

MARCH 2015 QUARTERLY ACTIVITIES REPORT

Substantial upgrade in Pilgangoora lithium-tantalum resource with more growth expected as drilling resumes; Tabba Tabba approvals now in final stages and on track for completion in Q2 2015

TABBA TABBA TANTALUM PROJECT DEVELOPMENT

- ❖ The **Works Approval, Mining Proposal and Mine Closure Plan** are currently under review with the new tailings storage facility design by Coffey Engineering submitted to the Department of Environmental Regulation and the Department of Mines and Petroleum.
- ❖ Pilbara expects all necessary approvals to facilitate the start of production at Tabba Tabba to be in place during May, clearing the way for the start of the Company's first mining operation.

PILGANGOORA LITHIUM-TANTALUM PROJECT

- ❖ **Updated JORC 2012 Mineral Resource completed for the Pilgangoora Tantalum-Lithium Project** in WA's Pilbara region, with this interim upgrade incorporating the results of successful in-fill and extensional RC drilling completed late last year. The updated resource comprises:
 - *Indicated and Inferred Resources of **21.7Mt @ 0.022% Ta₂O₅ (tantalite)** containing **10.7Mlbs Ta₂O₅** and a Lithium Resource of **16.6Mt @ 1.16% Li₂O (spodumene)** containing **192,000 tonnes of lithium oxide.***
- ❖ This represents a **95% increase in total contained Ta₂O₅** with a **significant upgrade of 3.1Mlbs of Ta₂O₅ to the Indicated category and 2.1Mlbs of Ta₂O₅ to the Inferred category** and a **120% increase in total contained lithium oxide.**
- ❖ **More outstanding high-grade results received from in-fill and extensional RC drilling** which resumed at Pilgangoora with **23 holes for 2,184m completed during the Quarter** in the Priority 1, 2 and 3 resource areas. Drilling to resume in Q2 2015 to complete the planned 10,000m program.
- ❖ **Positive initial metallurgical results received from specialist mineral processor Nagrom & Co, suggesting excellent potential recoveries of the tantalum product by simple gravity processing prior to the floatation of a spodumene product.**
- ❖ **A second bulk sample from Pilgangoora** is being prepared for transport to China to a large Chinese mining and downstream lithium processing group.



PROJECT DEVELOPMENT ACTIVITIES

Tabba Tabba Incorporated Joint Venture - Nagrom Mining Pty Ltd (PLS 50%, Nagrom & Co 50%)

Pilbara is currently developing the Tabba Tabba Tantalum deposit, located approximately 75km south-east of Port Hedland in WA's Pilbara region, through a 50% interest in an Incorporated Joint Venture Nagrom Mining Pty Ltd. Tabba Tabba is an advanced, high quality tantalum deposit which will underpin a boutique, low-cost mining and processing operation capable of supplying up to 10% of global annual tantalum consumption and generating robust cash-flows for Pilbara. The tantalum market is boutique in size with around 1,300t required each year. However, it is growing rapidly due to capacitor use in wireless and hand-held devices.

Works Approval

During November and December 2014, queries raised on the approvals documentation for the Tabba Tabba Project by the Departments of Minerals and Energy and the Department Environment Regulation in Western Australia were addressed by our environmental consultants and Nagrom & Co, which is managing the permitting process on behalf of the joint venture.

The Works Approval was placed on hold during January and February, pending the results of short-term test work on additional tailings characterisation work (L.E.A.F tests). This test work has now been successfully completed, clearly demonstrating that the process tailings generated by the Project are benign and represent a low environmental risk.

The **Works Approval, Mining Proposal** and **Mine Closure Plan** are currently under review, with the new tailings storage facility design by Coffey Engineering submitted to the DER and DMP. This new design was requested by the Department of Environment Regulation.

At this stage, the Company still expects all the necessary approvals for the Tabba Tabba Project to be in place to facilitate the commencement of production during May 2015, in line with previous guidance.

EXPLORATION

Pilgangoora Tantalum-Lithium Project (Pilbara 100%)

The Pilgangoora Lithium-Tantalum Project is located about 25km north-east of the world-class Wodgina Tantalum mine, owned by Global Advanced Metals Wodgina Ltd (GAMW) and 82km SSE of Port Hedland in WA's Pilbara region. During the Quarter, Pilbara upgraded the JORC compliant resource for the Pilgangoora lithium-tantalum deposit, and is focused on continuing to grow the Company's high-grade, high-value lithium resources at this potentially company-making project. Demand for lithium is growing rapidly and is being driven by its use in lithium batteries as a power source for a wide range of applications including electric bikes, cars, buses, trucks and taxis.

