



ASX/Media Announcement

28 April 2017

MARCH 2017 QUARTERLY ACTIVITIES REPORT

22% increase in the Pilgangoora Mineral Resource to 156Mt; Outstanding results from HMS pilot plant testwork; Significant progress with development of Pilgangoora Project; Acquisition of an initial 51% interest in the Mt Francisco Lithium-Tantalum Project

PILGANGOORA LITHIUM-TANTALUM PROJECT (PLS: 100%)

- Substantial increase in the Pilgangoora Mineral Resource to 156.3Mt @ 1.25% Li₂O (spodumene) and 128ppm Ta₂O₅, 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.
- Outstanding results from Heavy Media Separation (HMS) pilot plant highlight potential to further improve economics of the Pilgangoora Project, with increased yields and recoveries for the coarse spodumene concentrates ranging from 51.9% to 67.7% (compared to 41.9% to 44.6% used in the DFS).
- Final concentrate grades following HMS processing range from 6.05% Li₂O to as high as 6.26% Li₂O, confirming Pilgangoora should generate a premium product and comfortably meet or exceed the industry benchmark of a 6% concentrate grade.
- Pre-development RC grade control drilling within the Central footwall pegmatite confirmed high-grade spodumene mineralisation over the initial pit development stages. Significant intersections to date include:
 - 23m @ 1.54% Li₂O from 3m (PGC022);
 - 21m @ 1.72% Li₂O from 1m (PGC025);
 - 16m @ 2.07% Li₂O from 14m (PGC027); and
 - 32m @ 1.72% Li₂O from 0m (PGC033).
- Key 'Native Vegetation Clearing' permit awarded, with final approval for the Pilgangoora Mining Proposal expected in the near term.
- Award of major contracts for the Pilgangoora Project, including the EPC Contract to RCR Tomlinson and mine camp relocation to OTOC Australia.
- Early construction works continuing at the Pilgangoora Project with RCR Tomlinson's front end engineering and design (FEED) package for the processing plant nearing completion.
- Non-binding Memorandum of Understanding (MOU) signed with Atlas for a proposed Infrastructure Services Agreement, under which Atlas will provide port access, processing, bulk handling and haulage services to Pilbara for the ROM DSO mining operation.

MT FRANCISCO LITHIUM – TANTALUM PROJECT

- Agreement with Atlas Iron (ASX: AGO) to acquire an initial 51% interest in the lithium, tantalum and tin mineral rights for the Mt Francisco Lithium-Tantalum Project, located 50km south-west of Pilgangoora.
- Pilbara can earn up to an 80% interest in the Mt Francisco Project in stages by funding \$1M worth of exploration and completing a definitive feasibility study (DFS) until a decision to mine.
- Mt Francisco hosts the last remaining large occurrence of outcropping pegmatites in close proximity to Port Hedland, and is considered to represent one of the highest quality lithium exploration assets in the Pilbara region outside of Pilbara's world-class Pilgangoora Project.

CORPORATE

- Advanced discussions with potential financiers and offtake customers during the Quarter for the balance of the Pilgangoora product offtake.
- Mr Nick Cernotta, respected mining executive and past Director of Operations with Fortescue Metals Group (FMG), joined the Pilbara Board as an independent Non-Executive Director.
- Extraordinary General Meeting of Shareholders held on 25 January 2017 with shareholders approving an amended Employee Award Plan.
- Cash balance at 31 March 2017 of \$65.5M (31 December 2016: \$80.4M).

OVERVIEW

The March 2017 Quarter was a period of continued strong progress for Pilbara Minerals Limited (ASX: PLS), as the Company further advanced its flagship 100%-owned Pilgangoora Lithium-Tantalum Project in Western Australia towards production. The Company remains focussed to ramp up production from the 1st Quarter of 2018.

Key milestones for the Quarter included the delivery of an updated Mineral Resource estimate, which resulted in a 22% increase in total resource tonnage to 156.3 million tonnes, and a 14% increase in the total Measured and Indicated Resource component to 95.3 million tonnes.¹

Also during the Quarter, results from Heavy Media Separation (HMS) pilot plant testwork highlighted the real potential to further improve the economics of the Pilgangoora Project, with increased yields and recoveries for the coarse spodumene concentrates ranging from 51.9% to 67.7% (compared to 41.9% to 44.6% used in the DFS). The results further demonstrate the superior recovery and grade characteristics of the Pilgangoora resource and will be factored into the Company's upcoming revision to Pilgangoora Project Reserves and updated Stage 1 project financial modelling.

The updated Ore Reserve², metallurgical recovery results and final cost data arising from the Stage 1 project works will then underpin a Definitive Feasibility Study (DFS) for the proposed Stage 2, 4Mtpa ore processing scenario outlined in the Company's ASX Announcement "Pre-feasibility Study Outlines Compelling 4mtpa Expansion Option for Pilgangoora Lithium Project" dated 20 September 2016.

Outside of the world-class Pilgangoora Project, the Company significantly enhanced its dominant land-holding in the north Pilbara during the Quarter, entering into a binding farm-out and joint venture agreement with Atlas Iron (ASX: AGO) to acquire an initial 51% interest in the Mt Francisco Lithium-Tantalum Project, with the right to earn up to 80% in stages.

