ASX/Media Announcement **Tuesday 29 May 2018**

PILGANGOORA KEEPS GROWING WITH 36% JUMP IN MINERAL RESOURCE TO 213Mt AT 1.32% LITHIA ON EVE OF START-UP

Increased tonnage, higher lithia grade and 35% increase in Measured and Indicated Resource reinforce Pilgangoora's status as one of the world's premier lithium growth projects

HIGHLIGHTS

- **Further substantial increase in both tonnage and grade to the JORC 2012 Mineral Resource** for Pilbara's 100%-owned Pilgangoora Tantalum-Lithium Project in WA, including:
  - **36% increase** in the total Measured, Indicated and Inferred Resource to **213 million tonnes grading 1.32% Li_2O (spodumene) and 116ppm Ta_2O_5 and 0.69% Fe_2O_3**, containing **2.82 million tonnes of lithium oxide and 54.6 million pounds of Ta_2O_5**;
  - **35% increase** in the total Measured and Indicated Resource to **129 million tonnes grading 1.35% Li_2O (spodumene), 123ppm Ta_2O_5 and 0.61% Fe_2O_3**, containing **1.75 million tonnes of lithium oxide and 35.1 million pounds of Ta_2O_5**; and
  - with an increased cut-off grade of **1% Li_2O**, the total Measured, Indicated and Inferred Lithium Resource amounts to **160.8 million tonnes @ 1.50% Li_2O containing 2.4Mt of lithium oxide**, highlighting the exceptional nature of the resource before tantalum by-product credits**.**
- The new Mineral Resource will underpin a new Ore Reserve for Pilgangoora, scheduled for completion during the September Quarter 2018.
- The upgraded Mineral Resource includes the results of all exploration drilling campaigns from January 2017 through to April 2018. Since acquiring Pilgangoora, Pilbara Minerals has completed 145,189m of Reverse Circulation drilling and 6,843m of diamond drilling at the deposit.
- Despite the impressive nature of this Mineral Resource upgrade, the Pilgangoora Resource remains open in several areas, with **outstanding potential for further growth** with ongoing drilling.

OVERVIEW AND MANAGEMENT COMMENT

Australian lithium developer Pilbara Minerals Ltd (ASX: PLS) ("Pilbara", "Pilbara Minerals", or "the Company") is pleased to announce a further increase in the Mineral Resource at its flagship 100%-owned Pilgangoora Lithium-Tantalum Project in WA's Pilbara region to 213 million tonnes, reinforcing its position as one of the world's premier lithium development and growth projects.

The updated Mineral Resource, which represents a 36% increase in total resource tonnage compared with the resource upgrade announced on 25 January 2017, now comprises a total of 213 million tonnes grading 1.32% Li_2O (spodumene) and 116 ppm Ta_2O_5, containing 2.82 million tonnes of lithium oxide and 54.6 million pounds of Ta_2O_5.

The new resource estimate provides further support to an already compelling business case for the construction and development of the Stage 2, 5Mtpa expansion which is targeted to begin shortly after the commencement of first concentrate and the initial ramp-up of spodumene concentrate production from the Stage 1, 2Mtpa operation.

Pilbara Minerals' Managing Director and CEO, Ken Brinsden, said the latest increase in what was already a significant resource inventory highlighted the outstanding nature of the deposit and the significance of Pilgangoora as a major new long-life source of lithium raw materials for global markets.

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"Another big jump in resource tonnes, a massive uplift in the Measured and Indicated Resource categories and a higher overall lithia grade are the key features of this latest Resource upgrade," he said. *"This reinforces the outstanding credentials of Pilgangoora – which is, by any measure, one of the most important lithium and tantalum resources globally.*

"With the project now just weeks away from the start of Stage 1 production, we could not be better placed to take full advantage of burgeoning demand for lithium raw materials – which keeps surprising to the upside. Our focus is now very much on the upcoming commissioning and ramp-up activities, which will ensure that the Company can make the all-important transition from developer to a globally significant new strategic metals supplier over the coming months.

"With well over 150,000m of RC and diamond drilling completed on the project, Pilgangoora clearly has a sufficiently large resource inventory to underpin a world-class, expandable, low-cost mining operation for decades to come. I would like to take this opportunity to congratulate the Pilbara Minerals team for their hard work and dedication as they continue to deliver amazing results across the board."

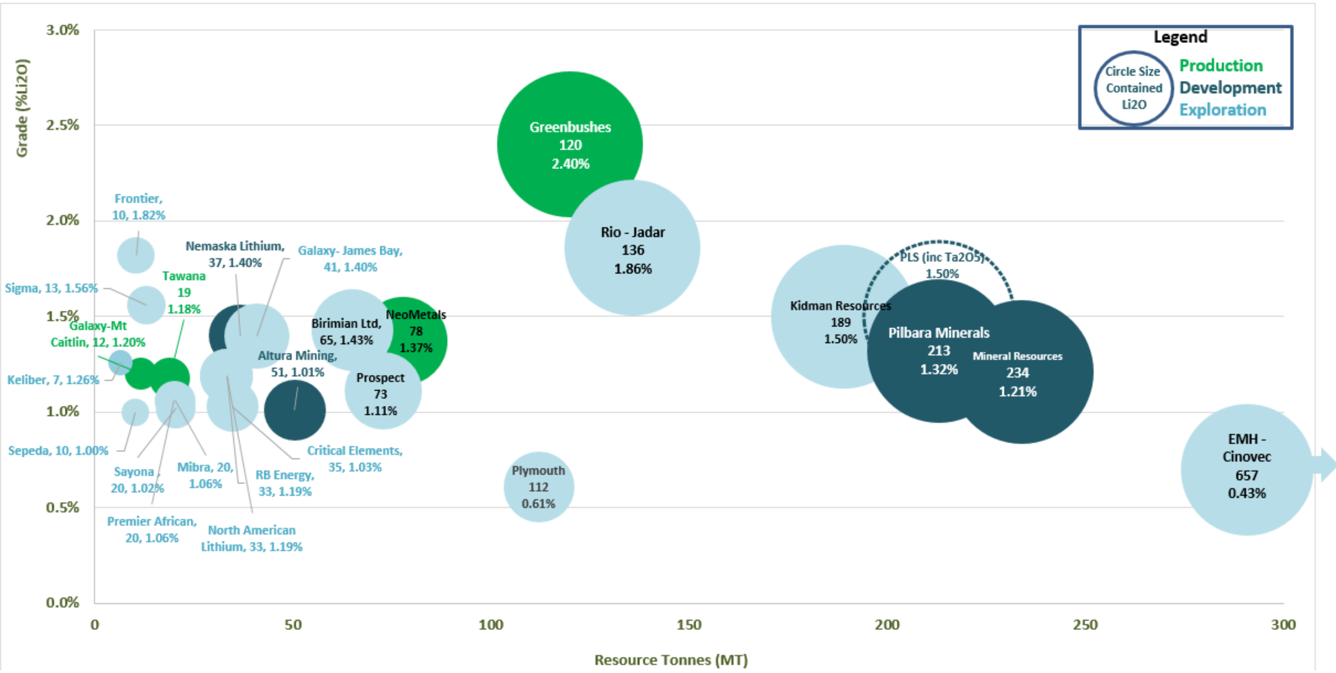

Figure 1 – Pilgangoora – A globally significant hard rock resource

Note: Tantalum adjusted resource size at Pilgangoora includes consideration of the spodumene equivalent revenue of tantalum by-product recovered and attributable to Pilbara Minerals over the LOM. Sources: Published resource estimates by project owners. Note that resources estimates for projects other than Pilgangoora may have been prepared under different estimation and reporting regimes and may not be directly comparable. Pilbara has not verified, and accepts no responsibility for, the accuracy of resources estimates other than its own. Readers should use appropriate caution in relying on this information.

2012 JORC RESOURCE ESTIMATION

The updated 2012 JORC compliant Mineral Resource for the Project incorporates all historical data, as well as all drilling data acquired through a number of exploration campaigns completed by Pilbara from 2014 to April 2018. Pilbara has clearly demonstrated that Pilgangoora is a globally significant hard-rock lithium-tantalum deposit.

The estimation was carried out by independent resource consultancy, Trepanier Pty Ltd, resulting in the estimation of Measured, Indicated and Inferred Resources. The reporting of all domains (using a cut-off of 0.5% Li_2O) results in a Measured, Indicated and Inferred Mineral Resource estimate (**Table 1**) totalling:

- **213.3 million tonnes @ 1.32 % Li_2O, containing 2.82 million tonnes of Li_2O**

Table 1 – Pilgangoora Project – Mineral Resource Estimate (using 0.5% Li_2O cut-off)

Category	Mt	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O (T)	Ta_2O_5 (M lb)
Measured	22.1	1.41	146	311,000	7.1
Indicated	107.0	1.34	119	1,435,000	28.0
Inferred	84.2	1.27	105	1,071,000	19.4
TOTAL	**213.3**	**1.32**	**116**	**2,818,000**	**54.6**

The envelope was wire-framed using both geological logging information (in particular logging of zoning within the pegmatite) and assay data for Li_2O, Ta_2O_5 and Fe_2O_3. **Table 2** below illustrates the breakdown of the resource by area, and **Figure 4** below shows a typical cross section through the northern end of the Central Pit showing the typical distribution of Measured, Indicated and Inferred categories.

If a lithium cut-off of >1% is used in global resource reporting, this results in a reduction in tonnage but provides a significantly higher grade resource (see **Figure 2**):

- **160.8 million tonnes @ 1.50 Li_2O, containing 2.4 million tonnes of Li_2O.**

Details of the drilling data used for the estimation, site inspection information and the quality control checks completed on the data are documented in **Appendices 1 and 2** (JORC Tables 1 to 3). **Figure 3** below illustrates the distribution of the pegmatites and their domains.

