



ASX/Media Announcement

31 January 2017

## DECEMBER 2016 QUARTERLY ACTIVITIES REPORT

***Major progress at Pilgangoora Lithium-Tantalum Project in WA with Mining Lease granted, long-lead items ordered, preliminary site works underway and process plant EPC contract award.***

### PILGANGOORA LITHIUM-TANTALUM PROJECT (PLS: 100%)

- Mining Lease M45/1256, being the main Mining Lease for the Pilgangoora Lithium–Tantalum Project, granted by the Western Australian Department of Mines and Petroleum (DMP). The granting of this Mining Lease follows the successful completion of several pre-requisite steps comprising the signing of:
  - *a Native Title Agreement with the Njamaal People, the Traditional Owners of the land; and*
  - *an Access Deed with the pastoral lease-holders within the Project area.*
- Access agreements signed with required rail operators for road access over their respective rail corridors on the Pippingarra/Wodgina East Road - providing necessary access to the Pilgangoora site for haulage and transportation during construction and operation of the project subject to necessary road upgrade works being completed.
- Orders placed for key long-lead items, including a High Pressure Grinding Rolls (HPGR) crusher, a Ball Mill and a Spodumene Concentrate Filter. These items represent key long-lead components in the processing flowsheet for the spodumene concentrate plant.
- Acquisition of a 300 room mine camp from Roy Hill providing a significant capital cost saving for the project compared to current replacement costs.
- Extensive drilling programs for sterilisation and strategic development achieve outstanding results, paving the way for a further increase in the Project's resource inventory (see below).
- Acquisition of the core tenements comprising the Lynas Find Lithium Project completed, which adjoin the Pilgangoora Project and hosts an Indicated and Inferred Mineral Resource of 5.6Mt @ 1.57% Li<sub>2</sub>O, 93ppm Ta<sub>2</sub>O<sub>5</sub> and 0.69% Fe<sub>2</sub>O<sub>3</sub>, with further significant exploration potential across the Dakota tenement group.

### SUBSEQUENT TO THE END OF THE DECEMBER 2016 QUARTER

- Engineering, Procurement and Construction (EPC) contract awarded to Australian-owned engineering company, RCR Tomlinson. The contract contains a target cost of A\$138M with a guaranteed maximum price of A\$148M, which is in line with the estimate (+/-15%) contained in the Company's Definitive Feasibility Study.
- Stage 1 contract for mine camp relocation package and re-establishment works awarded to OTOC Australia, with preliminary site works for the camp nearly complete and handover of an initial 60 room camp and adjoining common facilities due to be completed by late March 2017.
- Substantial increase in the Pilgangoora Mineral Resource to 156Mt @ 1.25% Li<sub>2</sub>O (spodumene) and 128ppm Ta<sub>2</sub>O<sub>5</sub>, a 22% increase in overall tonnage reflecting the success of drilling programs conducted in the second half of 2016, as well as the consolidation of the recently acquired Lynas Find Lithium Project.

### CORPORATE

- Agreement reached with Mineral Resources Limited (ASX: MIN) to permanently extinguish both the 2.5% Net Smelter Royalty and the Right of First Refusal over future lithium sales in exchange for the issue of shares.
- Mr Nick Cernotta, respected mining executive and past Director of Operations with Fortescue Metals Group (FMG), to join the Board of Pilbara as an independent Non-Executive Director, commencing 6th February 2017.
- Appointment of renowned lithium flotation specialist and long-serving Greenbushes lithium mine employee, Dr Wenbo Wang. Dr Wang joined Pilbara Minerals in January 2017, and will provide key expertise in the optimisation and performance of the Pilgangoora plant testwork, design, commissioning and plant ramp-up.

**Pilbara Minerals Limited**

Level 2, 88 Colin Street  
West Perth, Western Australia 6005

Phone: +61 8 6266 6266  
Fax: +61 8 6266 6288

Web: [www.pilbaraminerals.com.au](http://www.pilbaraminerals.com.au)  
ACN 112 425 788

ASX Code: PLS

- Off-take agreement signed with Chinese lithium carbonate ( $\text{Li}_2\text{CO}_3$ ) producer Shandong Ruifu Lithium Co. Limited (Shandong Ruifu) for the supply of crushed but unprocessed Direct Shipping Ore (DSO), providing an opportunity for early cash flow (subject to conditions precedent) during the main project construction and ramp up phase.

## OVERVIEW

Pilbara Minerals Limited (ASX: PLS) is pleased to advise that it made further significant progress during the December 2016 Quarter in advancing its flagship 100%-owned Pilgangoora Lithium-Tantalum Project in Western Australia's Pilbara region towards production, and maintaining its aggressive timetable targeting commissioning of the site by the end of 2017 and ramping up production during 2018.

The Pilgangoora development team has made excellent progress with project permitting and pre-development activities, including the ordering of long-lead items and the commencement of site development activities, while the Early Contractor Involvement (ECI) process proved to be highly successful, resulting in the award of a lump sum Engineering, Procurement and Construction (EPC) contract to RCR Tomlinson for the process plant in early 2017.

The Pilgangoora exploration team delivered another impressive performance during the December 2016 Quarter, completing extensive programs of sterilisation, development and exploration drilling which have resulted in another milestone increase in the Project's Mineral Resource which was announced subsequent to quarter end. The Lynas Find Lithium Project acquisition was also completed, contributing to the resource increase and adding to the impressive pipeline of exploration targets available to the Company in the Pilgangoora district.