Resource Update

During the Quarter, Pilbara completed an updated JORC 2012 Mineral Resource for the Pilgangoora Tantalum-Lithium Project incorporating the results of successful in-fill and extensional RC drilling completed late last year.

The updated resource comprises Indicated and Inferred Resources of **21.7Mt @ 0.022% Ta₂O₅ (tantalite)** containing **10.7Mlbs Ta₂O₅** and a Lithium Resource of **16.6Mt @ 1.16% Li₂O** (spodumene) containing **192,000 tonnes of lithium oxide**.

The updated Mineral Resource, which features a 120 per cent increase in contained lithium oxide and 95 per cent increase in contained tantalite, already positions Pilgangoora amongst some of the world’s largest hard-rock lithium-tantalum deposits, with potential to grow further.

The overall resource now comprises **10.7 million pounds of contained tantalum** and **192,000 tonnes of contained lithium**, with the recent successful in-fill drilling upgrading **3.1 million pounds of contained tantalum** and **65,000 tonnes of contained lithium** to the Indicated category.

The estimation was carried out by independent resource consultancy, Trepanier Pty Ltd (“Trepanier”), resulting in the estimation of Inferred and Indicated Resources. The reporting of all domains (capturing material above 0.01% Ta₂O₅) results in an Indicated and Inferred Mineral Resource estimate (Table 1) totalling:

- **21.7 million tonnes @ 0.022% Ta₂O₅ containing 10.7 million lbs of Ta₂O₅**

Within this, there is **16.6 million tonnes @ 1.16% Li₂O** containing **192,000 tonnes of lithium oxide**.

Table 1: Pilgangoora Mineral Resource Estimate

Category		Million Tonnes	Ta ₂ O ₅ (ppm)	Li ₂ O (%)	Ta ₂ O ₅ (T)	Ta ₂ O ₅ (M lbs)	Li ₂ O (T)
Indicated	Ta ₂ O ₅	5.99	235		1,410	3.1	
	Li ₂ O	4.69		1.38			64,800
Inferred	Ta ₂ O ₅	15.71	220		3,450	7.6	
	Li ₂ O	11.93		1.07			127,500
TOTAL	Ta ₂ O ₅	21.71	224		4,860	10.7	
	Li ₂ O	16.62		1.16			192,300

Note: Appropriate rounding applied

If a **lower lithium cut-off of >1%** is used in reporting (Figure 1: Grade v tonnage curves for the total lithium resource), it results in a reduction in tonnage but with a significantly higher grade resource figure, totalling:

- **10.25 million tonnes @1.44% Li₂O containing 192,000 tonnes of lithium oxide**

Reverse Circulation Drilling

The Pilgangoora drilling program on Exploration Licences (EL45/2232 and EL45/333) commenced on 3 November 2014. The main pegmatite field on EL45/2232 has undergone broad-spaced drilling by previous explorers (GAM and Talison) over a strike length of 3.2km.

In March-April 2015, Pilbara completed a further **23 Reverse Circulation (RC) holes for a total of 2,186m**. The drilling to date has in-filled the existing resource zone along the Eastern pegmatite body (in the Priority 1 Area), with assay results received for the first six RC holes in the Priority 1 Area, confirming the continuity and robustness of the high-grade lithium and tantalum mineralisation.

Highlights from the recent drilling include:

- **11m @ 1.58% Li₂O and 210ppm Ta₂O₅ from 22m (PLS036); and 6m @ 1.66% Li₂O and 197ppm Ta₂O₅ from 48m;**
- **9m @ 1.72% Li₂O and 204ppm Ta₂O₅ from 43m (PLS038); and 7m @ 1.41% Li₂O and 221ppm Ta₂O₅ from 64m; and 6m @ 2.21% Li₂O and 315ppm Ta₂O₅ from 82m;**
- **11m @ 1.79% Li₂O and 214ppm Ta₂O₅ from 26m (PLS0126); and 6m @ 1.71% Li₂O and 178ppm Ta₂O₅ from 47m; and 8m @ 2.16% Li₂O and 334ppm Ta₂O₅ from 61m;**
- **9m @ 1.79% Li₂O and 240ppm Ta₂O₅ from 33m (PLS0127); and 7m @ 1.1.83% Li₂O and 231ppm Ta₂O₅ from 70m; and 17m @ 1.84% Li₂O and 266ppm Ta₂O₅ from 85m**