Significant exploration upside remains within the project area, with mineralisation remaining open at depth within the Central pit domain (**Figure 5**) and other potential along strike and down-dip of defined pit areas within the project area. In addition, a number exploration targets outside of the defined resource area have yet to be drilled.

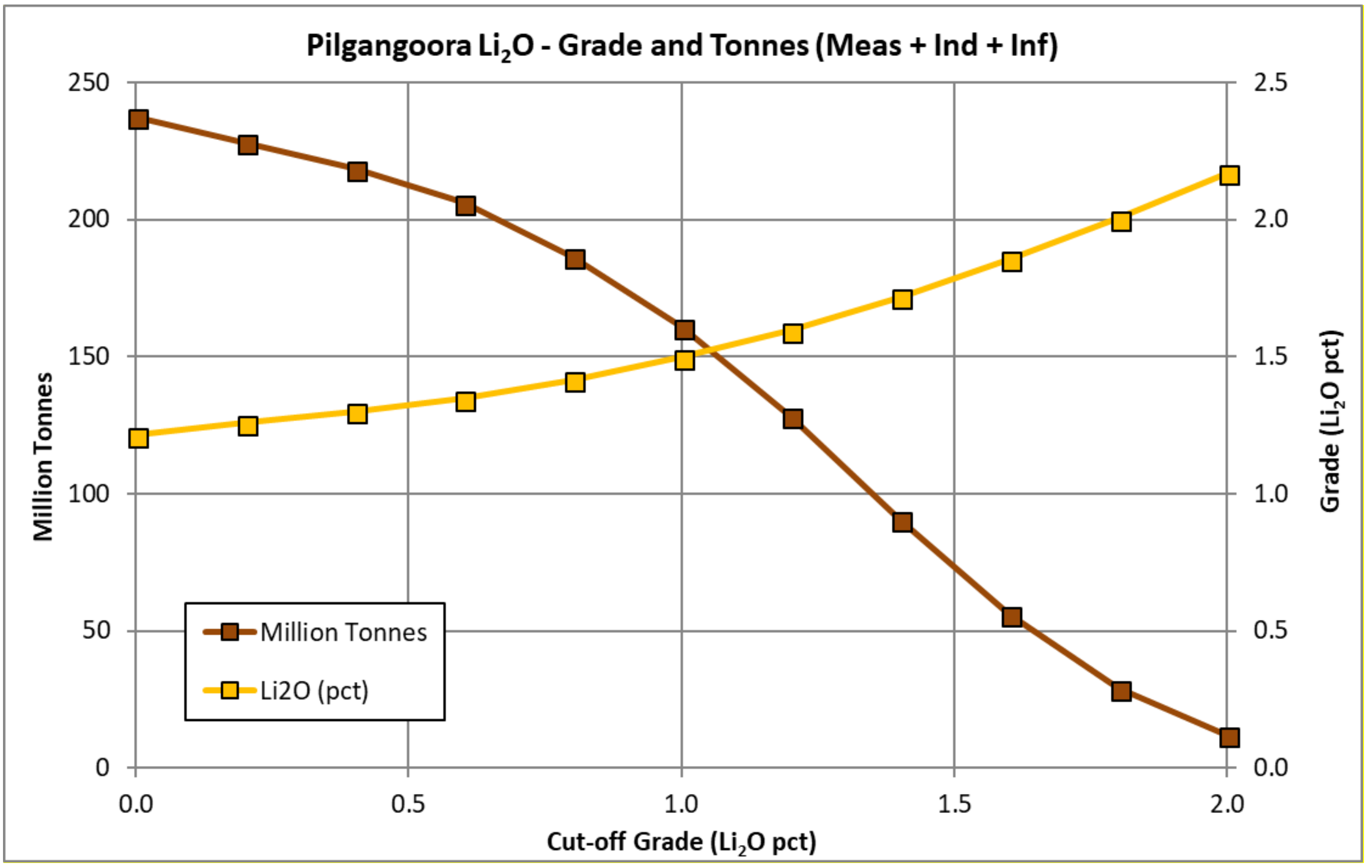

Figure 2 – Grade vs. Tonnage curves for the total lithium resource

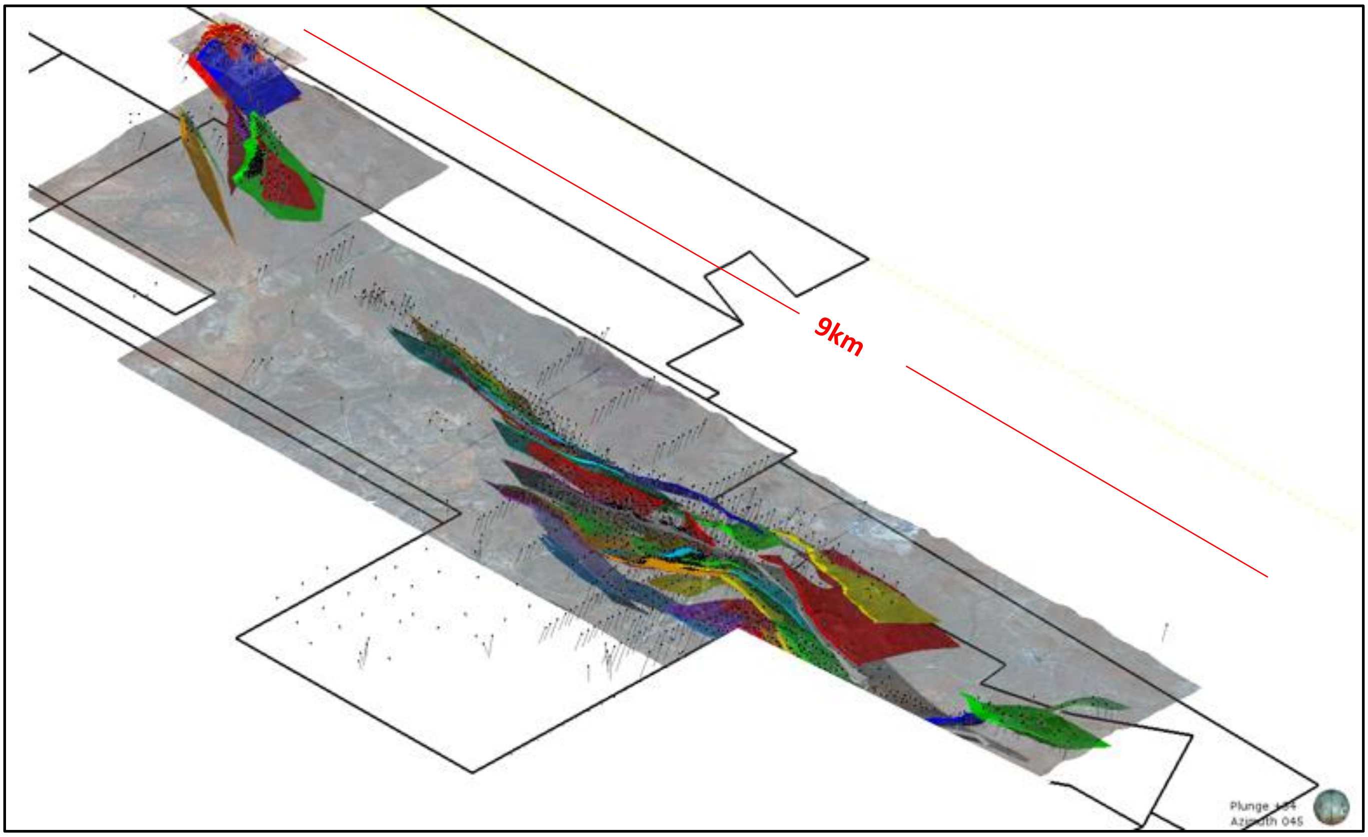

Figure 3 – Oblique View (looking 0450) of the mineralised Domains (Pegmatite veins) as modelled in Leapfrog™