The Company's corporate and commercial team continued to progress financing and off-take discussions, completing a further significant off-take agreement with Chinese lithium carbonate producer Shandong Ruifu Lithium Co. Limited for the supply of crushed but unprocessed Direct Shipping Ore (DSO) from Pilgangoora.

Pilbara continues to work on the balance of the Project's funding requirements, which includes several financing streams such as (but not limited to) conventional bank project financing, non-bank lending and customer/off-take financing. The Company is working towards and expects to secure the remaining project funding required to complete the development of the Pilgangoora Project during the March 2017 Quarter.

With contract lithium prices settling towards the end of 2016 at significantly higher levels compared with the previous year, Pilbara continues to remain confident that this is an opportune time to be developing a major new long-life Australian lithium project with scale, quality and grade to deliver strong operating margins for many years to come.

## PILGANGOORA LITHIUM-TANTALUM PROJECT, WA (100%)

### PROJECT DEVELOPMENT ACTIVITIES

#### *Mining Lease, Native Title Agreement and Project Approvals*

During the Quarter, Mining Lease M45/1256, being the main Mining Lease for the Pilgangoora Lithium-Tantalum Project, was granted by the DMP.

The award of the Mining Lease represents a key condition to the Pilgangoora mining proposal submission and subsequent final project permitting expected during the first Quarter of 2017, allowing major construction, development and mining activities to proceed.



*Figure 2 – Pilgangoora Native Title signing ceremony, December 2016*

The granting of this Mining Lease followed the successful completion of several pre-requisite steps earlier in the Quarter, including:

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

The signing of the Native Title Agreement was an important milestone for the Company and cements a strong and long term co-operative working relationship with the Njamal people.

### ***Commencement of Site Earthworks***

Site development activities commenced at Pilgangoora in November 2016, with the bulk earthworks required for the Project's mine camp and accommodation village, following the acquisition of Roy Hill Project's Rail Camp 3, which comprises a 300-person camp including a gym, recreation facilities and wet mess (refer ASX announcement on 28 October 2016).

The start of bulk earthworks puts the Company on track to commence mining operations in the second Quarter of CY 2017, including the proposed DSO mining operation subject to certain conditions precedent (refer ASX Announcement, 10 November 2016).



***Figure 3 – Bulk earthworks underway on site for the Pilgangoora accommodation village***

Bulk earthworks are near completion for the Stage 1 relocation of this camp to Pilgangoora, comprising an initial 60 accommodation rooms, as well as common central facilities.

The bulk earthworks package of work included:

- mobilisation and establishment of temporary offices, power and water supply infrastructure to support the works;
- establishment of suitable borrow pits;
- clearing of the planned camp access road from the main project site through to the camp location; and
- clearing and ground preparation of the area required to underpin the Stage 1 relocation of the camp to support ongoing activities, with approximately 5.7 hectares to be cleared during this initial stage.

### ***Order of Long-Lead Items***

To support its fast-track development strategy, the Company has been working on a number of fronts to ensure that appropriate infrastructure, access and logistics support are in place at Pilgangoora to allow the major construction works to commence as soon as project finance has been secured and the Board has made its final investment decision.

As part of this process the Company placed orders for critical long-lead items, including a High Pressure Grinding Rolls (HPGR) crusher, a Ball Mill and a Spodumene Concentrate Filter during the Quarter. These items represent key components of the proposed Pilgangoora processing facility pursuant to the flowsheet outlined in the Pilgangoora Definitive Feasibility Study (see ASX Announcement – 20 September 2016).

The order of these long-lead items will support the Company achieving its targeted schedule of commencing commissioning by the end of 2017.

### ***Water Supply***

Process water supply locations and corridors have now been secured for the Pilgangoora Project, through a combination of on-site water bores and access to a pre-existing bore field location just south of the Pilgangoora project area.

Pump testing and aquifer analysis has confirmed the respective bores' capacity to deliver sufficient water for Stage 1 (2Mtpa) of the project and bore licencing for these locations is now underway as part of the broader project approvals.

Furthermore, detailed negotiations and documentation are nearing completion to access additional water, under agreement, from an existing licenced bore field in the project region to further support future expanded water supply requirements, consistent with the Company's objective of production growth over time. Pilbara also maintains a portfolio of water exploration options in the region with a view to creating further flexibility for site water supply requirements.

### ***Award of EPC Contract***

Subsequent to the end of the Quarter, the Company was pleased to award the lump sum Engineering, Procurement and Construction (EPC) contract for the Pilgangoora Project to RCR Tomlinson Ltd ("RCR").

Finalisation of the EPC contract for the 2Mtpa lithium-tantalum plant is a key contract that keeps Pilbara on track to commission Pilgangoora in the December Quarter of this year.

The contract contains a target cost of A\$138 million with a guaranteed maximum price of A\$148 million. These figures are comfortably within the estimates contained in the Company's Definitive Feasibility Study (+/-15%).

The EPC contract has been awarded in two stages with the initial Stage 1 being a two month FEED (Front-End Engineering and Design) program, which will determine the final scope of work, timeline and target price (eliminating or reducing risk items identified in the tender). However, this process is expected to have no impact on the overall A\$148 million guaranteed maximum price contained in the EPC contract. Pilbara's total commitment for Stage 1 is fixed at approximately A\$10.3 million.