Detailed Results

Pegmatites containing high grades of lithium and tantalum have been intersected along the northern lines 7671500mN to 7671600mN in the Priority 1 Area, with six holes returning significant high-grade intersections **grading more than 1.5% Li₂O and more than 300ppm Ta₂O₅**, including **6m @ 2.21% Li₂O and 315ppm Ta₂O₅** from 82m (PLS038) and **8m @ 2.16% Li₂O and 334ppm Ta₂O₅** from 62m (PLS0126) (see ASX release dated 15th March 2015, and Appendix 1 for assay highlights).

Results are pending from the Priority 2 Area, which had previously been drilled on line spacings of 50m, often with only one drill hole per section.

Thirteen historical holes were drilled along this pegmatite, but only one drill hole in this area had been assayed for lithium, **returning lithium grades in excess of 1% Li₂O**.

Priority 2 Drilling has intersected significant widths of pegmatite in this program.

A single line of drilling has been completed in the Priority 3 exploration area, with all four holes on 766990mN intersecting pegmatite some 500m south of the Priority 2 Area. This zone will require in-fill drilling as part of the next phase of work (see Figure 1 below).

Metallurgy

In light of the success of the Company's ongoing drilling programs at Pilgangoora and unsolicited interest received from a large Chinese mining and downstream processing group which has requested a bulk sample of Pilgangoora material, Pilbara has prepared several bulk samples for metallurgical testwork and for transport to China for review by the interested party.

Three bulka bags (total weight 3482kg) of RC drill chips have been collected transported from Port Hedland to Nagrom for homogenisation and assay and a 1000kg bulk sample is being prepared for transport to China.



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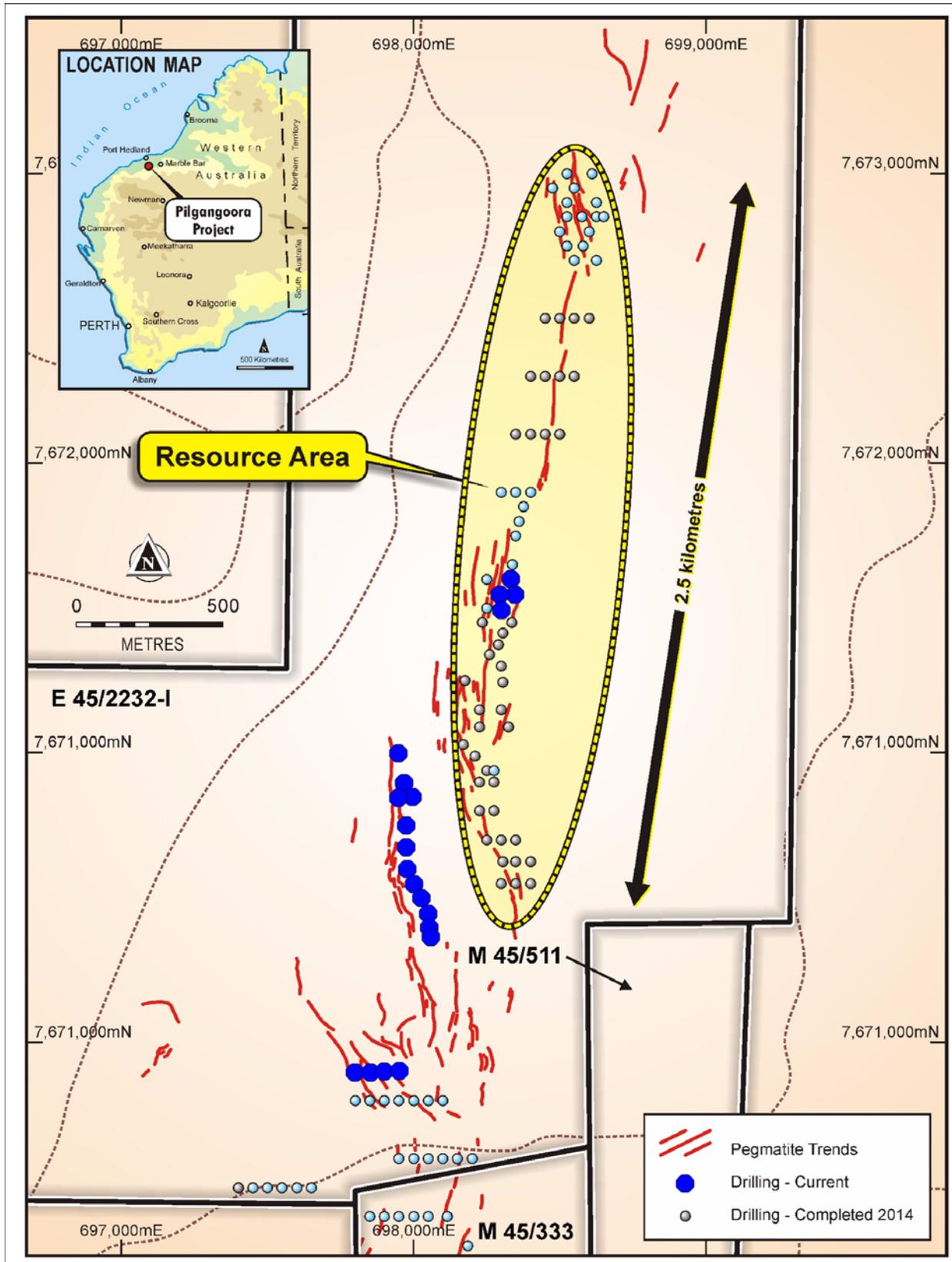