The Mt Francisco tenement is located 50km south-west of the Pilgangoora Project, and hosts the last remaining large occurrence of outcropping pegmatites located in close proximity to Port Hedland. Mt Francisco is considered to represent one of the highest-quality lithium-tantalum exploration assets in the Pilbara region outside of the Pilgangoora Project, and sits within an established zone of known lithium deposits.

¹ ASX Announcement "Pilgangoora Resource Hits 156 Mt Following Latest Drilling Success and Regional Consolidation" dated 25 January 2017.

² ASX Announcement "Pilbara More Than Doubles Pilgangoora Ore Reserves to 69.8Mt Ahead of Key Definitive Feasibility Study" dated 22 August 2016

In addition, the Company signed a non-binding MOU with Atlas for a proposed Infrastructure Services Agreement, under which Atlas will provide port access, processing, bulk handling and haulage services to Pilbara in respect of the Company's proposed DSO ROM mining operation from the Pilgangoora Project.

PILGANGOORA LITHIUM-TANTALUM PROJECT, WA (100%)

PROJECT DEVELOPMENT ACTIVITIES

January 2017 Mineral Resource Upgrade

The Company delivered an updated Mineral Resource estimate during the Quarter, which now totals **156.3 million tonnes grading 1.25% Li₂O (spodumene) and 128ppm Ta₂O₅** containing **1.95 million tonnes of lithium oxide and 44.2 million pounds of Ta₂O₅**.³ This represents a **22% increase** in total resource tonnage compared with the previous resource upgrade announced to ASX on 11 July 2016.

Importantly, the total Measured and Indicated Resource increased by 14% to 95.3Mt grading 1.32% Li₂O (spodumene), 130ppm Ta₂O₅ and 0.55% Fe₂O₃, containing 1.26Mt of lithium oxide and 27.3 million pounds of Ta₂O₅.

Table 1: Pilgangoora Project – Mineral Resource Estimate (using 0.5% Li₂O cut-off)

Category	Mt	Li ₂ O (%)	Ta ₂ O ₅ (ppm)	Li ₂ O (T)	Ta ₂ O ₅ (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
TOTAL	156.3	1.25	128	1,952,000	44.2

Pre-Mining Bulk Sample Campaign

Bulk sampling of outcropping pegmatites from the proposed initial mining areas, in particular the proposed DSO pits within the Central Domain and Lynas Find areas were completed during the Quarter. Approximately 10 x 1 tonne pegmatite samples were collected from different outcrops within the Central Domain (See **Figure 1**).



Figure 1 – Bulk Sampling Program within Central area

³ ASX Announcement dated 25 January 2017.

Samples were sent to Nagrom laboratories in Perth. Each 1 tonne sample was crushed to a top size of 50mm, then assayed across the Pilbara Minerals assay suite.

Results from the individual 1 tonne samples ranged from 1.46% Li₂O to 2.93% Li₂O with an average grade of 2.11% Li₂O. (see **Figure 2** following).