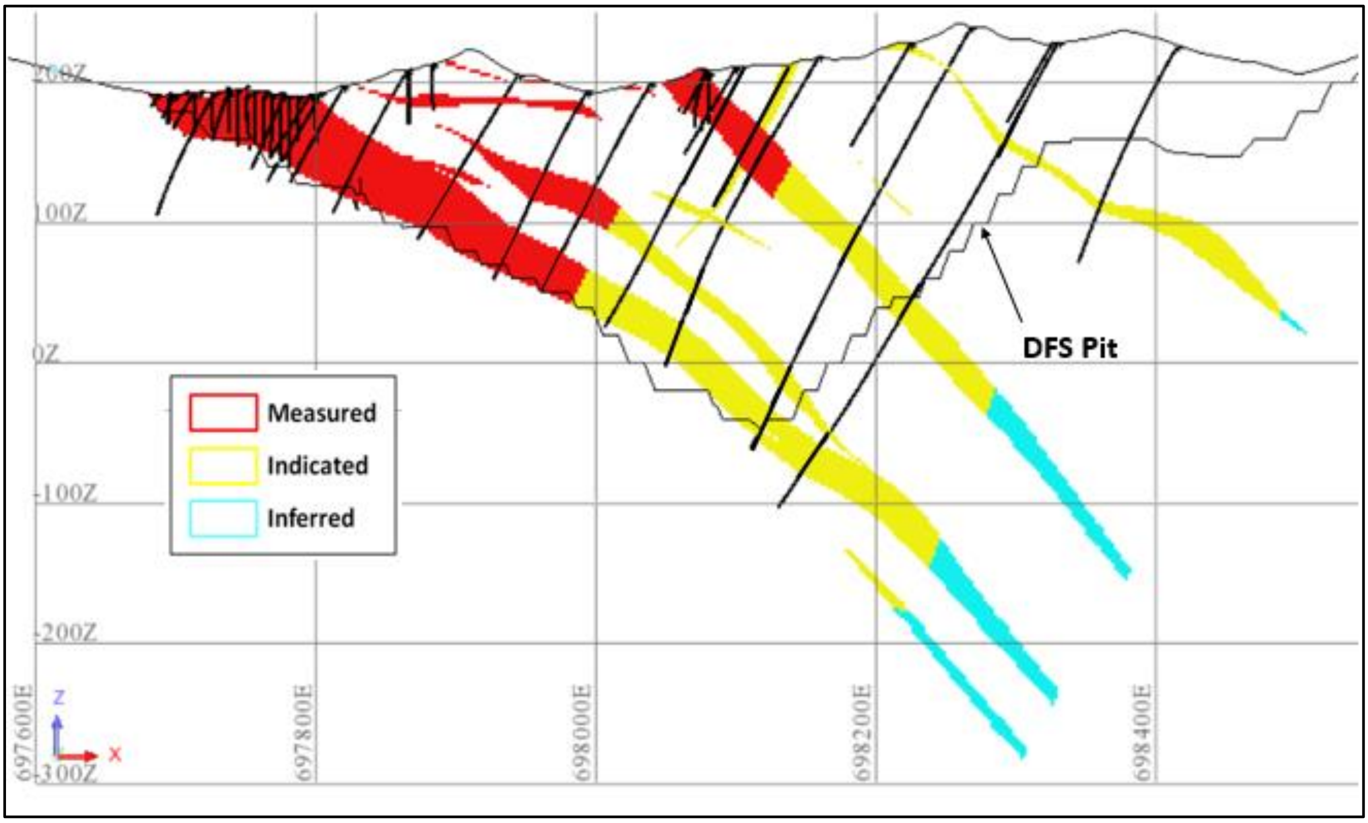

Figure 4 – Cross Section 7670050mN of the Central & Far East pegmatites (DFS pit outline) showing the typical distribution of Measured, Indicated and Inferred categories

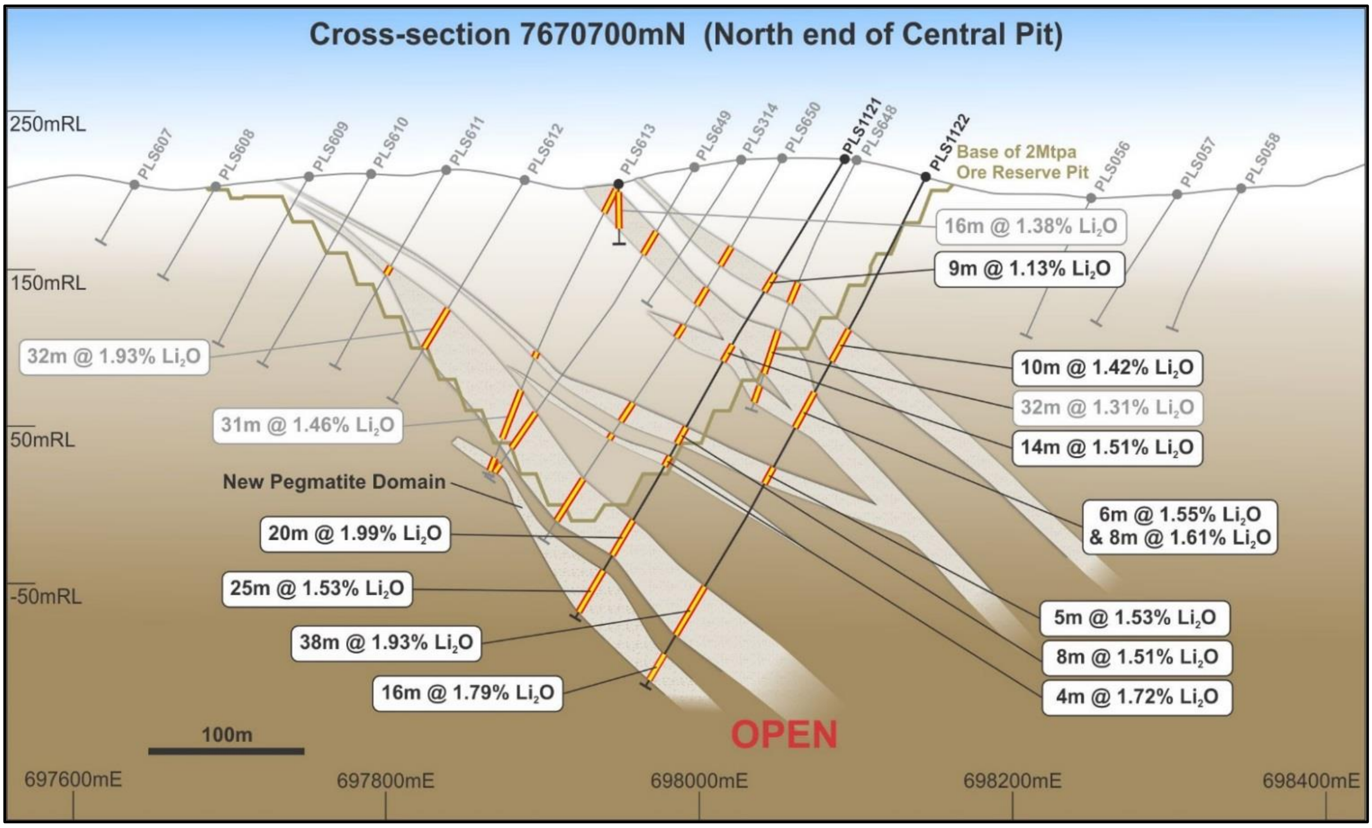

Figure 5 – Cross Section 7670700mN

Table 2 – Pilgangoora Project – Mineral Resource Estimate Breakdown by Area

	Category	Mt	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O (T)	Ta_2O_5 (M lb)
Central	**Measured**	14.7	1.41	114	208,000	3.7
	Indicated	69.2	1.36	108	939,000	16.5
	Inferred	37.5	1.38	83	519,000	6.9
	Combined	121.5	1.37	101	1,666,000	27.1
Eastern	**Measured**	4.7	1.38	247	65,000	2.5
	Indicated	11.2	1.22	245	136,000	6.0
	Inferred	10.4	1.22	260	126,000	5.9
	Combined	26.2	1.25	251	327,000	14.5
Far East	**Measured**				-	-
	Indicated	6.8	1.34	94	91,000	1.4
	Inferred	1.8	1.51	69	27,000	0.3
	Combined	8.6	1.37	89	118,000	1.7
South	**Measured**				-	-
	Indicated	4.6	1.29	62	59,000	0.6
	Inferred	21.4	1.15	66	247,000	3.1
	Combined	26.0	1.17	65	306,000	3.7
South End	**Measured**				-	-
	Indicated	5.1	1.19	73	61,000	0.8
	Inferred	2.9	0.93	68	27,000	0.4
	Combined	8.0	1.10	72	88,000	1.3
West	**Measured**				-	-
	Indicated				-	-
	Inferred	4.9	1.06	126	52,000	1.4
	Combined	4.9	1.06	126	52,000	1.4
Monster	**Measured**	2.7	1.46	141	39,000	0.8
	Indicated	6.1	1.41	138	86,000	1.8
	Inferred	3.9	1.37	134	53,000	1.1
	Combined	12.6	1.41	137	178,000	3.8
Pilgangoora Sub-Total	**Measured**	**22.1**	**1.41**	**146**	**311,000**	**7.1**
	Indicated	**103.0**	**1.33**	**120**	**1,372,000**	**27.2**
	Inferred	**82.8**	**1.27**	**105**	**1,051,000**	**19.1**
	Combined	**207.9**	**1.32**	**117**	**2,734,000**	**53.5**
Lynas Find	**Measured**	-	-	-	-	-
	Indicated	4.0	1.57	89	63,000	0.8
	Inferred	1.3	1.53	106	20,000	0.3
	Combined	5.4	1.56	93	84,000	1.1
TOTAL	**Measured**	**22.1**	**1.41**	**146**	**311,000**	**7.1**
	Indicated	**107.0**	**1.34**	**119**	**1,435,000**	**28.0**
	Inferred	**84.2**	**1.27**	**105**	**1,071,000**	**19.4**
	Combined	**213.3**	**1.32**	**116**	**2,818,000**	**54.6**