Once project funding has been secured, and the Pilbara Board has made its final investment decision, Pilbara has the option but not the obligation to commit to the Stage 2 construction component of the EPC contract, which is for the balance of the contract price and is planned to commence in May 2017.

RCR is an Australian-owned, highly-experienced and renowned engineering, procurement and construction company. RCR's extensive experience includes the recent delivery of two ore processing plants (combined 65Mtpa) for Fortescue at its Solomon operations in the Pilbara region of WA, valued at over \$700 million, which received industry recognition for the speed of construction.

For Pilgangoora, RCR has chosen sub-contractors Primero and Minnovo to provide technical and engineering support. Both have extensive experience in the engineering and process design sectors. Importantly, Primero is also one of the few engineering firms in Australia with direct experience in lithium plant construction, commissioning and operations as a result of its recent work at the Mt Cattlin site and the previous experience of their personnel at the Talison Greenbushes mine.

### ***Award of Stage 1 Camp Relocation and Re-establishment Contract***

Subsequent to the end of the Quarter, the Company also awarded the first stage of the 300-room camp relocation and re-establishment contract to OTOC Australia. Stage 1 of the contract is for a lump sum commitment of approximately \$4.8 million and will see OTOC de-construct, transport, erect, commission and handover an initial 60 rooms plus common facilities from the recently purchased Roy Hill rail camp 3 (refer ASX Announcement, 28 October 2016), which resides approximately 90km's from the identified Pilgangoora site camp location.

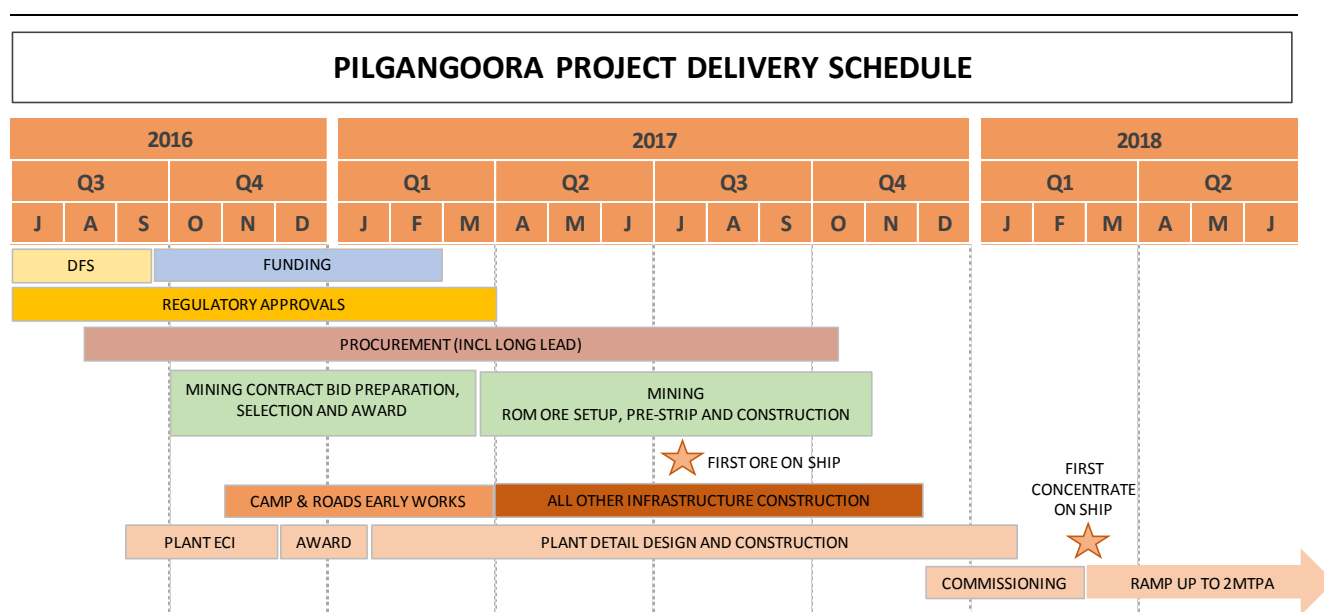
OTOC were selected following a competitive tendering process, and have considerable and recent camp construction experience in the Pilbara having delivered two of the four rail construction camps for Roy Hill, building removal and replacement at West Angeles for Rio Tinto, and detailed design and installation of a 330-room facility for BHP Billiton's Macedon construction village.

The initial 60 rooms and common facilities are due to be completed by late March 2017, with the balance of the camp due to be completed (subject to approvals and permitting) during Q2 2017.

Remaining contract packages for the Pilgangoora Project are either under negotiation or will be the subject of tender processes shortly.

### ***Project Development Schedule***

Further details of the updated project delivery schedule are provided below:



## **EXPLORATION AND GROWTH**

### ***Sterilisation and Strategic Development Drilling***

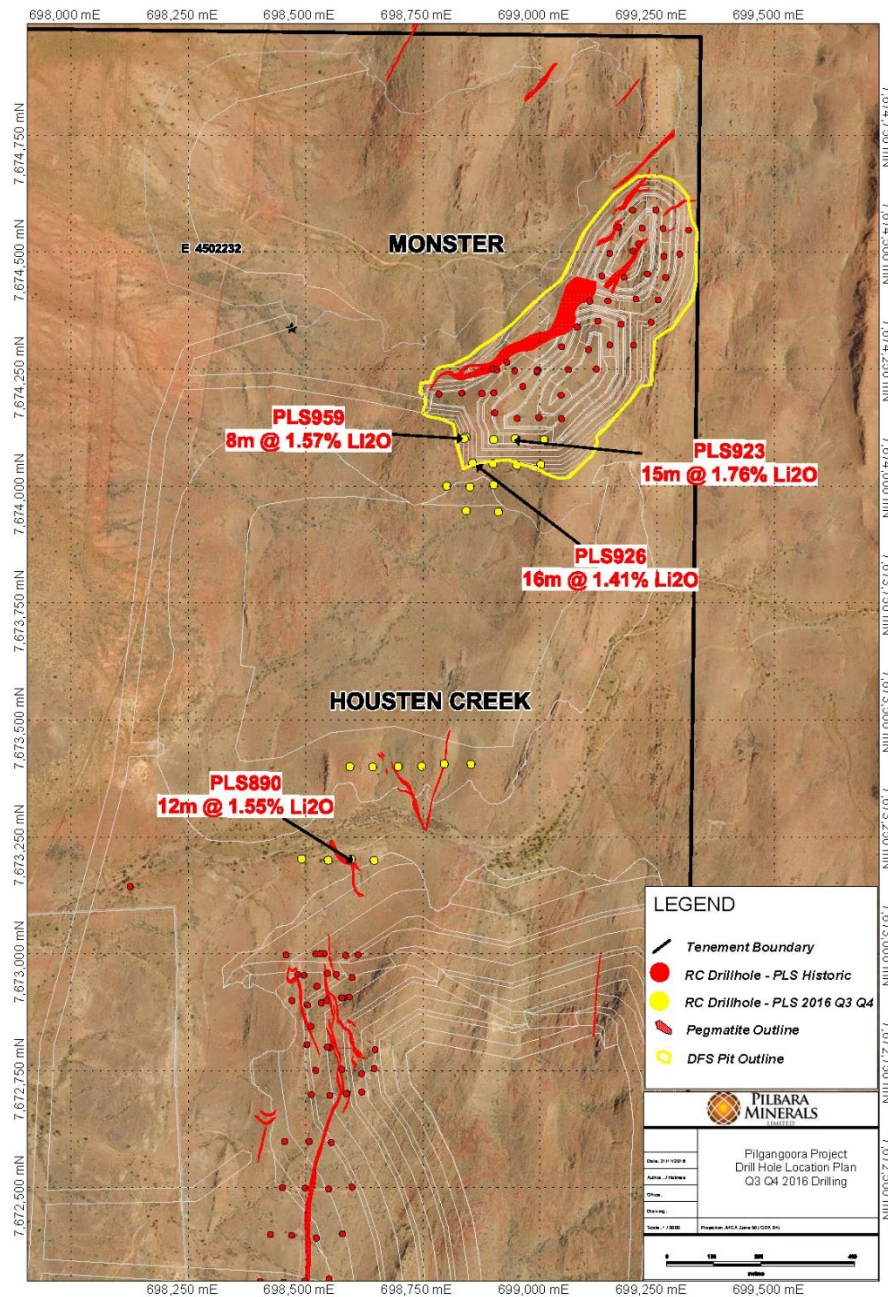
During the Quarter, Pilbara completed an extensive program of sterilisation and strategic development drilling at Pilgangoora, with outstanding results generated paving the way for a further increase in the Project's resource inventory.

Drilling during the Quarter was designed to target extensions to known near-surface pegmatites with the potential to add material tonnes to the existing resource base and assist with final pit designs, as well as sterilisation drilling to define final locations for key site infrastructure, including waste dumps.

Recent drilling results at both the Far East and Monster pegmatites has continued to identify significant thick zones of high-grade mineralisation. Results from the Far East zone have defined lithium mineralisation in a single pegmatite extending over 1.2kms, while drilling at the Monster prospect has extended the mineralised pegmatite a further 250m to the south.

Resource extension drilling at the Monster prospect (see Figure 3) returned significant widths of high-grade mineralisation down dip of the currently defined resource. Significant intercepts included:

- 12m @ 1.73% Li<sub>2</sub>O from 48m (PLS921);
- 15m @ 1.76% Li<sub>2</sub>O from 81m (PLS923);
- 16m @ 1.41% Li<sub>2</sub>O from 53m (PLS926);
- 10m @ 1.58% Li<sub>2</sub>O from 112m (PLS928); and
- 8m @ 1.57% Li<sub>2</sub>O from 59m (PLS959).



Significant new intercepts from the Far East prospect included:

- 13m @ 1.61% Li<sub>2</sub>O from 96m (PLS961); and
- 5m @ 1.87% Li<sub>2</sub>O from 104m (PLS965).



Pleasing results have also been received from strategic drilling along the eastern side of the Altura/Pilbara Minerals tenement boundary (western boundary of M45/333). This drilling lies south of the proposed South Pit, which forms part of the proposed mining area outlined in the September 2016 Definitive Feasibility Study (see Figure 4).