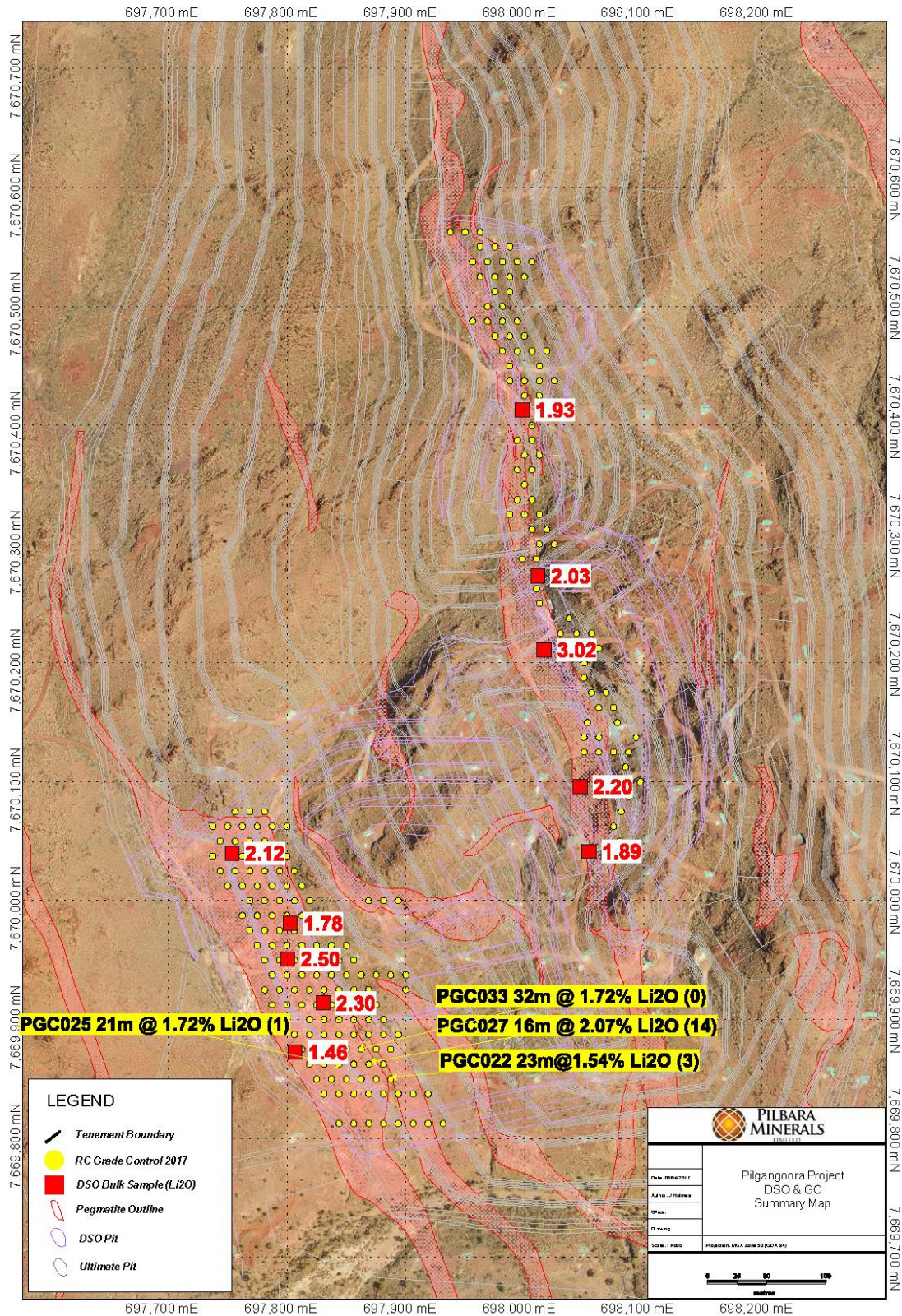


Figure 2 – Bulk Sample and Grade Control Summary Plan

Pre-development RC Grade Control Drilling

RC grade control drilling is being undertaken on two key pegmatite domains (D36 and D1) within the Central pit area and also at Lynas Find. The program is being undertaken by Mt Magnet Drilling Pty Ltd using a track mounted RC450 drill rig.

Holes are being drilled vertically on a nominal 12 metre x 12 metre offset pattern to an average depth of 33m (representing approximately the first 6 benches of mining) through this zone. Drilling of the footwall zone (D36) is nearing completion with a total of 124 holes for 4,139 metres completed to date.

All samples are being sent to Nagrom laboratories in Perth for analysis using a peroxide fusion digest with an ICP finish. Results have been received for the first 43 holes with significant intersections including:

- ***23m @ 1.54% Li₂O from 3m (PGC022);***
- ***21m @ 1.72% Li₂O from 1m (PGC025);***
- ***16m @ 2.07% Li₂O from 14m (PGC027); and***
- ***32m @ 1.72% Li₂O from 0m (PGC033).***

Drill hole locations are shown on **Figure 2**. A full suite of results is tabled in the ASX Announcement “Bulk sampling program in initial mining areas achieves average grades in excess of 2%” dated 18 April 2017.

On completion of the drilling program, the Resource will be re-calculated for domains D1 and D36 before undertaking detailed variography studies. Results from these studies will be used to optimise grade control strategies prior to commencement of mining.



Figure 3 – Grade Control and Geotechnical Drilling Central Domain

Diamond Drilling

A diamond drilling program for additional geotechnical and metallurgical data is also currently underway. Drilling is being carried out at the Lynas Find, Eastern, Central and Far East Domains.

A total of 5 PQ drill holes for 225m have been completed at the Lynas Find prospect for additional metallurgical testwork. The drill holes have been positioned to twin existing RC holes. In addition, 3 HQ drill holes (PLS968M to PLS970M) for a total of 258m have been completed for geotechnical purposes.

Geotechnical drilling has been completed at Central and Eastern Domains. This included 5 HQ drill holes for a total of 468m. The program is nearing completion with 2 PQ drill holes remaining at the Far East Domain.

Results will be reported on completion of drilling program and receipt of assays.

Heavy Media Separation (HMS) Pilot Testwork

The Heavy Media Separation (HMS) Pilot Plant test work program was completed during the Quarter, with the final results showing significant improvements in the yield, lithia recovery and coarse product grades – refer to ASX Announcement dated 1 March 2017.

These results further demonstrate the superior recovery and grade characteristics of the Pilgangoora Resource and will be factored into the Company's upcoming revision to Pilgangoora Reserves and updated Stage 1 Project financial modelling. Updated Pilgangoora Ore Reserves⁴, improved metallurgical recovery results and final cost data arising from the Stage 1 project works will form the basis for a proposed Stage 2, 4Mtpa DFS. This study will build on the previous strong financial outcomes outlined in the 4Mtpa Pre-Feasibility Study (PFS) published in September 2016 (see ASX announcement "Pre-feasibility Study Outlines Compelling 4mtpa Expansion Option for Pilgangoora Lithium Project" dated 20 September 2016). Results for the 4Mtpa DFS are expected to be published in the 2nd half of 2017.

The HMS circuit design for the 2Mtpa DFS was modelled on the Heavy Liquid Separation (HLS) test work program completed on the three major ore domains, optimising the density cut points to produce a coarse spodumene concentrate.

Since the last metallurgical ASX Announcement dated 6 September 2016, the HMS Pilot Plant located at Diamond Recovery Services has been modified by Pilbara and then commissioned on a bulk surface sample from the Eastern Domain, with the definitive program completed using the PQ diamond core generated for the DFS.

The bulk samples for processing represented each ore domain, including bulk Eastern Surface ore, Eastern Domain, Western Domain and Central Domain, which are representative of the scheduled first five to seven years of mine life.