Figure 1 – Pilgangoora RC Collar Locations EL45/2232

ANZAPLAN Testwork

ANZAPLAN is a specialist in the high purity industrial and strategic minerals and metals businesses, providing a multitude of services, such as materials testing and analysis, industry expertise and market intelligence, basic and advanced engineering services. For further information see www.anzaplan.com.

Pilbara has commissioned some initial testwork at ANZAPLAN focusing on simple flotation and magnetic separation of Pilgangoora material to produce spodumene concentrate from a 100kg bulk sample. This composite sample was created from several drill-holes from the Priority 1 area. The spodumene concentrate will be evaluated with regard to the impurity levels and **potential applications in the glass and ceramic industry.**

A summary of the grades recorded for the 100kg sample are presented below:

SAMPLE	Mass kg	Li ₂ O ppm	SiO ₂ %	Fe ₂ O ₃ %	MnO %	MgO %	Ta ₂ O ₅ ppm	Nb ₂ O ₅ %	ThO ₂ ppm	U ₃ O ₈ ppm
PLS Composite	261.0	23650	74.599	0.696	0.189	0.012	280.0	0.009	6.0	5.5

Nagrom Testwork

Testwork is also currently underway at Nagrom, specialist Mineral Processors, on a 150kg sample of the same bulk material supplied to Anzaplan. The proposed test work will include **tantalum recovery plus lithium**, and is designed to establish a suitable flow sheet for the recovery of both tantalum and lithium (Spodumene).

The test flow sheet investigates primary gangue removal via gravity separation (using wet tables) and re-grind of the Middlings stream to liberate locked tantalum. The Rougher and Scavenger Concentrates are then further cleaned via gravity separation (wet tables) to produce a high-grade tantalum concentrate and a lithium concentrate (two product streams).

Preliminary results to date indicate that a primary tantalum concentrate can be produced via a simple gravity flow-sheet. The primary lithium concentrate will be subject to flotation and magnetic separation to produce a clean spodumene product.

Primary rougher wet tables returned excellent results on the -0.212+0.075mm fraction, indicating that ~89% of the Ta₂O₅ can be recovered to ~1.5% of the mass in this stream, while rejecting ~99% of the SiO₂. Work is ongoing.