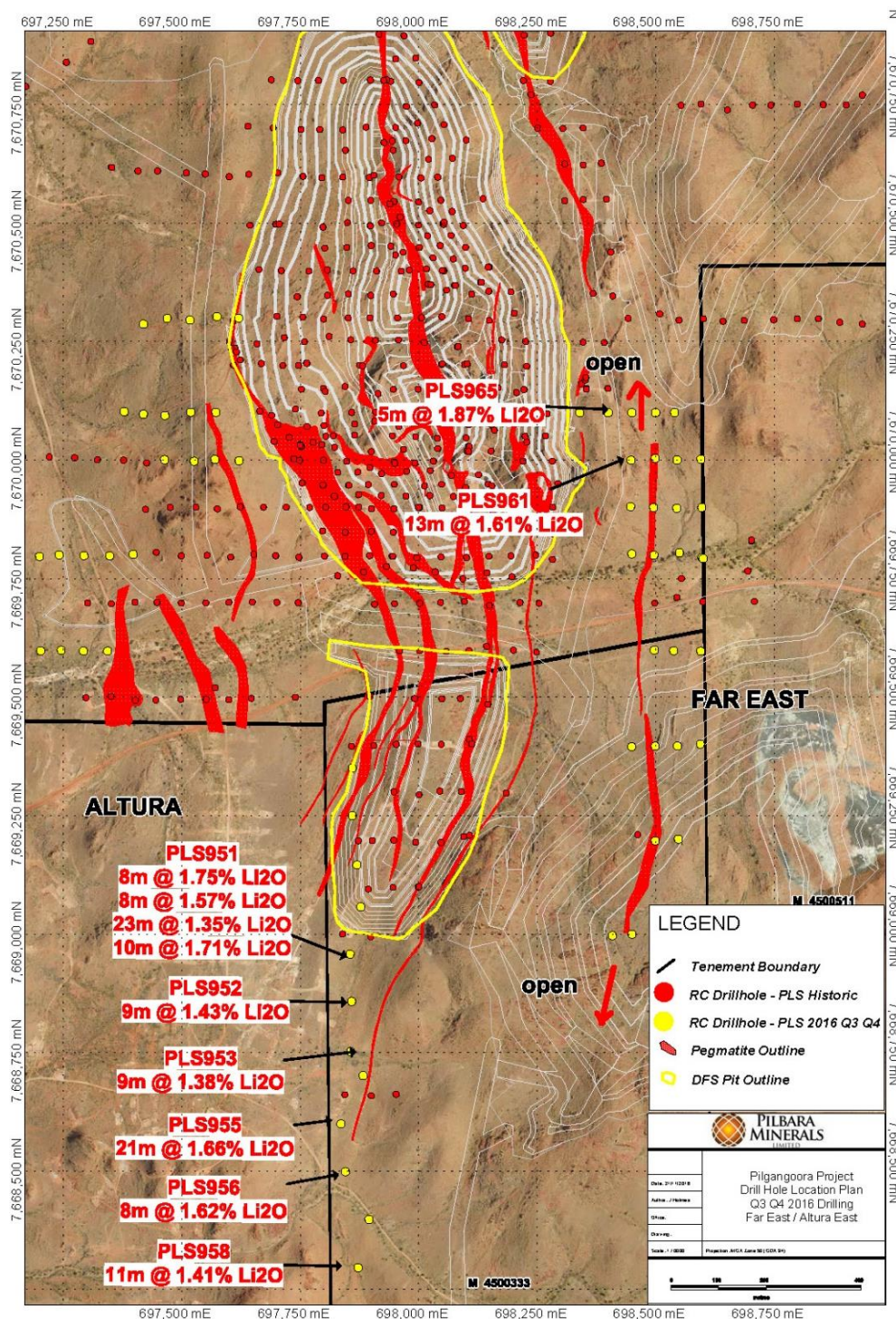


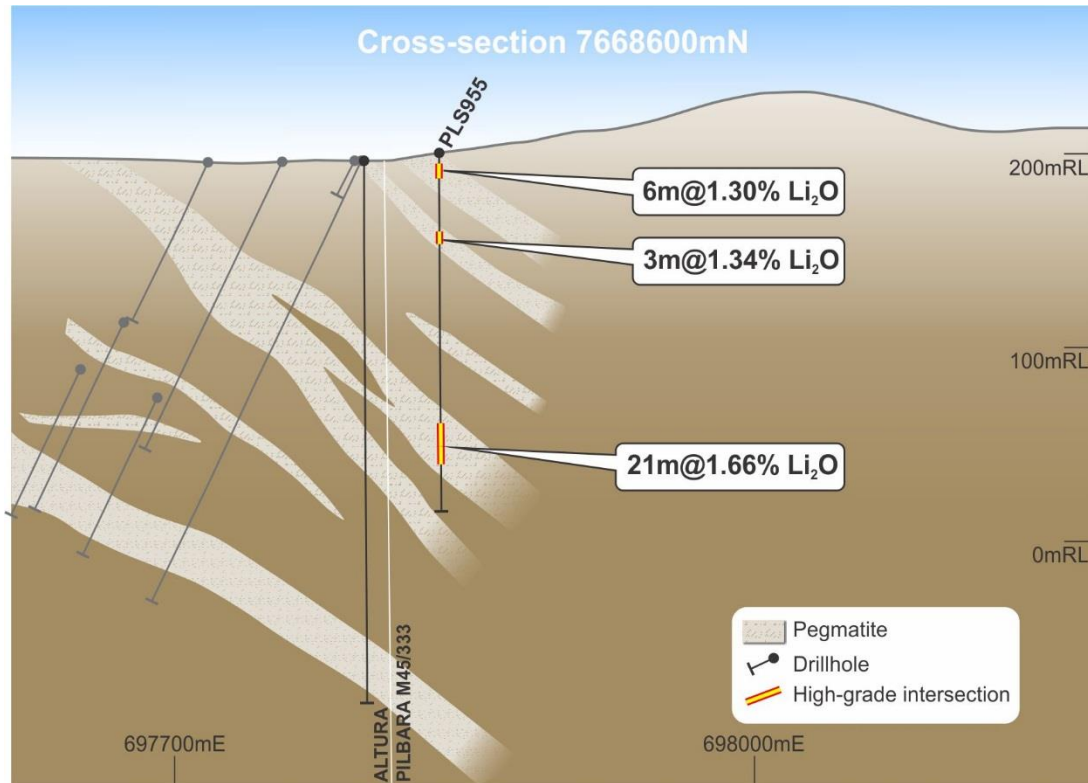
Figure 5 – New RC drilling, Far East Pegmatite / Altura Boundary, E45/2232 and M45/333