The bulk samples generated were prepared by the High Pressure Grinding Roll (HPGR) variability work and then screened to produce (+0.50 – 3.35 mm) HMS feed product, with the (-0.50 mm) material becoming the truncated feed for the gravity and flotation circuits.



Figure 4: HMS Pilot Plant Concentrates

⁴ ASX Announcement dated 22 August 2016



Figure 5: HMS Spodumene Concentrate (Sinks)



Figure 6: Left – HMS Spodumene-Tantalum Concentrate; Right – HMS Floats

The Pilot Plant HMS results for the Central, Western and East Domains are summarised in Table 2 below, with the results demonstrating increases in both yield and recovery compared to those previously published in the 2Mtpa DFS (see ASX announcement “Pilgangoora Definitive Feasibility Study Confirms World-Class Australian Lithium Project” dated 20 September 2016), including a significant increase in recovery in the Eastern Domain from **44.6% to 67.7%**, an increase of **23.1%** producing a **6.26% Li₂O grade**.

Table 2: Two stage HMS Pilot Plant summary results

Sample	% Yield	% Li ₂ O Grade	% Li ₂ O Recovery
Central Domain	16.5	6.05	51.9
Western Domain	18.8	6.11	56.0
Eastern Domain	22.4	6.26	67.7

For comparative purposes, the HMS modelling conducted from the HLS test work used for the Basis of Design in the previously published 2Mtpa DFS is summarized in Table 3 below:

Table 3: Two stage HMS modelling results – DFS

Sample	% Yield	% Li ₂ O Grade	% Li ₂ O Recovery
Central Domain	13.2	6.00	44.2
Western Domain	12.0	6.00	41.9
Eastern Domain	13.8	6.00	44.6

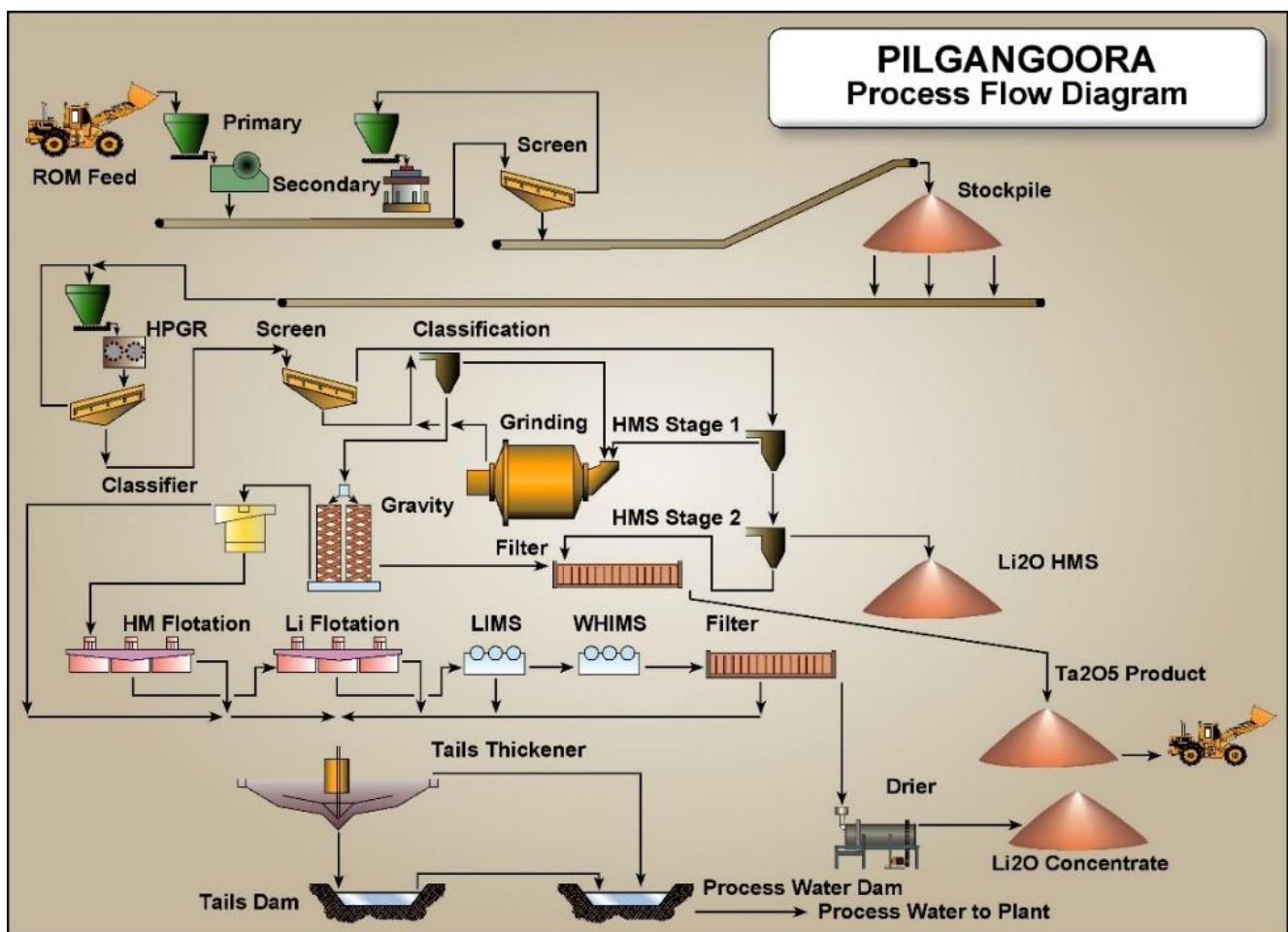


Figure 7: Pilgangoora Plant Process Flow Diagram

The results are a significant improvement over the modelled test work results used in the 2Mtpa DFS and provide an increased level of confidence for the FEED program currently being conducted by RCR Tomlinson, Minnovo and Primero.

