate and industry standard.



Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	PLS samples have field duplicates, field standards and blanks as well as laboratory splits and repeats.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Field duplicates were taken approximately every 20m, and standards and blanks every 50 samples.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Drilling sample sizes are considered to be appropriate to correctly represent the tantalum and lithium mineralization at Pilgangoora based on the style of mineralization (pegmatite) and the thickness and consistency of mineralization.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	PLS samples were assayed NAGROM Perth laboratory and analysed for a suite of 9 elements via ME-MS91 Sodium Peroxide for ICPMS finish and Peroxide fusion with an ME-ICP89 ICPAES finish.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used to determine any element concentrations used in this resource estimate.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	PLS duplicates of the samples were taken at twenty metre intervals with blanks and standards inserted every 50m. Comparison of duplicates by using a scatter chart to compare results show the expected strong linear relationship reflecting the strong repeatability of the sampling and analysis process.
		The PLS drilling contains QC samples (field duplicates, blanks and standards plus laboratory pulp splits, and Nagrom internal standards), and have produced results deemed acceptable.



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Infill drilling completed by PLS in this program has confirmed the approximate width and grade of historical drilling.
	The use of twinned holes.	
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	An electronic database containing collars, surveys, assays and geology is maintained by Trepanier Pty Ltd, an Independent Geological consultancy.
	Discuss any adjustment to assay data.	Li was converted to Li2O for the purpose of reporting. The conversion used was Li2O = Li x 2.153
Location of data	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	PLS holes were surveyed using DGPS in GDA94, Zone 50.
points		Down hole surveying of drill holes was conducted using a Reflex EZ-shot, electronic single shot camera to determine the true dip and azimuth of each hole.
		Measurements were recorded at the bottom of each hole. Drill hole collar locations will be surveyed at the end of the program by a differential GPS (DGPS).
	Specification of the grid system used.	The grid used was MGA (GDA94, Zone 50).
	Quality and adequacy of topographic control.	The topographic surface used was supplied by GAM.
Data spacing and	Data spacing for reporting of Exploration Results.	Drilling spacings varied between 50m to 200m apart.
distribution	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The interpretation of the mineralised domains are supported by a moderate drill spacing, plus both geological zones and assay grades can be interpreted with confidence.
	Whether sample compositing has been applied.	No compositing.



Criteria	JORC Code explanation	Commentary
Orientation of data in relation to	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering	The mineralisation dips approximately 45-60 degrees at a dip direction of 090 degrees.
geological structure	the deposit type.	The drilling orientation and the intersection angles are deemed appropriate.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation-based sampling bias has been identified.
Sample security	The measures taken to ensure sample security.	Chain of custody for PLS holes were managed by PLS personnel.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques for historical assays have not been audited.
		The collar and assay data have been reviewed by checking all of the data in the digital database against hard copy logs.
		All PLS assays were sourced directly from the NAGROM laboratory.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites	PLS owns 100% of tenements M45/1256, M45/333, M45/511, Application for M45/1259 and M45/1266.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	No known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Talison completed RC holes in 2008 GAM completed RC holes between 2010 and 2012.



Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The Pilgangoora pegmatites are part of the later stages of intrusion of Archaean granitic batholiths into Archaean metagabbros and metavolcanics. Tantalum mineralisation occurs in zoned pegmatites that have intruded a sheared metagabbro.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes, including easting and northing of the drill hole collar, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length.	Refer to Appendices 2 and 3.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	Length weighed averages used for exploration results reported in Appendix 3. Cutting of high grades was not applied in the reporting of intercepts in Appendix 3.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No metal equivalent values are used.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths	These relationships are particularly important in the reporting of Exploration Results.	Downhole lengths are reported in Appendix 3.
and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	



Criteria	JORC Code explanation	Commentary
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	See Figures 10 and 11.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Comprehensive reporting of drill details has been provided in Appendix 3.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All meaningful & material exploration data has been reported.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The aim is to upgrade the existing JORC compliant resource calculation.