Note: Appropriate rounding applied

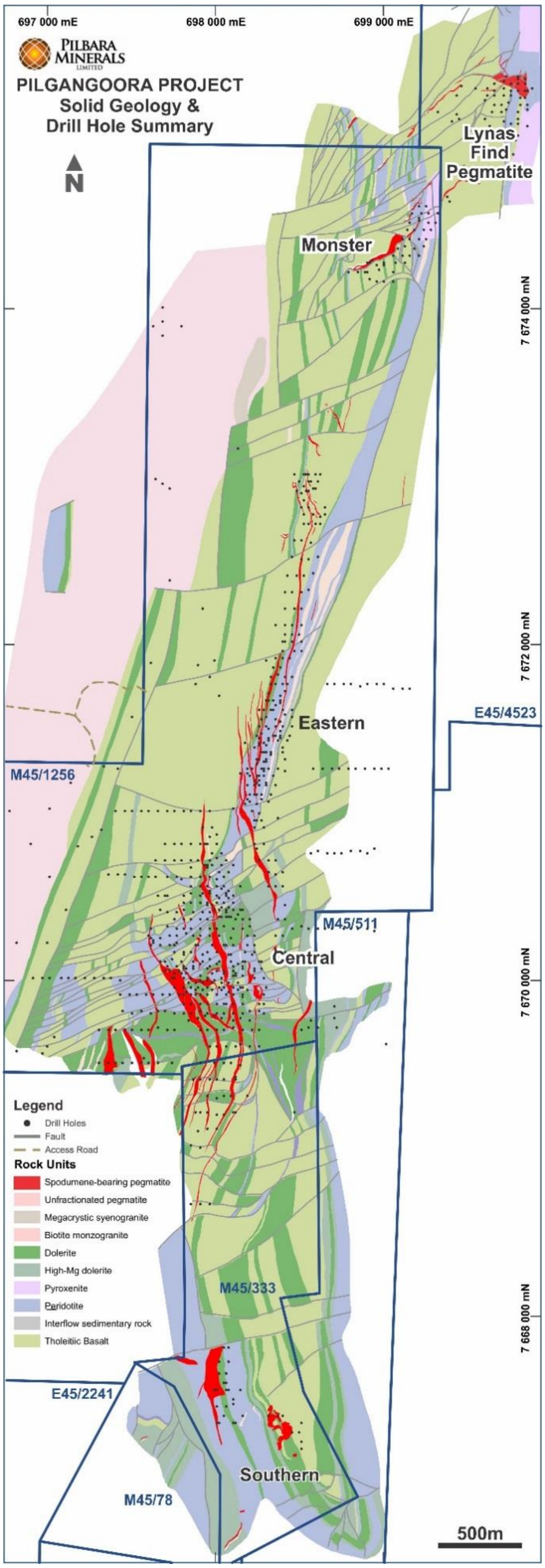

Figure 6 – Solid Geology and Drill Hole Summary

GEOLOGY

The Pilgangoora Lithium-Tantalum deposit is located on the western flank of the East Strelley greenstone belt, in a sequence of highly deformed, fault bounded mafic dominated supracrustal rocks, which protrude into the Carlindi Batholith. Lithologies within the project area are dominantly tholeiitic metabasalts with thin interflow metasedimentary units. The metabasalts may contain abundant fine to coarse grained actinolite, possibly of hydrothermal origin, within the centre of the project area is an intrusive sequence of layered meta-ultramafic sills, with subordinate metamafic units, are up to 500m thick. This ultramafic sequence is comprised of peridotite, pyroxenite and Mg- and Fe-rich varieties of dolerite, with gradational contacts between units.

Recently completed mapping at Pilgangoora has defined four phases of deformation in the project area. The first phase (D1) produced the steeply inclined attitude of the supracrustal rock sequence by the development of a fold and thrust belt. A regional strike slip fault system developed across the greenstone belt in D2, as an interconnected network of layer parallel strike slip faults with discordant cross faults.

This faulting pattern is particularly strongly developed in the vicinity of the Central and Western pegmatite domains. The D3 event is related to the pegmatite emplacement - these breach the D2 structures and have a local preference for exploitation of the Ultramafic rock package.

Three principal pegmatite groups or domains are identified in the centre of the project area – Eastern, Western and Central. Two outlying pegmatite groups, Monster and Southern, are also identified, which have strike lengths of up to 350 and 500 meters respectively. These latter two groups are not discussed further here. Pegmatites of the three principal domains have a strike length of up to 1.4 km, and mostly range in thickness from 1-30 metres, although pegmatites of the Central and Western domains may be up to 70 m thick.

The distribution of the Pilgangoora pegmatites is shown in **Figure 6**. Drilling has shown that the pegmatites occur as dykes dipping to the east at 20-60° (see **Figures 3 to 7**), striking parallel to sub-parallel to the dominant NNW trending schistose (D3) fabric within the greenstones. Pegmatites of the three principal pegmatite groups typically breach D2 faults. The Central and Western pegmatites generally occur within dip-slip (D3) shear zones, and the Eastern pegmatites within strike slip (D3) shear zones.

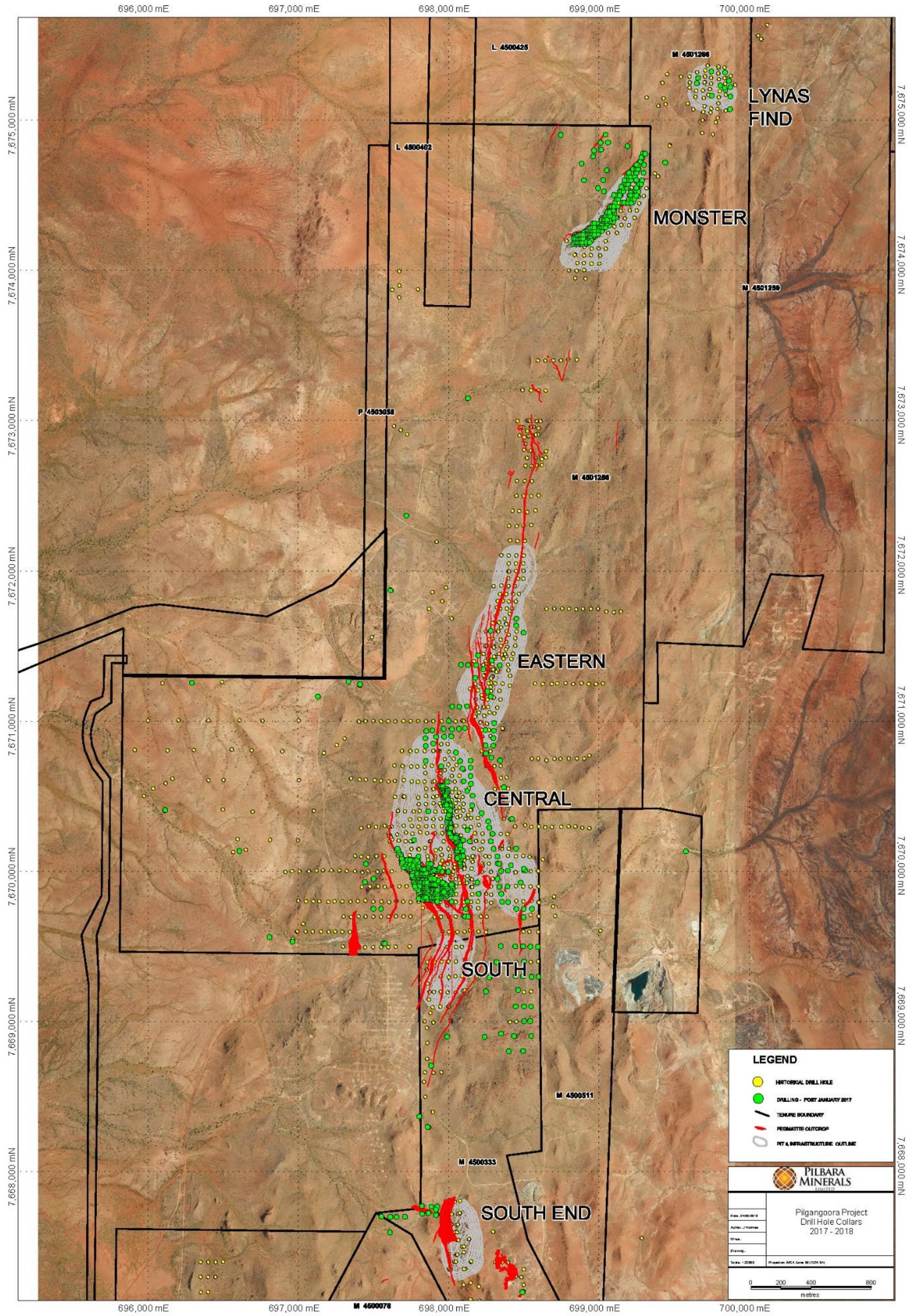

Figure 7 – Pilgangoora RC collar locations within licences M45/1256 and M45/333 showing the 2018 resource drilling

FE_2O_3 WITHIN RESOURCE

In addition to Ta_2O_5 and Li_2O, Pilbara has also estimated the Fe_2O_3 for the resource as a potential deleterious element in the production of spodumene concentrates for the glass and ceramics industry. In May 2015, Pilbara announced (refer ASX announcement dated 25 May 2015) that high-quality spodumene concentrate was successfully produced from a 100kg bulk sample by German industrial minerals specialists ANZAPLAN. Using simple flotation and magnetic separation specifications met that of typical glass-grade spodumene products, which require low iron oxide content, typically in the range of 0.06 – 0.17% Fe_2O_3. Subsequent pilot scale process testwork conducted for both chemical and technical grade products during and after the July 2017 Definitive Feasibility Study (refer ASX announcements dated 12 May 2017 and 31 July 2017) also successfully produced technical grade spodumene products from multiple samples. A further 6.5 tonnes of the bulk Eastern sample was processed to produce an additional technical grade product sample of approximately 1 tonne, for distribution to potential customers. The technical grade concentrate produced as sampled from the pilot plant and after iron removal assayed between 6.8 to 7.1% Li_2O and 0.11 to 0.13% Fe_2O_3. The concentrate is now undergoing blending and rotary sampling at Nagrom to prepare bulk samples for distribution.

Therefore, Fe_2O_3 is not considered to be a deleterious element as testwork demonstrates most Fe_2O_3 can be removed through a standard metallurgical process.

During the process of drilling, sampling and assaying, Pilbara identified two key issues causing contamination and, hence, artificial elevation of the Fe_2O_3 assays for the drill samples. Firstly, the highly abrasive nature of the Li_2O/Ta_2O_5 mineralised pegmatite on the RC drilling bits and rods has resulted in iron contamination of the drill samples in the field. Secondly, when the drill samples were pulverised in laboratory in steel containers, the highly abrasive nature resulted in further iron contamination. As such, Pilbara completed a statistical analysis into both of the abovementioned issues which then allowed for factoring of the Fe_2O_3 assays to account for the contamination.

The iron contamination introduced when the drill samples were pulverised in laboratory was investigated initially by pulverising 56 duplicate samples at Nagrom (in 2014 and 2015) of crushed and homogenised core in both LM5 and LM2 steel vs. LM2 tungsten carbide containers. A further 59 samples were analysed in the same way by ALS in 2016. The results showed Li_2O and Ta_2O_5 repeating consistently, but with a significant increase in Fe_2O_3 in the samples pulverised in the steel containers, with results shown in **Table 3**. The difference in the factors between Nagrom and ALS is in part due to differing residence times of the samples in the pulverising bowls (Nagrom less than ALS). Initial LM5 steel bowl factors of -0.33% (Nagrom analyses) and -0.47% (ALS analyses) have been applied to all the raw Fe_2O_3 assays in the database. An average of the two of 0.4% has been applied to all the historic GAM raw Fe_2O_3 assays in the database.