Further Pilot Plant gravity programs have been conducted during the Quarter with the bulk (-0.50 mm) material from each of the Domains being combined with the (+0.50 – 3.35 mm) first stage floats generated from the HMS Pilot Plant Program. After tantalum recovery, this material will be subjected to further Flotation Pilot Plant programs with a view to further optimising the process plant design and operations, with completion expected during the current Quarter.

These closing Pilot Plant programs will further validate the DFS metallurgical test work program, improve the basis of design for the current FEED process and further optimise operating regimes and production costs.

Reserve Update and Proposed Stage 2 – 4Mtpa Definitive Feasibility Study (DFS)

The recently published and expanded Resource for the Pilgangoora Project, the improved metallurgical characteristics and the more detailed engineering design arising from the current Stage 1 project will be used to generate a revised JORC Reserve estimate. The updated Reserve is expected to be published during the June Quarter for 2017.

The Company previously published a Stage 2, 4Mtpa pre-feasibility study (PFS) for the Pilgangoora Project (see ASX announcement dated 20 September 2016), which demonstrated very strong economic returns. Additional engineering design and pilot scale testwork has further demonstrated the merits of the Pilgangoora Project and when combined with updated project Reserves, support continued expansion studies at Pilgangoora beyond the current Stage 1, 2Mtpa project.

Further planning is underway for the delivery of the Stage 2, 4Mtpa DFS and following the approval of Pilbara's Board, it is expected that these results could be published during the second half of 2017.

Project Approvals

During the Quarter, further key infrastructure tenements have been granted by the DMP that have paved the way for the Mining Proposal and Mine Closure Plan to be submitted for assessment.

The Mining Proposal contains detailed information on identification, evaluation and management of significant environmental impacts such as biodiversity, water resources, landforms, and mine closure, relevant to PLS's proposed mining operations.

DMP have completed their initial assessments of both the Mining Proposal and Mine Closure Plan and further technical comments lodged by PLS to assist this process of assessment have been submitted to progress the applications towards final approval. The documents will form the basis of the Pilgangoora Lithium-Tantalum Projects operating strategy, along with the submitted Project Management Plan. The DMP has recently approved the Project Management Plan and it is anticipated that the Mining Proposal and Mine Closure Plan will be approved shortly, allowing the commencement of major site works at Pilgangoora.

A Native Vegetation Clearing Permit was lodged and formally signed off by the Director Operations, Environment at the DMP, pending an appeals period, during this Quarter. The Appeals period is now successfully completed, and PLS have been officially notified of the final grant of this permit.

The first of two 5C water extraction licences for the Project was also received during the Quarter. This allows the Company access to its own groundwater via bores, to undertake the construction activities leading into production.

An application for a Works Approval and Operating Licence were also lodged during the Quarter with the Department of Environmental Regulation.

The Project Management Plan for the initial identification of potential major risks at the various stages of the operation's life cycle, from construction to development, production and closure, was also compiled and lodged for assessment during the Quarter.

Pilgangoora Project Execution – General Update

RCR Tomlinson, Minnovo and Primero are well progressed with the final engineering and design of the processing plant (2Mtpa). Procurement activities are ongoing with a number of key packages currently in tender and/or planned for award over the coming weeks consistent with the project delivery schedule.

In anticipation of the commencement of major site construction works, the Company has also continued to liaise with its offtake partner, Shandong Ruifu with respect to the commencement of the ROM DSO program. Pilbara has collected bulk samples to send to Shandong Ruifu for the optimisation of their processing facility in China.

Pilbara has also commenced the application process to access the Utah Point Port facility at Port Hedland to facilitate bulk ship loading for the purposes of the ROM program.

As previously announced, the progress of the ROM ore offtake agreement with Shandong Ruifu remains conditional and subject to Pilbara's access to the Utah Point port facility and Ruifu obtaining regulatory approval in China. The Company is also in discussions with other potential customers for DSO ROM ore.

Site Earthworks

During the Quarter, the Company completed the necessary initial site clearing and earthworks required for Stage 1 (60 rooms) of the 300 room accommodation facility, as depicted in **Figures 8 and 9** below:



Figures 8 & 9 – Camp Site Bulk Earthworks and Temporary Offices

Concrete Batching Facility

A 60-cubic metre per hour concrete batching facility (refer **Figure 10**) was awarded to Holcim and mobilised during the Quarter which has been initially utilised for Stage 1 of the camp relocation works. There are significant benefits in having a concrete batching facility on site during construction and it will remain during the course of 2017 to service both plant and infrastructure construction activities.



Figure 10 – Concrete Batching Facility at Pilgangoora

Process Plant EPC

Engineering and procurement has progressed with RCR Tomlinson Ltd (“RCR”) during the Quarter who are now largely through the awarded two-month Front End Engineering and Design (“FEED”) and procurement program (“Stage 1”) as advised to ASX on 18 January 2017. Testwork programs undertaken have further validated the process flow sheet and de-risked a number of elements pertaining to the overall process design.