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Table 2 – Primary Rougher Wet Table results

PLS Comp P100 1mm -0.212+0.075mm Wilfley Wet Table							
PRODUCT Wet Table	Yield %	Li2O		SiO2		Ta2O5	
		ppm	dist.	%	dist.	%	dist.
Cut 1	1.55%	60980	4.49%	61.53	1.23%	1.514	88.96%
Cut 2	8.71%	48410	20.04%	71.73	8.07%	0.016	5.29%
Cut 3	12.35%	35090	20.60%	75.86	12.09%	0.004	1.88%
Cut 4	18.70%	25930	23.04%	78.02	18.83%	0.001	0.71%
Cut 5	21.11%	15500	15.55%	80.19	21.85%	0.001	0.80%
Cut 6	27.36%	8850	11.51%	80.44	28.40%	0.001	1.04%
Cut 7	7.83%	8790	3.27%	73.71	7.45%	0.003	0.89%
Cut 8	0.59%	9900	0.28%	65.14	0.50%	0.004	0.09%
Slimes	1.80%	14310	1.22%	68.34	1.59%	0.005	0.34%
Calculated Head	100.00%	21042	100.00%	77.48	100.00%	0.026	100.00%

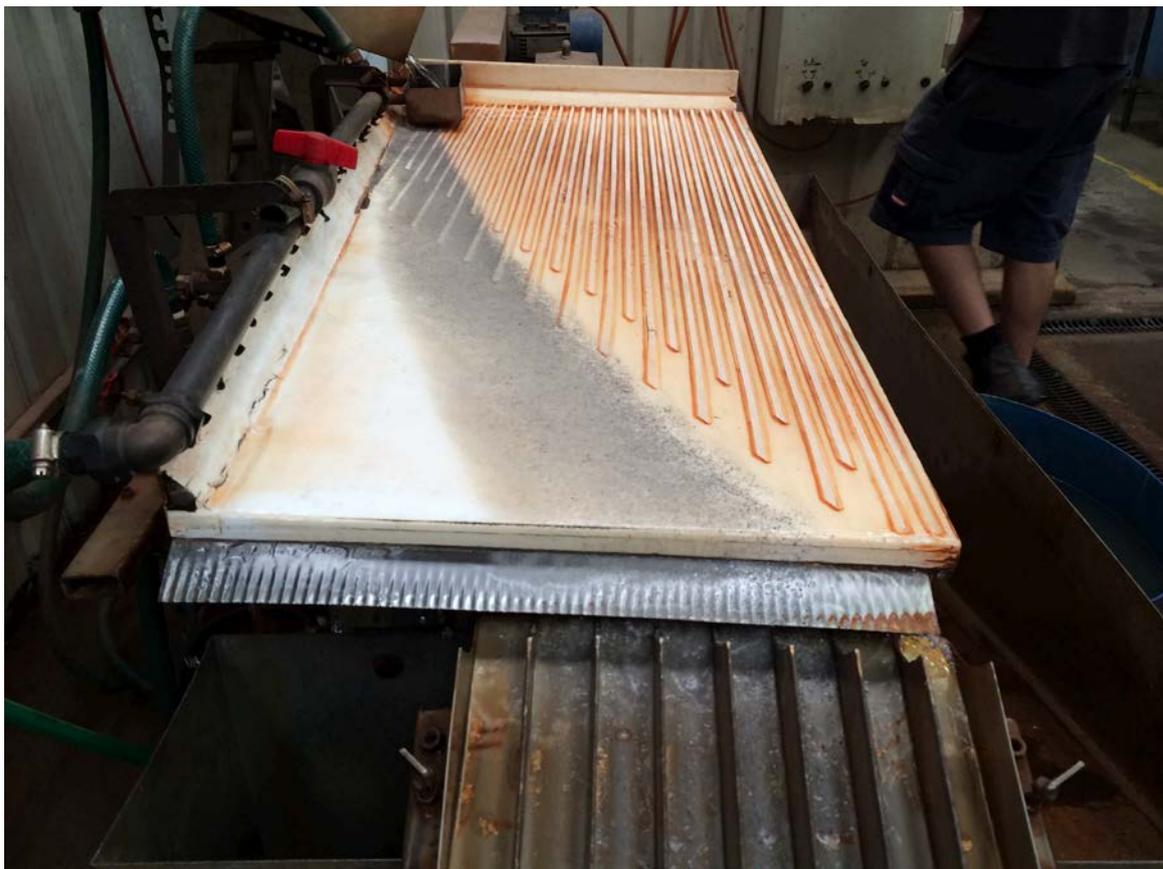


Figure 2 – PLS Comp P100 1mm -0.212+0.075mm Ta₂O₅ recovery on the Wilfley Wet Table

WEST PILBARA JV (PLS 60%, FXR 40% FARMING-IN)

See Fox Resources Limited Quarterly Report (ASX: FXR) for work completed in the Quarter.