Results have been received for the first eight holes of the resource extension drilling program, with significant widths of mineralisation being returned, including:

- 8m @ 1.75% Li<sub>2</sub>O from 56m (PLS951);
- 8m @ 1.57% Li<sub>2</sub>O from 82m (PLS951);

- 23m @ 1.35% Li<sub>2</sub>O from 119m (PLS951);
- 10m @ 1.71% Li<sub>2</sub>O from 161m (PLS951);
- 9m @ 1.43% Li<sub>2</sub>O from 86m (PLS952);
- 21m @ 1.66% Li<sub>2</sub>O from 143m (PLS955); and
- 11m @ 1.41% Li<sub>2</sub>O from 102m (PLS958).

This pegmatite zone remains open to the south and open at depth (see Figure 5).



**Figure 6 – Cross Section 7668600mN (Southern Area – Altura East)**

The Mineral Resource for South Pit has been re-calculated. There is potential for the deeper extensions to be mined in conjunction with Altura in the future. In the previous Quarter, Pilbara signed a co-operation agreement with Altura Mining (see ASX Announcement, 25 August 2016) formalising a framework for ongoing co-operation between the two companies.

In addition, reconnaissance exploration drilling at the Houston Creek pegmatite to the north of the Eastern Domain returned some encouraging shallow ore grade intercepts, including 12m @ 1.55% Li<sub>2</sub>O from 13m (PLS890).

### **Completion of Lynas Find Lithium Project Acquisition**

During the Quarter, Pilbara completed the acquisition of the Lynas Find Lithium Project which directly adjoins its flagship Pilgangoora Lithium-Tantalum Project, increasing its world-class resource inventory in the Pilbara District of Western Australia.

In accordance with the binding acquisition agreement with Dakota Minerals Limited (ASX: DKO) announced to ASX on 6 October 2016, Pilbara has now acquired the core package of granted tenements for the Lynas Find Lithium Project. The Lynas Find Lithium Project hosts an Indicated and Inferred Mineral Resource of 5.6Mt @ 1.57% Li<sub>2</sub>O, 93ppm Ta<sub>2</sub>O<sub>5</sub> and 0.69% Fe<sub>2</sub>O<sub>3</sub>.

This acquisition represents a strategic addition to Pilbara's existing world-class resource inventory at Pilgangoora, providing the Company with early access to readily accessible higher grade tonnes, as well as creating additional flexibility for the location of key infrastructure components for the development of the Pilgangoora Project.

### **January 2017 Mineral Resource Upgrade**

The updated resource recently announced on 24 January 2017 represents a **22 % increase** in total resource tonnage compared with the resource upgrade announced on 11 July 2016, and now comprises a total of **156.3 million tonnes grading 1.25% Li<sub>2</sub>O (spodumene) and 128ppm Ta<sub>2</sub>O<sub>5</sub>** containing **1.95 million tonnes of lithium oxide and 44.2 million pounds of Ta<sub>2</sub>O<sub>5</sub>**. Importantly, the total Measured and Indicated Resource increased by 14% to 95.3 Mt grading 1.32% Li<sub>2</sub>O (spodumene), 130ppm Ta<sub>2</sub>O<sub>5</sub> and 0.55% Fe<sub>2</sub>O<sub>3</sub>, containing 1.26 Mt of lithium oxide and 27.3 million pounds of Ta<sub>2</sub>O<sub>5</sub>.

**Table 1: Pilgangoora Project – Mineral Resource Estimate (using 0.5% Li<sub>2</sub>O cut-off)**

Category	Mt	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> (ppm)	Li <sub>2</sub> O (T)	Ta <sub>2</sub> O <sub>5</sub> (M lb)
Measured	17.6	1.39	151	244,000	5.9
Indicated	77.7	1.31	125	1,017,000	21.5
Inferred	61.1	1.13	125	691,000	16.8
<b>TOTAL</b>	<b>156.3</b>	<b>1.25</b>	<b>128</b>	<b>1,952,000</b>	<b>44.2</b>

## **CORPORATE**

### **AGREEMENT WITH MINERAL RESOURCES**

The Company successfully reached agreement with Mineral Resources Limited (ASX: MIN) ("MIN" or "Mineral Resources") during the Quarter to resolve a dispute over a Right of First Refusal (ROFR) relating to the sale of lithium products from the Pilgangoora Project (refer to ASX Announcement, 25 October 2016).

The agreement saw the extinguishment of the ROFR and related 2.5% royalty in exchange for Mineral Resources taking an equity stake in Pilbara and committing to support the development of the Pilgangoora Lithium-Tantalum Project, and provided a clear and unrestricted path forward for Pilbara to progress all existing and future off-take agreements in relation to the sale of lithium. The removal of the 2.5% royalty for the life of the project is a key financial benefit for the long-term cash flow of the Pilgangoora Project, especially in light of the major resource growth evident at Pilgangoora.