Table 3 – Steel vs. tungsten carbide pulverising difference for Li_2O (%), Ta_2O_5 (%) & Fe_2O_3 (%)

Laboratory	Difference	Li_2O (%)	Ta_2O_5 (%)	Fe_2O_3 (%)
Nagrom (2014 & 2015)	90% Confidence Average Standard Deviation	-0.05 0.41	0.000 0.017	-0.33 0.11
ALS (2016)	90% Confidence Average Standard Deviation	-0.05 0.11	0.001 0.003	-0.47 0.10

The iron contamination introduced into the RC drill samples by the highly abrasive nature of the mineralised pegmatite on the RC drilling bits and rods was investigated by comparing Fe_2O_3 assays from 15 sets of twin diamond core and RC holes. The twin hole sets were spread over a strike length of 2km and the separation distance between holes varied between <1m to 15m. Statistical analysis of the spatial co-located data for the Pilbara diamond core, Pilbara RC and historic RC drilling confirmed a consistent significant difference in the Fe_2O_3 assays between the Pilbara diamond core and Pilbara RC – and to a lesser extent between the Pilbara diamond core and the historic RC results. From this, an additional factor of -0.3% has been applied to all the raw Fe_2O_3 assays for the Pilbara RC holes and -0.1% for the historic RC holes. No additional factor was applied to the Pilbara diamond core Fe_2O_3 assays.

The two step Fe_2O_3 adjustment factors are summarised in **Table 4** and the factored Fe_2O_3 resource grades are shown in **Table 5**. It should be noted this process has been used to understand the potential Fe_2O_3 grades in the resource attempting to remove the Fe_2O_3 present from contamination. The Fe_2O_3 grades should not be used as a definitive result.

In order to determine the extent of iron contamination of the Dakota RC samples, the diamond core samples were crushed in tungsten carbide bowls instead of steel bowls and compared with their twin RC drillholes. The comparison, which accounts for both of the iron contamination issues, indicates that the iron content of the RC samples is potentially elevated by 0.52% Fe_2O_3. Based on these results, an iron factor of - 0.52% Fe_2O_3 was applied to the RC samples only.

Table 4 – Pilgangoora Project – Fe_2O_3 adjustment factors

Drill hole assay sub-set	Laboratory	Fe_2O_3 (%) Factor 1	Fe_2O_3 (%) Factor 2	Fe_2O_3 (%) Factor Total
Pilbara Diamond Core Samples	Nagrom	-0.33%	N/A	**-0.33%**
	ALS	-0.47%	N/A	**-0.47%**
Pilbara RC Samples	Nagrom	-0.33%	-0.30%	**-0.63%**
	ALS	-0.47%	-0.30%	**-0.77%**
Historic RC Samples	GAM	-0.40%	-0.10%	**-0.50%**
Dakota RC Samples	Nagrom	Combined -0.52%		**-0.52%**

Table 5 – Pilgangoora Project – Mineral Resource Estimate Breakdown by Area with Fe_2O_3

Area	Category	Mt	Li_2O (%)	Ta_2O_5 (ppm)	Fe_2O_3 (%)	Li_2O (T)	Ta_2O_5 (M lb)
Central	**Measured**	14.7	1.41	114	0.40	208,000	3.7
	Indicated	69.2	1.36	108	0.67	939,000	16.5
	Inferred	37.5	1.38	83	0.88	519,000	6.9
	Combined	121.5	1.37	101	0.71	1,666,000	27.1
Eastern	**Measured**	4.7	1.38	247	0.51	65,000	2.5
	Indicated	11.2	1.22	245	0.68	136,000	6.0
	Inferred	10.4	1.22	260	0.70	126,000	5.9
	Combined	26.2	1.25	251	0.65	327,000	14.5
Far East	**Measured**					-	-
	Indicated	6.8	1.34	94	0.60	91,000	1.4
	Inferred	1.8	1.51	69	0.89	27,000	0.3
	Combined	8.6	1.37	89	0.66	118,000	1.7
South	**Measured**					-	-
	Indicated	4.6	1.29	62	0.74	59,000	0.6
	Inferred	21.4	1.15	66	0.74	247,000	3.1
	Combined	26.0	1.17	65	0.74	306,000	3.7
South End	**Measured**					-	-
	Indicated	5.1	1.19	73	0.55	61,000	0.8
	Inferred	2.9	0.93	68	0.66	27,000	0.4
	Combined	8.0	1.10	72	0.59	88,000	1.3
West	**Measured**					-	-
	Indicated					-	-
	Inferred	4.9	1.06	126	0.78	52,000	1.4

	Combined	4.9	1.06	126	0.78	52,000	1.4
Monster	**Measured**	2.7	1.46	141	0.34	39,000	0.8
	Indicated	6.1	1.41	138	0.51	86,000	1.8
	Inferred	3.9	1.37	134	0.63	53,000	1.1
	Combined	12.6	1.41	137	0.51	178,000	3.8
Pilgangoora Sub-Total	**Measured**	**22.1**	**1.41**	**146**	**0.42**	**311,000**	**7.1**
	Indicated	**103.0**	**1.33**	**120**	**0.66**	**1,372,000**	**27.2**
	Inferred	**82.8**	**1.27**	**105**	**0.80**	**1,051,000**	**19.1**
	Combined	**207.9**	**1.32**	**117**	**0.69**	**2,734,000**	**53.5**
Lynas Find	**Measured**	-	-	-	-	-	-
	Indicated	4.0	1.57	89	0.64	63,000	0.8
	Inferred	1.3	1.53	106	0.84	20,000	0.3
	Combined	5.4	1.56	93	0.69	84,000	1.1
TOTAL	**Measured**	**22.1**	**1.41**	**146**	**0.42**	**311,000**	**7.1**
	Indicated	**107.0**	**1.34**	**119**	**0.65**	**1,435,000**	**28.0**
	Inferred	**84.2**	**1.27**	**105**	**0.80**	**1,071,000**	**19.4**
	Combined	**213.3**	**1.32**	**116**	**0.69**	**2,818,000**	**54.6**

Note: Appropriate rounding applied

SUMMARY OF RESOURCE ESTIMATE AND REPORTING CRITERIA

As per ASX Listing Rule 5.8 and the 2012 JORC reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below (for more detail please refer to Table 1, Sections 1 to 3 included below in **Appendix 2**).

Geology and geological interpretation

The Pilgangoora pegmatites are hosted in the East Strelley greenstone belt, which is a series of steeply dipping, mafic meta volcanic rocks and amphibolites. At Pilgangoora, the greenstones have been intruded by a swarm of north-trending, east-dipping pegmatites extending from Mount York in the south northwards for about 11km to McPhees Mining Centre. Many of the pegmatites are very large, reaching over 1000m in length and 200–300m in width. Despite their large size, mineralisation within these zoned pegmatites appears to be restricted to alteration zones, mainly along vein margins containing quartz, albite, muscovite, and spessartine garnet. These mineralised zones contain varying amounts of lepidolite, spodumene, tantalite, cassiterite, and minor microlite, tapiolite, and beryl.

The area of the Pilgangoora pegmatite field within M45/1256, M45/333 and M45/1266 comprises a series of extremely fractionated dykes and veins up to 50m thick within the immediate drilling area. These dykes and veins dip to the east at 20-60°, are strike parallel to sub-parallel to the main schistose fabric within the greenstones (**Figures 4 to 7**).

Drilling techniques and hole spacing

Talison Minerals Pty Ltd ("Talison") conducted a 54 drill hole RC program in 2008 totalling 3,198m and 29 drill holes for a total of 2,783m in 2010. Talison changed its name to Global Advanced Metals ("GAM") and completed 17 RC holes for 1,776m in 2012. Since acquiring the Pilgangoora Project, Pilbara Minerals has completed 145,189 metres of RC drilling (114,360m exploration, 19,808m infill RC grade control, 5.745m RC water exploration and 5,276m RC Lynas Find-Dakota Minerals) and 6,483m of diamond drill core.

Sampling and sub-sampling techniques

Sample information used in resource estimation was derived from both RC and diamond core drilling. The drill samples have been geologically logged and sampled for lab analysis. Two programs of diamond core holes (primarily drilled to collect metallurgical sample material) in 2015 and 2017 twinned existing RC holes and, when compared, strongly confirmed the RC results.

Sample analysis method

The Talison and GAM samples were assayed by GAM's Wodgina Site Laboratory for a 36 element suite using XRF on fused beads. Selected pulps from the 2008 and 2010 drilling plus all pegmatite pulps from the 2012 drilling were collected and sent to SGS Laboratories in Perth for analysis of their lithium content. Lithium analysis was conducted by Atomic Absorption Spectroscopy (AAS). The Pilbara Mineral drill hole samples from 2014 and 2015 were analysed by the Nagrom Laboratory in Perth by both fused bead XRF and ICP. The Pilbara Mineral drill hole samples from 2016 were analysed by the ALS Global Laboratory in Perth using a Sodium Peroxide fusion with ICPMS finish. Dakota diamond holes were analysed by SGS using fused beads ICP and XRF for 22 elements. Dakota RC holes were analysed by Nagrom for Li_2O, Cs and Ta using a Sodium Peroxide fusion with ICP finish. No geophysical tools were used to determine any element concentrations used in the resource estimate.