Subsequent to the end of the Quarter, the Company has agreed with RCR to extend the Stage 1 program given there was further work to be completed in value engineering. It is expected that a final Stage 2 Guaranteed Maximum Price (“GMAX”) will be provided by RCR in May 2017 on completion of the value engineering works undertaken.

Stage 1 Camp Relocation

Significant progress has also been made with the first stage of the camp relocation package, with OTOC Australia (“OTOC”) nearing completion of installing the first 60 rooms and common facilities. Commissioning of the re-established camp facilities at Pilgangoora will commence during late April.

Subsequent to the end of the Quarter, **Figure 11** depicts progress of Stage 1 as of mid-April 2017.



Figure 11 – Stage 1 Accommodation Camp Construction Progress

Water Supply

The on-tenure monitoring and production bore drilling program commenced during the Quarter and is currently progressing well. Current yield results are consistent with the DFS results.

Engineering and Design for the proposed 2Mtpa borefield pipeline and associated headwork infrastructure is scheduled to commence in the June Quarter which is consistent with project delivery timelines.

Funding

During the Quarter, Pilbara continued to work on the balance of the Company's funding requirements and offtake, inclusive of lithium and tantalum products. The Company is engaged with multiple industry participants, including advanced discussions and documentation in relation to both lithium and tantalum concentrate offtakes.

In parallel, potential funding streams were continued to be progressed to support the balance of the Pilgangoora Project funding requirement, including offtake-linked and non-bank debt facilities. The discussions are ongoing and any material developments will be communicated to the market over the coming weeks as they arise.

Other Project Activities

The Company has continued to progress a variety of project packages during the Quarter. These include:

- Completion of Detailed Design for the Site Wide Bulk Earthworks;
- Completion of Tendering for the Process Plant and Site Infrastructure Earthworks;
- Completion of Tendering for the Camp Services and Catering Operational Contract;
- Completion of Tendering for Paramedical Support Services;
- Completion of Tendering for On Site Dual Fuel Power Station; and
- Awarded Site Survey works package.

Consistent with the current delivery program, the Company expects to award those tendered works during the next Quarter.

Project Development Schedule

The indicative delivery program for the Project is provided in **Figure 12** below:

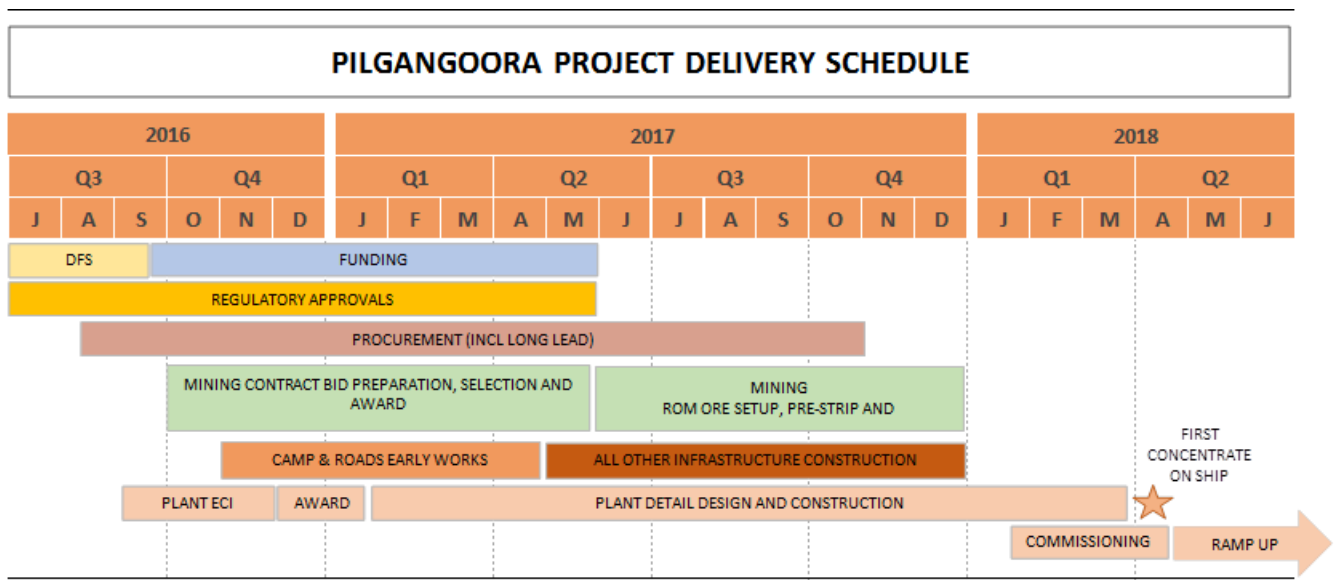


Figure 12 – Pilgangoora Project Delivery Schedule

MT FRANCISCO LITHIUM – TANTALUM PROJECT

ACQUISITION AND FARM IN OF MT FRANCISCO PROJECT

During the Quarter, Pilbara significantly enhanced its dominant land-holding in the north Pilbara and world-class Pilgangoora lithium district, after entering into a binding farm-out and joint venture agreement with Atlas Iron Limited (ASX: AGO) (Atlas) to acquire an initial 51% interest in the Mt Francisco Lithium-Tantalum Project. Pilbara may then spend a further \$1M on exploration in the first 12 months to increase its interest in the project to 70%, following which Pilbara may then earn an additional 10% upon completion of the DFS and decision to mine.