Under the agreement, the Company issued \$A50 million in shares (comprising 104,166,667 shares) to Mineral Resources as consideration for the permanent relinquishment of the ROFR and royalty (based on \$0.48 per share). The shares were issued under the Company's 15% capacity under ASX Listing Rule 7.1 and subsequently approved by shareholders on 25 January 2017. Mineral Resources has agreed it will not sell its shares for a period of 6 months and will not increase its holding in the Company for a period of 12 months.

### **OFF-TAKE AGREEMENT WITH SHANDONG RUIFU**

During the Quarter, Pilbara Minerals secured a second innovative off-take agreement with Chinese lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) producer, Shandong Ruifu Lithium Co. Limited (Shandong Ruifu), for the early supply of direct shipping ore (DSO) from either the Pilgangoora Project or, at Pilbara's election, the adjoining higher grade Lynas Find Lithium Project, from as early as July 2017 (refer to ASX Announcement, 10 November 2016).

Under the agreement, Pilbara Minerals will supply a total of 1.9 million tonnes of unprocessed ROM product from July 2017 with a specification of 1.5% Li<sub>2</sub>O and 5% moisture level (shipment rejection below 1.4% Li<sub>2</sub>O). The agreement provides for an attractive fixed USD price per dry metric tonne (1.5% Li<sub>2</sub>O, CFR China basis), which will provide a healthy operating margin and cashflow for the Company.

The off-take agreement represents significant value for the Company in early stage project revenues over the two year term of the contract and includes a US\$10 million cash pre-payment to assist the Company in funding project construction and mine start-up costs. This pre-payment is required to be made after the commencement of major mine construction works and will be secured by a second ranking security (subordinated behind senior debt) and offset against Shandong Ruifu's product payment obligations under the agreement.

Under the agreement, the ROM product will be shipped to Shandong Ruifu's existing local port facility on the eastern seaboard of China, where it proposes to carry out relatively minor modifications to an existing processing plant to concentrate the run-of-mine ore delivered by Pilbara. The ROM off-take agreement is subject to certain conditions precedents including regulatory approvals in China; Pilbara securing appropriate access to the Utah Point bulk export facility in Port Hedland; and a final investment decision of the Pilbara Board for the development and construction of the Pilgangoora Project.

This off-take agreement will be in addition to the concentrate off-take agreement announced on 4 July 2016 with General Lithium Corporation, for the supply of 140,000tpa of 6% chemical grade spodumene concentrate from Pilgangoora from Q1 2018.

The Company continues to work with Ruifu towards satisfaction of the outstanding conditions precedent. Further, Run-of-Mine sample results are being shared with Ruifu and an initial bulk sample is being shipped to China in the coming weeks to assist in finalising details around their processing facility.

The Company continues to engage with and is in advanced discussions with other offtake partners for the balance of its annual production from Pilgangoora.

## **BOARD & SENIOR MANAGEMENT CHANGES**

During the Quarter, Pilbara announced further changes to its Board and senior management team as the Company continues to progress towards production.

Respected mining executive and past Director of Operations with Fortescue Metals Group (FMG), Mr Nick Cernotta, has confirmed his acceptance to join the Board of Pilbara as an independent Non-Executive Director. Mr Cernotta will formally join the Board from 6<sup>th</sup> February 2017. Mr Cernotta's appointment will complement the Board's existing skills and experience as the Company rapidly advances towards its objective of becoming a significant new low-cost global lithium producer.

In addition, renowned lithium flotation specialist and long-serving Greenbushes lithium mine employee, Dr Wenbo Wang, joined Pilbara Minerals in mid-January 2017 from Talison Lithium. Dr Wang will provide key expertise in the optimisation and performance of the Pilgangoora plant testwork, design, commissioning and plant ramp-up.

Dr Wang was intimately involved in the commissioning of a new lithium processing plant at the Greenbushes Operation and the further optimisation of its performance. Both of these are key objectives in the near-term for Pilbara Minerals' Pilgangoora operation and access to such rare skills and experience will be invaluable to the Company.

## **PROJECT FUNDING**

Pilbara continues to work on the balance of the Project's funding requirements, which includes several financing streams such as (but not limited to) conventional bank project financing, non-bank lending and customer/off-take financing.

The Company is working towards and expects to secure the remaining project funding required to complete the development of the Pilgangoora Project during the March 2017 Quarter.

### **DOWNSTREAM PROCESSING INITIATIVES**

Part of the Company's longer term strategy are initiatives that provide the potential to leverage the quality of the Pilgangoora Project into value-adding downstream processing opportunities in the form of lithium carbonate and/or lithium hydroxide production. Several initiatives are underway including the Memorandum of Understanding with General Lithium Corporation to jointly evaluate downstream lithium processing opportunities and joint testwork with Lithium Australia NL (ASX:LIT).

Pilbara continues to evaluate downstream opportunities with General Lithium Corporation, including the identification of suitable locations globally for future chemical conversion facilities. These discussions are continuing within the context of project financing and the potential for further offtake from expanded operations at the Pilgangoora site.