CORPORATE

Cash Balance

The Company had a cash balance of \$1,276,000 as at 31 March, 2015.

No new securities were issued during the quarter.

LISTING RULE 5.3.3 INFORMATION

Project	Location	Tenements	Beneficial Interest	Notes	Change in the Quarter
Pilgangoora	Western Australia	E45/2232	100%		None
Pilgangoora	Western Australia	E45/2241	100%		None
Pilgangoora	Western Australia	M45/511	100%		None
Pilgangoora	Western Australia	M45/78	100%		None
Pilgangoora	Western Australia	M45/333	100%		None
Pinnacle Hill	Western Australia	E45/3560	100%		None
Fox Resources JV	Western Australia	E47/1093	45%	JV	None
Fox Resources JV	Western Australia	E47/1094	45%	JV	None
Fox Resources JV	Western Australia	E47/1813	45%	JV	None
Fox Resources JV	Western Australia	E47/1814	45%	JV	None
Fox Resources JV	Western Australia	E47/1815	45%	JV	None
Fox Resources JV	Western Australia	E47/2261	45%	JV	None



Competent Person's Statement

The company confirms it is not aware of any new information or data that materially affects the information included in the January 19th, 2015 Tabba Tabba 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 updated resource announcement made on 19th January.

The company confirms it is not aware of any new information or data that materially affects the information included in the March 9th, 2014 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 maiden resource announcement made on 9th March.

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 Young (Executive and Chief Geologist of Pilbara Minerals Limited). Mr Young is a shareholder of Pilbara Minerals. Mr Young is a member of the Australasian Institute of Mining and Metallurgy 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 Young consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.



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Appendix 1

Total Drilling Completed 3/04/2015

Hole ID	North GDA94	East GDA94	RL	Dip	AZ	Depth
PLS036	7671600	698327	194	-60	270	94
PLS127	7671600	698327	194	-90	0	110
PLS038	7671547	698351	200	-60	270	100
PLS039	7671549	698294	195	-60	270	60
PLS040	7671499	698299	200	-60	270	100
PLS126	7671499	698299	200	-90	0	100
PLS065	7671002	697954	188	-60	270	100
PLS066	7670900	697971	201	-60	270	100
PLS067	7670849	697952	197	-60	270	70
PLS068	7670852	697999	197	-60	270	100
PLS069	7670750	697976	199	-60	270	100
PLS070	7670677	697976	210	-60	270	100
PLS071	7670600	697959	222	-60	270	100
PLS072	7670548	698002	224	-60	270	76
PLS073	7670500	698050	224	-60	270	101
PLS073A	7670497	698002	228	-60	270	80
PLS074	7670450	698049	224	-60	270	73
PLS075	7670401	698051	215	-60	270	100
PLS076	7670363	698060	210	-60	270	120
PLS077	7669901	697804	184	-60	270	100
PLS078	7669901	697847	185	-60	270	100
PLS079	7669898	697900	185	-60	270	100
PLS080	7669897	697948	185	-60	270	100
					TOTAL	2184

Table1: Drilling Intersections 2015 (>1% Li₂O)

Hole Id	From (m)	To (m)	Thickness (m)	Li ₂ O (%)	Ta ₂ O ₅ (ppm)
PLS036	22	33	11	1.58	210
	48	54	6	1.66	197
	84	88	4	1.62	393
PLS038	43	52	9	1.72	204
	64	71	7	1.41	221
	82	88	6	2.21	315
PLS039	1	3	2	1.19	565
	12	13	1	2.26	160
	26	31	5	1.28	208
PLS040	16	18	2	1.32	190
	27	29	2	1.17	225
	36	42	6	1.85	187
	83	85	2	1.50	490
PLS0126	88	94	6	1.49	225
	26	37	11	1.79	214
	47	53	6	1.71	178
	61	69	8	2.16	334
PLS0127	84	85	1	1.93	530
	33	42	9	1.79	240
	70	77	7	1.83	231
	85	102	17	1.84	266

Table 2: Drilling Intersections (>100ppm Ta₂O₅)