The Mt Francisco tenement is located 50km south-west of the Company's flagship Pilgangoora Lithium-Tantalum Project, and hosts the last remaining large occurrence of outcropping pegmatites located in close proximity to Port Hedland (see **Figures 13, 14 and 15**).

Mt Francisco is considered to represent one of the highest-quality lithium-tantalum exploration assets in the Pilbara region outside of Pilbara's world-class Pilgangoora Project. It sits within an established zone of known lithium deposits and represents a highly attractive addition to the Company's world-class lithium portfolio, offering the potential for significant resource scale in close proximity to accessible infrastructure.

The Mt Francisco tenement (E45/4270) was previously explored for tantalum and tin prior to Atlas' acquisition. Atlas re-analysed historical exploration data to identify the Mt Francisco lithium prospect, with rock chip results from chip trays (ASX release by Atlas 23rd May 2016) including:

- 10m grading 1.21% Li₂O and 52ppm Ta₂O₅ from 60m (MFRC036); and
- 2m grading 1.92% Li₂O and 103ppm Ta₂O₅ from 30m (MFRC037).

Pilbara plans to immediately commence a review of historical data from the Mt Francisco Project with a view to identifying drill targets using its extensive North Pilbara lithium-tantalum exploration expertise, in parallel with commencing negotiations with traditional owners to secure access for drilling.

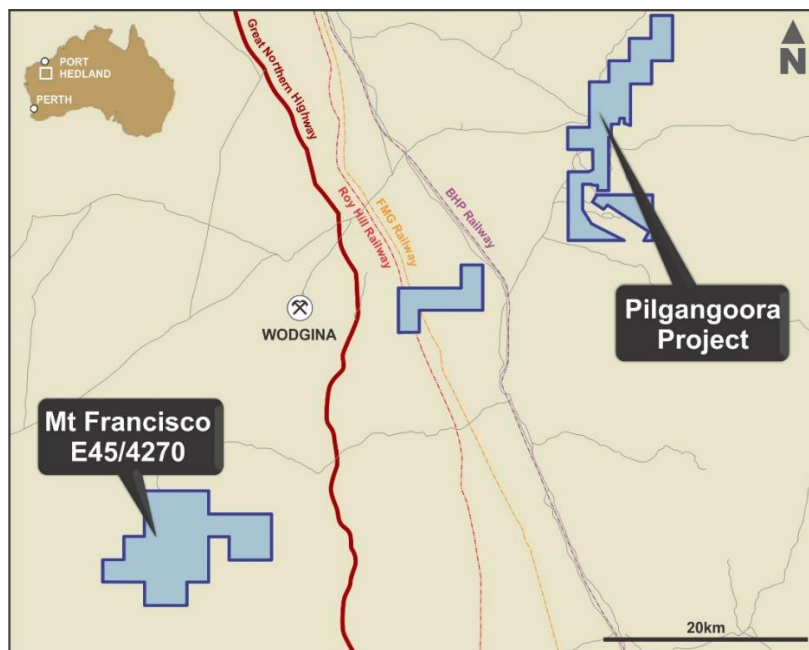


Figure 13: Mt Francisco tenement E45/4270 is located approximately 50km from Pilgangoora

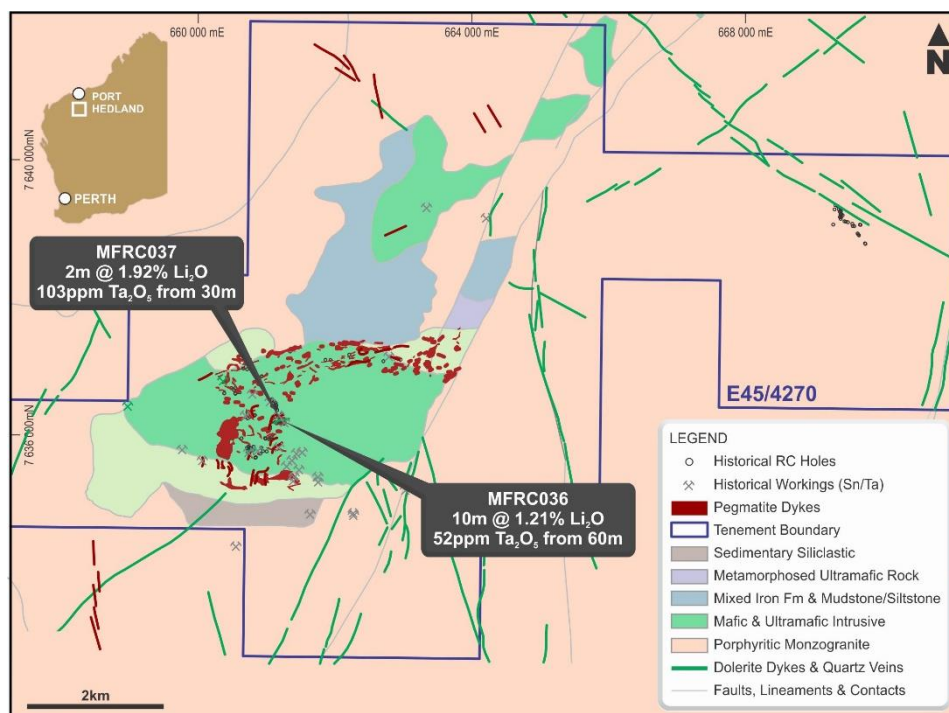


Figure 14: Location of mapped pegmatites and historical rock chip results



Figure 15: Outcropping pegmatites at Mt Francisco

MOU FOR INFRASTRUCTURE SERVICES AGREEMENT

As noted above, in addition to the Mt Francisco Agreement, Pilbara has also entered into a non-binding MOU with Atlas Iron for a proposed Infrastructure Services Agreement, under which Atlas would provide port access, processing, bulk handling and haulage services to Pilbara in respect of the Company's run-of-mine (ROM) ore operation from the Pilgangoora Project.