Subsequent to the end of the Quarter, Lithium Australia NL announced that its Sileach™ halogen digestion process had successfully produced battery-grade lithium carbonate. Pilbara Minerals has a memorandum of understanding with Lithium Australia to jointly evaluate the commercial potential of LIT's wholly owned Sileach™ process for the production of lithium carbonate.

Operations undertaken at ANSTO Minerals (a division of the Australian Nuclear Science and Technology Organisation) have demonstrated the production of battery grade lithium carbonate. The lithium carbonate feed was produced by Lithium Australia's Sileach™ pilot plant, processing ore from Lepidolite Hill in Western Australia. The refinement of the lithium carbonate produced during piloting was undertaken using a bicarbonate – carbonate re-precipitation approach, widely adopted in the lithium chemicals industry. The quality of the lithium carbonate meets or exceeds the specification of battery grade lithium carbonate produced by one of the world's largest suppliers of lithium chemicals, FMC Lithium.

Production of high-quality carbonate demonstrates the possibility to produce commercial products from a range of silicate materials, some of which are not commonly processed to produce lithium chemicals, due to limitations in existing processing routes. This outstanding result is a significant prelude to continuous Sileach™ pilot plant operations on spodumene concentrates from Pilbara Minerals' Pilgangoora project. The pilot plant at ANSTO is being prepared for processing the concentrates towards the end of January. Lithium Australia is confident that the run will create a benchmark in the hydrometallurgical processing of spodumene, potentially heralding a paradigm shift in lithium processing practices.

### **ANNUAL GENERAL MEETING**

A General Meeting of the Company's shareholders was held on 24 November 2016, with all resolutions passed on a show of hands.

### **CASH BALANCE**

The Company had a cash balance of \$80.4M as at 31 December 2016 (\$94.2M as at 30 September 2016). Major items of expenditure during the quarter included \$5.2M on the development of the Pilgangoora Project (including critical long-lead items), \$5M for the acquisition of the core tenements comprising the Lynas Find Lithium Project from Dakota Minerals and \$2.7M on exploration and evaluation work on the Pilgangoora Project (including the associated feasibility study).

## Competent Persons Statement

*The Company confirms it is not aware of any new information or data that materially affects the information included in the 24<sup>th</sup> 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 24<sup>th</sup> January 2016.*

*The Company confirms it is not aware of any new information or data that materially affects the information included in the 22 August 2016 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 22 August 2016.*

## 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 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.

## Contacts:

### Investors / Shareholders

Ken Brinsden  
Chief Executive Officer, Managing Director  
Ph. +61 (0)8 6266 6266

### Media

Nicholas Read  
Read Corporate  
Ph. +61 (0)8 9388 1474

## 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**

Lease	Location	Status	Registered Holder	PLS beneficial holding at commencement of period	PLS beneficial holding at end of period
<b>ACTIVE TENEMENTS and APPLICATION AT COMMENCEMENT OF THE QUARTER</b>					
<b>E45/2241</b>	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
<b>E45/3560</b>	Pinnacle	Granted	PILBARA MINERALS LTD	100%	100%
<b>E45/4648</b>	Pinga	Granted	PILBARA MINERALS LTD	100%	100%
<b>E47/1813</b>	Pilbara West	Granted	Pilbara Minerals LTD and Fox Resources LTD	45%	45%
<b>E47/1814</b>	Pilbara West	Granted	Pilbara Minerals LTD and Fox Resources LTD	45%	45%
<b>E47/1815</b>	Pilbara West	Granted	Pilbara Minerals LTD and Fox Resources LTD	45%	45%
<b>E47/2261</b>	Pilbara West	Granted	Pilbara Minerals LTD and Fox Resources LTD	45%	45%
<b>L45/388</b>	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
<b>L45/396</b>	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
<b>L45/402</b>	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
<b>L45/403</b>	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
<b>L45/411</b>	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
<b>L45/412</b>	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
<b>L45/413</b>	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
<b>L45/414</b>	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
<b>M45/1256</b>	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
<b>M45/333</b>	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
<b>M45/511</b>	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
<b>M45/78</b>	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
<b>APPLICATIONS MADE DURING THE QUARTER</b>					
<b>M45/1259</b>	Pilgangoora	Application	DAKOTA MINERALS LIMITED	0%	100%
<b>L45/417</b>	Pilgangoora	Application	PILBARA MINERALS LTD	0%	100%
<b>L45/421</b>	Pilgangoora	Application	PILBARA MINERALS LTD	0%	100%
<b>TENEMENTS DISPOSED OF DURING THE QUARTER</b>					
<b>E45/2232</b>	Pilgangoora	Granted	PILBARA MINERALS LTD (Conversion to M45/1256)	100%	0%
<b>E47/1093</b>	Pilbara West	Granted	Pilbara Minerals LTD and Fox Resources LTD	45%	0%
<b>E47/1094</b>	Pilbara West	Granted	Pilbara Minerals LTD and Fox Resources LTD	45%	0%
<b>TENEMENTS ACQUIRED DURING THE QUARTER</b>					
<b>E 45/3648</b>	Pilgangoora	Granted	DAKOTA MINERALS LIMITED	0%	100%
<b>E 45/4689</b>	Pilgangoora	Application	DAKOTA MINERALS LIMITED	0%	100%
<b>E45/4523</b>	Pilgangoora	Granted	DAKOTA MINERALS LIMITED	0%	100%
<b>P 45/2783</b>	Pilgangoora	Granted	DAKOTA MINERALS LIMITED	0%	100%
<b>M45/1256</b>	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%