Hole Id	From (m)	To (m)	Thickness (m)	Ta ₂ O ₅	Li ₂ O (%)
PLS036	10	13	3	137	0.19
	15	17	2	205	0.45
	20	23	3	227	0.80
	45	55	10	194	1.09
	64	67	3	170	0.29
PLS038	82	89	7	331	1.26
	43	52	9	204	1.72
	63	73	10	219	1.10
	80	96	16	280	1.21
PLS039	0	4	4	405	0.83
	12	15	3	173	1.16
	25	34	9	256	0.81
	43	44	1	110	0.47
PLS040	50	52	2	110	0.54
	15	22	7	163	0.80
	27	29	2	225	1.17
	36	46	10	187	1.36
	76	78	2	570	0.10
	83	95	12	407	1.13
PLS0126	25	37	12	208	1.71
	48	57	9	173	1.51
	61	73	12	279	1.69
	82	85	3	250	0.77
PLS0127	33	44	11	244	1.50
	70	80	10	222	1.38
	85	104	19	249	1.71

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Pilbara Minerals Limited (PLS) have completed to 23 drill hole RC program totalling 2184m
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> 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).
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Drilling was completed by an track mounted Schramm T450 with an automated rod-handler system and on-board compressor rated to 1,350cfm/800psi. Drilling used a reverse circulation face sampling hammer. The sampling system consisted of a rig mounted cyclone with cone splitter

Criteria	JORC Code explanation	Commentary
		and dust suppression system.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<ul style="list-style-type: none"> Sample recovery was recorded as good for RC holes.
	<ul style="list-style-type: none"> Measures taken to maximise sample recovery and ensure representative nature of the samples. 	<ul style="list-style-type: none"> Whilst drilling through the pegmatite, rods were flushed with air after each 6 metre interval.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Samples were dry and recoveries are noted as “good.”
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 hard copy logging sheets and later transferred an Excel spreadsheet. The rock-chip trays are to be stored in PLS Perth office..
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	<ul style="list-style-type: none"> Logging has primarily been quantitative.
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> The database contains lithological data for all holes in the database.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p>	<ul style="list-style-type: none"> RC samples were generally dry and split at the rig using a cyclone splitter, which is appropriate and industry standard.
	<ul style="list-style-type: none"> Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	<ul style="list-style-type: none"> PLS samples have field duplicates, field standards and blanks as well as laboratory splits and repeats.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Field duplicates were taken approximately every 20m, and standards and blanks every 50 samples.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	<ul style="list-style-type: none"> PLS samples were assayed at NAGROM Pty Ltd 's Laboratory in Perth WA, for a 18 element suite using XRF on fused beads, and total acid digestion with an ICP finish.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No geophysical tools were used to determine any element concentrations used in this resource estimate.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	<ul style="list-style-type: none"> Infill drilling completed by PLS in this program has confirmed the approximate width and grade of historical drilling. No use of twins
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	<ul style="list-style-type: none"> An electronic database containing collars, surveys, assays and geology is maintained by Trepanier Pty Ltd, an Independent Geological consultancy.
	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Li was converted to Li₂O for the purpose of reporting. The conversion used was Li₂O = Li x 1.6
Location of	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations 	<ul style="list-style-type: none"> PLS holes were surveyed using DGPS in GDA94, Zone 50. Down hole surveying of drill holes was conducted using a Reflex EZ-shot,

Criteria	JORC Code explanation	Commentary
data points	<i>used in Mineral Resource estimation.</i>	<p>electronic single shot camera to determine the true dip and azimuth of each hole.</p> <ul style="list-style-type: none"> 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).
	<ul style="list-style-type: none"> <i>Specification of the grid system used.</i> 	<ul style="list-style-type: none"> The grid used was MGA (GDA94, Zone 50)
	<ul style="list-style-type: none"> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> The topographic surface used was supplied by GAM
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> Drilling spacings varied between 50m to 200m apart
	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> No compositing
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> 	<ul style="list-style-type: none"> The mineralisation dips approximately 45-60 degrees at a dip direction of 090 degrees The drilling orientation and the intersection angles are deemed appropriate.
	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> No orientation-based sampling bias has been identified.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Chain of custody for PLS holes were managed by PLS personnel.

Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> PLS owns 100% of tenement E45/2232
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No known impediments.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Talison completed RC holes in 2008 GAM completed RC holes between 2010 and 2012.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. If the exclusion of this information is justified on the basis that the 	<ul style="list-style-type: none"> Refer to Appendix 1 this announcement.

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	
<p>Data aggregation methods</p>	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • Length weighed averages used for exploration results reported in Table 1 and 2. Cutting of high grades was not applied in the reporting of intercepts in Table 1 and 2 • No metal equivalent values are used.
<p>Relationship between mineralisation widths and intercept lengths</p>	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>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’).</i> 	<ul style="list-style-type: none"> • Downhole lengths are reported in Table 1 and 2
<p>Diagrams</p>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • See Figures 1
<p>Balanced reporting</p>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Comprehensive reporting of drill details has been provided in Appendix 1 of this announcement.
<p>Other substantive exploration data</p>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Bulk sampling has been completed by PLS personnel with collection of 3482kg of RC drill chips. • Preliminary Metallurgical results from Nagrom have been reported and testwork is on-going. Initial work reported involves establishing the recovery of Ta₂O₅ by simple crushing, grinding and wet tabling and of three size fractions to produce concentrates, various concentrates will be

Criteria	JORC Code explanation	Commentary
		<p>reground and wet tabled to produce final concentrates.</p> <ul style="list-style-type: none"> All meaningful & material exploration data has been reported.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> The aim is to upgrade the existing JORC compliant resource calculation.

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

Pilbara Minerals Limited

ABN

95 112 425 788

Quarter ended ("current quarter")

31 March 2015

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (9 months) \$A'000
1.1 Receipts from product sales and related debtors	-	
1.2 Payments for (a) exploration and evaluation	(105)	(832)
(b) development	-	-
(c) production	-	-
(d) administration	(125)	(916)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	10	42
1.5 Interest and other costs of finance paid	-	-
0 Income taxes paid	-	-
1.7 Other	7	22
Net Operating Cash Flows	(213)	(1,684)
Cash flows related to investing activities		
1.8 Payment for purchases of: (a)prospects	-	-
(b) plant and equipment	(12)	(86)
(c) other investments	-	-
1.9 Proceeds from sale of: (a)prospects	-	-
(b)equity investments	-	-
(c)other fixed assets	-	-
1.10 Loans to Nagrom Mining Pty Ltd joint venture	(671)	(1,266)
1.11 Loans repaid by other entities	-	-
1.12 Other		
- payments on behalf of Nagrom Mining Pty Ltd joint venture	(64)	(363)
- payments for security deposits	-	(5)
Net investing cash flows	(747)	(1,720)
1.13 Total operating and investing cash flows (carried forward)	(960)	(3,404)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(960)	(3,404)
Cash flows related to financing activities			
1.14	Proceeds from issues of shares (net of capital raising costs).	-	3,584
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Proceeds from oversubscription of shares	-	1
Net financing cash flows		-	3,585
Net increase (decrease) in cash held		(960)	181
1.20	Cash at beginning of quarter/year to date	2,236	1,095
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	1,276	1,276

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	94
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities	-	-
3.2	Credit standby arrangements	-	-

+ See chapter 19 for defined terms.

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	190
4.2 Development	200
4.3 Administration	200
Total	590

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	1,276	2,236
5.2 Deposits at call	-	-
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	1,276	2,236

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed			
6.2	Interests in mining tenements acquired or increased			

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference +securities <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 +Ordinary securities	617,587,590	617,587,590	Fully paid	Fully paid
7.4 Changes during quarter (7) Increases through issues (b) Decreases through returns of capital, buy-backs				
7.5 +Convertible debt securities <i>(description)</i>			<i>Issue Price Per Security</i>	<i>Maturity Date</i>
	173,600	-	\$1.00	25/09/2015
	876,400	-	\$1.00	30/11/2015
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 Options <i>(description and conversion factor)</i>	39,166,659	-	<i>Exercise price</i> \$0.03	<i>Expiry date</i> 25/03/2017
7.8 Issued during quarter	-			
7.9 Exercised during quarter				
7.10 Expired during quarter				
7.11 Debentures <i>(totals only)</i>				
7.12 Unsecured notes <i>(totals only)</i>				

+ See chapter 19 for defined terms.

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.



Sign here: .
Company Secretary
Print name: Alan Boys

Date: 24 April 2015

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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