Cut-off grades

Pegmatite boundaries typically coincide with anomalous Li_2O and Ta_2O_5 which allows for geological continuity of the mineralised zones. A significant increase in Fe_2O_3 at the contacts between the elevated iron mafic country rock and the iron poor pegmatites further refines the position of this contact in additional to the geological logs. Interpretation work also focussed on the internal mineralogical zonation (spodumene rich vs poor) within the pegmatite veins. All pegmatite vein (and grade) contact models were built in Leapfrog™ Geo software and exported for use as domain boundaries for the block model.

Estimation Methodology

Grade estimation was by Ordinary Kriging for Ta_2O_5, Li_2O and Fe_2O_3 (both raw and factored) using GEOVIA Surpac™ software. The estimate was resolved into 5m (E) x 25m (N) x 5m (RL) parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, no top-cuts were applied for Li_2O, and only one domain for Ta_2O_5. For Fe_2O_3, they typically varied between 1.0% and 9.0%. Some domains did not require top-cutting.

Classification criteria

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information. The Pilgangoora Mineral Resource in part has been classified as Measured and Indicated with the remainder as Inferred according to JORC 2012.

Mining and metallurgical methods and parameters

Based on the orientations, thicknesses and depths to which the pegmatite veins have been modelled, plus their estimated grades for Ta_2O_5 and Li_2O, the potential mining method is considered to be open pit mining.

Nagrom Pty Ltd and Anzaplan have both completed scoping metallurgical testwork and have recovered both Ta_2O_5 and Li_2O of marketable qualities. Refer ASX announcement ''Pilbara Testwork Confirms Potential" dated 25 May 2015 and "Quarterly Activities and Appendix 5B" dated 24 April 2015.

Pilbara Minerals has released a Pre-Feasibility Study (refer ASX announcement dated 10 March 2016) and a Definitive Feasibility Study (refer ASX announcement dated 20 September 2016) that included information on mining parameters by consultants Mining Plus Pty Ltd and definitive metallurgical testwork completed by ALS and Como Engineering Pty Ltd.

Pilot plant metallurgical testwork was also undertaken post completion of the Definitive Feasibility Study (refer ASX announcement "Quarterly Activities Report" dated 31 July 2017). Advanced metallurgical testwork utilising over 6 tonnes of pegmatite taken from drill core is currently in progress.

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COMPETENT PERSON'S STATEMENT

The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr John Holmes (Exploration Manager of Pilbara Minerals Limited). Mr Holmes is a shareholder of Pilbara Minerals. Mr Holmes is a member of the Australasian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration and to the activities undertaken to qualify as a Competent Person 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. Mr Holmes consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

The information in this report that relates to Mineral Resources is based on and fairly represents information compiled by Mr Lauritz Barnes (Consultant with Trepanier Pty Ltd) and Mr John Holmes (Exploration and Geology Manager of Pilbara Minerals Limited). Mr Holmes is a shareholder of Pilbara Minerals. Mr Barnes is a member of the Australasian Institute of Mining and Metallurgy and Mr Holmes is a member of the Australasian Institute of Geoscientists and each 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. Mr Barnes and Mr Holmes consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

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.

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.

Appendix 1 – Additional Resource Drilling Intercepts since January 2017

HoleID	Hole Type	MGA Easting	MGA Northing	RL	Dip	MGA Azi.	Hole Depth	Domain	Depth From	Interval Length	Li_2O pct	Ta_2O_5 ppm
PLS808	RC	698495	7669501	193	-60	271	200.0	25	16	5	1.38	65
PLS809	RC	698543	7669499	197	-60	271	100.0	25	50	2	0.40	46
PLS815	RC	698445	7669303	196	-60	271	140.0	25	6	7	1.14	59
PLS816	RC	698495	7669302	199	-60	271	148.0	25	34	6	1.35	70
PLS817	RC	698552	7669297	198	-60	267	190.0	41	178	2	1.18	76
PLS818	RC	698597	7669298	202	-60	271	230.0	41	191	9	1.80	69
PLS822	RC	698445	7669101	202	-60	270	130.0	25	19	5	0.81	103
PLS822	RC	698445	7669101	202	-60	270	130.0	41	111	2	0.69	64
PLS823	RC	698501	7669100	203	-60	271	148.0	41	136	2	1.08	86
PLS823	RC	698501	7669100	203	-60	271	148.0	25	32	7	1.98	82
PLS824	RC	698549	7669100	205	-60	271	112.0	25	55	11	0.19	75
PLS977	RC	698542	7669003	212	-60	271	109.0	25	83	7	1.75	70
PLS978	RC	697991	7668900	234	-60	271	46.0	41	35	4	0.86	60
PLS983	RC	698240	7668898	216	-60	271	90.0	41	64	2	0.29	78
PLS985	RC	698348	7668919	203	-61	270	136.0	25	32	1	1.35	51
PLS985	RC	698348	7668919	203	-61	270	136.0	41	88	2	1.80	54
PLS987	RC	698435	7668903	198	-60	271	136.0	41	114	4	1.28	70
PLS987	RC	698435	7668903	198	-60	271	136.0	25	50	3	1.90	73
PLS989	RC	698549	7668904	213	-60	271	200.0	25	122	5	1.91	50
PLS989	RC	698549	7668904	213	-60	271	200.0	41	193	2	1.45	67
PLS990	RC	698400	7668802	201	-60	271	172.0	25	61	4	0.93	57
PLS990	RC	698400	7668802	201	-60	271	172.0	41	94	8	0.83	45
PLS992	RC	698495	7668804	205	-60	271	190.0	25	110	6	1.74	46
PLS992	RC	698495	7668804	205	-60	271	190.0	41	162	3	1.15	84
PLS995	RC	698319	7669395	190	-60	271	68.0	41	62	2	0.60	52
PLS996A	RC	698269	7669293	195	-60	271	56.0	41	48	3	1.85	94
PLS997	RC	698248	7669202	207	-60	271	70.0	41	63	2	0.30	53
PLS1000	RC	697920	7667717	198	-60	271	82.0	51	14	16	0.30	47
PLS1001	RC	697865	7667726	197	-60	271	50.0	51	2	25	0.41	54
PLS1003	RC	697924	7667769	203	-60	271	94.0	51	49	26	0.74	79
PLS1004	RC	697885	7667768	209	-60	271	158.0	40	128	20	0.63	39
PLS1004	RC	697885	7667768	209	-60	271	158.0	51	37	34	0.59	73
PLS1005	RC	697822	7667772	217	-60	271	142.0	40	80	17	0.99	46
PLS1005	RC	697822	7667772	217	-60	271	142.0	51	16	40	0.69	79
PLS1007	RC	697653	7667699	197	-60	271	144.0	48	74	68	0.41	59
PLS1008	RC	697612	7667700	197	-60	271	106.0	48	39	60	0.15	46
PLS1009	RC	697552	7667703	194	-60	271	100.0	48	0	34	0.45	71
PLS1012	RC	697609	7667596	194	-60	271	94.0	48	46	22	0.10	55
PLS1016	RC	698415	7670041	226	-60	271	170.0	2	38	2	0.50	280
PLS1016	RC	698415	7670041	226	-60	271	170.0	24	124	9	1.33	96
PLS1017	RC	698501	7670016	200	-60	281	160.0	24	92	25	1.48	82
PLS1018	RC	698350	7670002	226	-59	268	100.0	24	61	5	2.05	113
PLS1018	RC	698350	7670002	226	-59	268	100.0	2	0	12	2.02	325
PLS1019	RC	698395	7670003	228	-60	271	112.0	24	100	7	0.45	77
PLS1019	RC	698395	7670003	228	-60	271	112.0	2	23	4	1.03	246
PLS1023	RC	698337	7669896	203	-60	271	70.0	24	40	6	1.70	90
PLS1024	RC	698392	7669899	216	-60	271	96.0	2	11	3	1.24	335
PLS1024	RC	698392	7669899	216	-60	271	96.0	24	81	9	1.34	93
PLS1027	RC	698355	7669797	187	-59	269	52.0	24	41	7	1.79	94
PLS1028	RC	698395	7669795	187	-60	271	64.0	24	50	10	1.54	90
PLS1028	RC	698395	7669795	187	-60	271	64.0	2	10	1	0.04	241
PLS1029	RC	698183	7671373	190	-60	271	75.0	3	22	10	1.06	235
PLS1029	RC	698183	7671373	190	-60	271	75.0	7	4	2	0.17	250
PLS1032	RC	698231	7671345	193	-60	271	108.0	3	81	6	0.24	215
PLS1032	RC	698231	7671345	193	-60	271	108.0	7	62	1	1.23	177
PLS1032	RC	698231	7671345	193	-60	271	108.0	8	24	4	0.90	614
PLS1032	RC	698231	7671345	193	-60	271	108.0	9	6	3	1.52	196
PLS1034	RC	698071	7671095	202	-61	272	125.0	28	101	1	0.19	151
PLS1035	RC	698023	7671097	200	-61	270	165.0	1	90	1	0.03	176
PLS1036	RC	698100	7670600	200	-60	271	185.0	1	91	8	0.67	159
PLS1036	RC	698100	7670600	200	-60	271	185.0	30	130	14	1.27	102
PLS1036	RC	698100	7670600	200	-60	271	185.0	28	71	10	0.74	97
PLS1044	RC	697898	7670850	193	-59	270	119.0	36	94	20	0.77	110
PLS1045	RC	698018	7670899	203	-59	270	218.0	1	76	6	1.58	283
PLS1045	RC	698018	7670899	203	-59	270	218.0	30	96	3	1.61	124
PLS1045	RC	698018	7670899	203	-59	270	218.0	34	169	1	0.49	339
PLS1045	RC	698018	7670899	203	-59	270	218.0	36	184	12	1.99	97
PLS1045	RC	698018	7670899	203	-59	270	218.0	37	204	11	1.62	389
PLS1046	RC	697970	7670897	203	-60	267	192.0	28	10	3	1.75	146
PLS1046	RC	697970	7670897	203	-60	267	192.0	36	150	14	1.81	129
PLS1046	RC	697970	7670897	203	-60	267	192.0	1	39	5	0.56	254
PLS1046	RC	697970	7670897	203	-60	267	192.0	37	173	10	1.59	362
PLS1047	RC	697916	7670895	194	-59	269	130.0	36	108	6	1.09	131
PLS1047	RC	697916	7670895	194	-59	269	130.0	37	116	5	1.04	178