The MOU is a pre-cursor to reaching a final binding agreement with Atlas, under which Pilbara could undertake DSO ROM ore mining at the Pilgangoora Project by utilising Atlas' existing infrastructure, including haulage, storage and crushing infrastructure held at its Mt Dove Project and its port access and capacity at the Port Hedland Port Facilities.

Importantly, an Infrastructure Services Agreement with Atlas would facilitate Pilbara being able to deliver the DSO ROM ore project in a relatively short timeframe, providing early cash flow and enabling the Company to meet its commitments under the Shandong Ruifu Offtake Agreement (see ASX Announcement dated 10 November 2016), or any other customer pursuing ROM ore deliveries.

The parties intend to negotiate a formal binding Infrastructure Services Agreement upon both being satisfied that there are no restrictions on using the Port Headland Port Facilities for the ROM ore operation and subject to the Offtake Agreement with Shandong Ruifu becoming unconditional and binding. The Offtake Agreement still remains subject to satisfaction of certain conditions precedent, including regulatory approvals in Australia and China, Pilbara securing appropriate access to port facilities and a final investment decision being made by Pilbara for the development of the ROM ore mining operation.

The final agreed terms of the Infrastructure Services Agreement would be subject to Board approval from both Pilbara and Atlas.

BOARD APPOINTMENT

During the Quarter, respected mining executive and past Director of Operations with Fortescue Metals Group (FMG), Mr Nick Cernotta, joined the Board of Pilbara as an independent Non-Executive Director. Mr Cernotta's appointment will complement the Board's existing skills and experience as the Company advances towards its objective of becoming a significant new low-cost global lithium producer.

PROJECT FUNDING

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

The Company is hopeful of securing the remaining project funding required to complete the development of the Pilgangoora Project by the end of May.

CASH BALANCE

The Company had a cash balance of \$65.5M as at 31 March 2017 (\$80.4M as at 31 December 2016). Major items of expenditure during the Quarter included \$13.1M on the development of the Pilgangoora Project and \$1.8M 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 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 STATEMENT

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 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.

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
ACTIVE TENEMENTS and APPLICATION AT COMMENCEMENT OF THE QUARTER					
E45/2241	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
E45/3560	Pinnacle	Granted	PILBARA MINERALS LTD	100%	100%
E45/3648	Pilgangoora	Granted	DAKOTA MINERALS LIMITED	100%	100%
E45/4523	Pilgangoora	Granted	DAKOTA MINERALS LIMITED	100%	100%
E45/4624	Pilgangoora	Application	SLIPSTREAM RESOURCES INVESTMENTS PTY LTD	100%	100%
E45/4633	Pilgangoora	Application	SLIPSTREAM RESOURCES INVESTMENTS PTY LTD	100%	100%
E45/4640	Pilgangoora	Application	SLIPSTREAM RESOURCES INVESTMENTS PTY LTD	100%	100%
E45/4648	Pinga	Granted	PILBARA MINERALS LTD	100%	100%
E45/4689	Pilgangoora	Application	DAKOTA MINERALS LIMITED	100%	100%
E47/1813	Pilbara West	Granted	PILBARA MINERALS LTD and FOX RESOURCES LTD	45%	45%
E47/1814	Pilbara West	Granted	PILBARA MINERALS LTD and FOX RESOURCES LTD	45%	45%
E47/1815	Pilbara West	Granted	PILBARA MINERALS LTD and FOX RESOURCES LTD	45%	45%
E47/2261	Pilbara West	Granted	PILBARA MINERALS LTD and FOX RESOURCES LTD	45%	45%
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	Application	PILBARA MINERALS LTD	100%	100%
L45/411	Pilgangoora	Application	PILBARA MINERALS LTD	100%	100%
L45/412	Pilgangoora	Application	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%
M45/1256	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
M45/1259	Pilgangoora DSO	Application	DAKOTA MINERALS LIMITED	100%	100%
M45/333	Pilgangoora	Granted	Pilbara Minerals	100%	100%
M45/511	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
M45/78	Pilgangoora	Granted	PILBARA MINERALS LTD	100%	100%
P 45/2783	Pilgangoora	Granted	DAKOTA MINERALS LIMITED	100%	100%
APPLICATIONS MADE DURING THE QUARTER					
L45/425	Pilgangoora DSO	Application	PILBARA MINERALS LTD	0%	100%
L45/426	Pilgangoora	Application	PILBARA MINERALS LTD	0%	100%
TENEMENTS DISPOSED OF DURING THE QUARTER					
-	-	-	-	-	-
TENEMENTS ACQUIRED DURING THE QUARTER					
E45/4270	Mt Francisco	Granted	ATLAS IRON LTD	0%	100%