PLS1048	RC	697967	7670948	197	-60	267	176.0	37	157	5	1.00	216
PLS1048	RC	697967	7670948	197	-60	267	176.0	1	29	5	1.06	251
PLS1048	RC	697967	7670948	197	-60	267	176.0	36	140	14	1.88	114
PLS1049	RC	698021	7670946	199	-60	257	222.0	34	158	2	1.25	126
PLS1049	RC	698021	7670946	199	-60	257	222.0	36	179	20	1.73	96
PLS1049	RC	698021	7670946	199	-60	257	222.0	37	205	12	1.54	246
PLS1049	RC	698021	7670946	199	-60	257	222.0	30	89	4	1.17	92
PLS1049	RC	698021	7670946	199	-60	257	222.0	1	76	4	0.88	210
PLS1049	RC	698021	7670946	199	-60	257	222.0	28	42	1	0.70	78
PLS1050	RC	698067	7670948	192	-60	268	293.0	1	122	6	1.06	279
PLS1050	RC	698067	7670948	192	-60	268	293.0	28	75	1	2.24	190
PLS1050	RC	698067	7670948	192	-60	268	293.0	34	194	2	1.17	114
PLS1050	RC	698067	7670948	192	-60	268	293.0	36	235	11	1.56	70
PLS1050	RC	698067	7670948	192	-60	268	293.0	37	258	26	1.72	70
PLS1051	RC	698109	7670954	190	-59	266	150.0	28	100	4	2.73	222
PLS1052	RC	699199	7674650	202	-60	271	100.0	84	7	28	0.99	173
PLS1054	RC	699296	7674649	206	-60	271	130.0	81	42	1	0.65	431
PLS1054	RC	699296	7674649	206	-60	271	130.0	84	75	28	0.31	123
PLS1058	RC	699281	7674751	197	-60	271	128.0	84	13	7	0.08	162
PLS1078	RC	698283	7670757	200	-60	270	494.0	3	27	15	1.00	238
PLS1078	RC	698283	7670757	200	-60	270	494.0	4	70	7	0.42	172
PLS1078	RC	698283	7670757	200	-60	270	494.0	28	228	19	1.12	80
PLS1078	RC	698283	7670757	200	-60	270	494.0	35	372	2	0.72	102
PLS1078	RC	698283	7670757	200	-60	270	494.0	1	349	11	1.19	115
PLS1078	RC	698283	7670757	200	-60	270	494.0	36	448	41	1.75	59
PLS1079	RC	698367	7670560	206	-60	269	475.0	2	16	4	1.00	165
PLS1079	RC	698367	7670560	206	-60	269	475.0	3	88	5	1.60	92
PLS1079	RC	698367	7670560	206	-60	269	475.0	4	122	4	1.22	164
PLS1079	RC	698367	7670560	206	-60	269	475.0	28	289	7	0.87	80
PLS1079	RC	698367	7670560	206	-60	269	475.0	36	446	21	1.40	59
PLS1079	RC	698367	7670560	206	-60	269	475.0	1	356	8	1.02	93
PLS1080	RC	698422	7670350	222	-61	269	499.0	24	168	13	1.74	71
PLS1080	RC	698422	7670350	222	-61	269	499.0	36	478	17	1.48	46
PLS1080	RC	698422	7670350	222	-61	269	499.0	2	29	3	1.94	267
PLS1080	RC	698422	7670350	222	-61	269	499.0	1	366	11	0.65	70
PLS1081	RC	698450	7670151	233	-60	269	475.0	24	154	8	1.80	63
PLS1081	RC	698450	7670151	233	-60	269	475.0	36	446	15	1.54	54
PLS1081	RC	698450	7670151	233	-60	269	475.0	1	326	16	1.39	85
PLS1082	RC	698479	7669926	203	-60	280	458.0	1	296	10	0.24	67
PLS1082	RC	698479	7669926	203	-60	280	458.0	24	70	13	1.33	84
PLS1082	RC	698479	7669926	203	-60	280	458.0	36	403	7	1.43	70
PLS1082	RC	698479	7669926	203	-60	280	458.0	39	445	4	1.35	85
PLS1090	RC	699169	7674601	205	-60	271	76.0	81	0	6	1.19	82
PLS1090	RC	699169	7674601	205	-60	271	76.0	84	46	15	1.25	177
PLS1091	RC	697916	7667747	201	-60	221	55.0	51	0	52	0.44	54
PLS1093M	DDH	697925	7669799	185	-60	271	39.0	35	1.8	5.7	0.67	164
PLS1093M	DDH	697925	7669799	185	-60	271	39.0	36	19	16.3	1.07	108
PLS1094M	DDH	698020	7669799	185	-60	271	28.3	34	4.75	18.95	1.37	76
PLS1095M	DDH	697906	7670006	206	-60	271	109.5	32	0.5	8.5	1.22	106
PLS1095M	DDH	697906	7670006	206	-60	271	109.5	36	58.75	44.05	1.83	116
PLS1096M	DDH	697997	7669998	192	-60	271	136.5	32	4.1	8.4	1.37	51
PLS1096M	DDH	697997	7669998	192	-60	271	136.5	34	47.15	21.85	1.80	86
PLS1096M	DDH	697997	7669998	192	-60	271	136.5	36	95	29.1	1.68	152
PLS1098M	RCDT	697769	7670208	224	-80	89	155.5	36	70	74.95	1.59	88
PLS1101M	RCDT	697865	7670399	221	-75	271	154.4	36	98	54.05	1.48	126
PLS1102M	DDH	697979	7670503	225	-90	0	22.9	1	9.5	13.4	1.64	137
PLS1104M	DDH	697950	7670699	204	-90	0	30.2	1	4.7	19.5	1.11	251
PLS1105M	DDH	698245	7670940	201	-70	271	64.5	3	27.1	29.6	1.74	216
PLS1105M	DDH	698245	7670940	201	-70	271	64.5	2	8.3	3.05	0.13	241
PLS1107M	DDH	698257	7671196	200	-90	0	73.7	12	11.75	17.35	1.54	236
PLS1107M	DDH	698257	7671196	200	-90	0	73.7	9	41.1	8.8	0.62	462
PLS1107M	DDH	698257	7671196	200	-90	0	73.7	8	66.4	1.4	0.05	116
PLS1108M	DDH	698286	7671403	199	-90	0	49.5	12	31	13.7	1.73	202
PLS1108M	DDH	698286	7671403	199	-90	0	49.5	13	16	15	1.42	279
PLS1109M	DDH	698280	7671601	195	-90	0	37.7	12	20.45	8.65	1.10	302
PLS1110M	DDH	698046	7670223	221	-75	271	50.9	1	13	36	1.35	126
PLS1111	RC	698289	7670249	226	-60	271	370.0	1	212	28	0.86	95
PLS1111	RC	698289	7670249	226	-60	271	370.0	24	65	4	0.59	129
PLS1111	RC	698289	7670249	226	-60	271	370.0	28	182	7	0.71	84
PLS1111	RC	698289	7670249	226	-60	271	370.0	36	314	11	2.26	55
PLS1111	RC	698289	7670249	226	-60	271	370.0	37	329	27	1.18	64
PLS1111	RC	698289	7670249	226	-60	271	370.0	38	359	7	1.90	62
PLS1112	RC	698126	7670284	229	-60	271	334.0	35	207	5	1.66	62
PLS1112	RC	698126	7670284	229	-60	271	334.0	36	253	47	1.72	78
PLS1112	RC	698126	7670284	229	-60	271	334.0	34	170	14	1.36	93
PLS1112	RC	698126	7670284	229	-60	271	334.0	1	97	15	1.57	109
PLS1112	RC	698126	7670284	229	-60	271	334.0	28	79	10	1.78	83
PLS1112	RC	698126	7670284	229	-60	271	334.0	30	121	9	1.41	79
PLS1112	RC	698126	7670284	229	-60	271	334.0	39	325	4	0.08	90

PLS1114	RC	698263	7670333	219	-60	271	364.0	37	353	1	0.83	57
PLS1114	RC	698263	7670333	219	-60	271	364.0	1	205	19	1.28	98
PLS1114	RC	698263	7670333	219	-60	271	364.0	24	51	6	1.93	143
PLS1114	RC	698263	7670333	219	-60	271	364.0	28	168	15	1.60	70
PLS1114	RC	698263	7670333	219	-60	271	364.0	34	248	3	0.99	148
PLS1114	RC	698263	7670333	219	-60	271	364.0	36	323	30	1.80	68
PLS1115	RC	698219	7670387	224	-65	271	502.0	38	361	16	1.62	66
PLS1115	RC	698219	7670387	224	-65	271	502.0	37	326	23	1.65	77
PLS1115	RC	698219	7670387	224	-65	271	502.0	36	302	16	0.77	133
PLS1115	RC	698219	7670387	224	-65	271	502.0	1	207	8	1.18	118
PLS1115	RC	698219	7670387	224	-65	271	502.0	28	147	10	1.58	64
PLS1115	RC	698219	7670387	224	-65	271	502.0	39	399	21	1.66	79
PLS1116	RC	698157	7670438	217	-60	271	388.0	36	281	20	1.79	113
PLS1116	RC	698157	7670438	217	-60	271	388.0	39	350	20	1.84	79
PLS1116	RC	698157	7670438	217	-60	271	388.0	38	325	7	0.89	44
PLS1116	RC	698157	7670438	217	-60	271	388.0	37	302	15	1.42	76
PLS1116	RC	698157	7670438	217	-60	271	388.0	34	222	1	0.36	53
PLS1116	RC	698157	7670438	217	-60	271	388.0	30	182	5	1.78	78
PLS1116	RC	698157	7670438	217	-60	271	388.0	1	161	8	1.25	97
PLS1116	RC	698157	7670438	217	-60	271	388.0	28	118	9	1.16	83
PLS1116	RC	698157	7670438	217	-60	271	388.0	35	232	4	0.07	47
PLS1118	RC	698124	7670535	218	-60	271	352.0	1	127	15	1.34	137
PLS1118	RC	698124	7670535	218	-60	271	352.0	28	101	10	1.01	76
PLS1118	RC	698124	7670535	218	-60	271	352.0	30	156	11	0.13	111
PLS1118	RC	698124	7670535	218	-60	271	352.0	34	214	5	0.95	108
PLS1118	RC	698124	7670535	218	-60	271	352.0	36	265	33	1.21	95
PLS1118	RC	698124	7670535	218	-60	271	352.0	39	331	16	0.76	84
PLS1119	RC	698148	7670583	214	-60	271	496.0	30	185	8	1.41	77
PLS1119	RC	698148	7670583	214	-60	271	496.0	39	341	14	1.17	77
PLS1119	RC	698148	7670583	214	-60	271	496.0	34	232	4	1.24	131
PLS1119	RC	698148	7670583	214	-60	271	496.0	28	96	15	1.15	111
PLS1119	RC	698148	7670583	214	-60	271	496.0	1	148	15	0.31	130
PLS1119	RC	698148	7670583	214	-60	271	496.0	36	285	27	1.34	79
PLS1119	RC	698148	7670583	214	-60	271	496.0	56	445	14	0.05	105
PLS1120	RC	698146	7670634	202	-60	271	352.0	1	139	13	0.87	139
PLS1120	RC	698146	7670634	202	-60	271	352.0	28	90	13	0.29	122
PLS1120	RC	698146	7670634	202	-60	271	352.0	30	156	18	1.17	92
PLS1120	RC	698146	7670634	202	-60	271	352.0	34	230	6	0.22	113
PLS1120	RC	698146	7670634	202	-60	271	352.0	36	280	29	1.61	68
PLS1120	RC	698146	7670634	202	-60	271	352.0	39	332	15	1.31	94
PLS1121	RC	698093	7670684	219	-60	271	340.0	35	217	4	1.72	161
PLS1121	RC	698093	7670684	219	-60	271	340.0	39	312	25	1.53	105
PLS1121	RC	698093	7670684	219	-60	271	340.0	36	248	31	1.94	78
PLS1121	RC	698093	7670684	219	-60	271	340.0	1	119	3	0.15	279
PLS1121	RC	698093	7670684	219	-60	271	340.0	28	87	8	1.17	125
PLS1121	RC	698093	7670684	219	-60	271	340.0	30	135	14	1.51	77
PLS1121	RC	698093	7670684	219	-60	271	340.0	34	200	7	1.63	96
PLS1122	RC	698146	7670691	207	-60	271	370.0	1	157	24	0.99	119
PLS1122	RC	698146	7670691	207	-60	271	370.0	28	111	21	0.88	93
PLS1122	RC	698146	7670691	207	-60	271	370.0	34	209	5	1.53	122
PLS1122	RC	698146	7670691	207	-60	271	370.0	35	247	6	1.23	223
PLS1122	RC	698146	7670691	207	-60	271	370.0	36	296	38	1.93	118
PLS1122	RC	698146	7670691	207	-60	271	370.0	39	346	15	1.86	70
PLS1123	RC	698077	7670734	214	-60	271	310.0	35	215	3	1.21	236
PLS1123	RC	698077	7670734	214	-60	271	310.0	36	235	12	1.27	108
PLS1123	RC	698077	7670734	214	-60	271	310.0	34	193	7	1.43	60
PLS1123	RC	698077	7670734	214	-60	271	310.0	37	257	35	1.85	80
PLS1123	RC	698077	7670734	214	-60	271	310.0	28	82	9	1.87	115
PLS1123	RC	698077	7670734	214	-60	271	310.0	1	119	17	0.95	197
PLS1123	RC	698077	7670734	214	-60	271	310.0	30	140	2	0.63	120
PLS1125	RC	698342	7670737	207	-60	271	175.0	2	55	3	0.26	269
PLS1125	RC	698342	7670737	207	-60	271	175.0	3	85	3	1.48	241
PLS1125	RC	698342	7670737	207	-60	271	175.0	4	155	11	1.57	112
PLS1126	RC	697847	7670734	202	-60	271	252.0	36	71	9	1.56	161
PLS1126	RC	697847	7670734	202	-60	271	252.0	59	141	3	0.80	55
PLS1127	RC	698048	7670791	207	-60	271	347.0	28	71	8	1.17	143
PLS1127	RC	698048	7670791	207	-60	271	347.0	30	120	4	1.62	96
PLS1127	RC	698048	7670791	207	-60	271	347.0	34	177	2	0.53	74
PLS1127	RC	698048	7670791	207	-60	271	347.0	36	217	9	1.52	85
PLS1127	RC	698048	7670791	207	-60	271	347.0	37	244	24	1.62	120
PLS1127	RC	698048	7670791	207	-60	271	347.0	1	106	8	0.71	234
PLS1127	RC	698048	7670791	207	-60	271	347.0	39	283	11	1.95	58
PLS1132	RC	697848	7670835	195	-60	271	76.0	36	66	6	1.26	250
PLS1133	RC	698297	7670886	199	-70	271	124.0	2	41	4	0.80	347
PLS1133	RC	698297	7670886	199	-70	271	124.0	3	113	7	1.23	173
PLS1133	RC	698297	7670886	199	-70	271	124.0	12	19	1	0.24	73
PLS1134	RC	697846	7670885	190	-60	271	70.0	36	59	2	0.68	201
PLS1135	RC	697851	7670935	188	-60	271	150.0	36	53	1	0.08	106
PLS1136	RC	697893	7670938	190	-60	271	150.0	36	88	7	1.29	224

PLS1136	RC	697893	7670938	190	-60	271	150.0	58	137	3	0.56	69
PLS1138	RC	698302	7670985	205	-60	271	120.0	3	85	9	1.58	179
PLS1138	RC	698302	7670985	205	-60	271	120.0	5	100	2	1.59	145
PLS1138	RC	698302	7670985	205	-60	271	120.0	12	38	6	1.11	263
PLS1139	RC	698177	7671288	190	-60	271	150.0	3	22	7	0.68	211
PLS1139	RC	698177	7671288	190	-60	271	150.0	7	7	4	0.60	188
PLS1140	RC	698197	7671437	190	-60	271	104.0	3	52	9	1.20	223
PLS1140	RC	698197	7671437	190	-60	271	104.0	7	19	1	0.94	346
PLS1141	RC	698498	7671589	199	-60	271	254.0	10	208	3	0.73	321
PLS1141	RC	698498	7671589	199	-60	271	254.0	12	188	4	0.71	289
PLS1141	RC	698498	7671589	199	-60	271	254.0	13	142	12	1.34	183
PLS1141	RC	698498	7671589	199	-60	271	254.0	8	243	3	1.73	157
PLS1142	RC	698449	7671635	203	-60	271	208.0	8	195	5	0.83	182
PLS1142	RC	698449	7671635	203	-60	271	208.0	10	164	8	1.21	243
PLS1142	RC	698449	7671635	203	-60	271	208.0	12	132	14	1.95	217
PLS1142	RC	698449	7671635	203	-60	271	208.0	13	98	8	1.41	252
PLS1142	RC	698449	7671635	203	-60	271	208.0	16	49	1	0.97	686
PLS1143	RC	698450	7671682	200	-60	271	154.0	12	128	20	1.87	238
PLS1143	RC	698450	7671682	200	-60	271	154.0	13	95	9	1.75	204
PLS1143	RC	698450	7671682	200	-60	271	154.0	16	44	2	0.98	934
PLS1144	RC	699099	7674501	203	-60	271	100.0	84	46	3	0.31	61
PLS1145	RC	699032	7674526	198	-60	271	100.0	84	2	5	0.07	127
PLS1148	RC	699147	7674556	206	-60	280	100.0	84	48	16	0.92	187
PLS1149	RC	698900	7674600	202	-60	271	100.0	85	85	2	0.08	76
PLS1152	RC	699250	7674601	208	-60	271	140.0	81	38	16	1.33	108
PLS1152	RC	699250	7674601	208	-60	271	140.0	84	92	14	0.67	127
PLS1153	RC	698884	7674711	199	-60	271	103.0	85	27	1	0.08	44
PLS1154	RC	699249	7674703	200	-60	271	80.0	84	15	7	0.06	86
PLS1155	RC	699300	7674702	205	-60	271	120.0	84	55	14	0.07	91
PLS1156	RC	698966	7674798	195	-60	271	60.0	85	0	19	1.35	125
PLS1157	RC	699015	7674803	207	-60	271	100.0	85	39	29	0.78	119
PLS1159	RC	699011	7674850	198	-60	271	60.0	85	7	24	0.60	100
PLS1162	RC	699044	7674903	196	-60	271	60.0	85	18	5	0.28	43
PLS1162	RC	699044	7674903	196	-60	271	60.0	86	10	3	0.11	33
PLS1163	RC	699090	7674904	192	-60	271	106.0	86	66	7	1.58	126
PLS1163	RC	699090	7674904	192	-60	271	106.0	87	42	12	1.43	112
PLS1163	RC	699090	7674904	192	-60	271	106.0	85	80	5	1.43	68
PLS1166	RC	698961	7674759	197	-60	271	100.0	85	28	15	1.21	108
PLS1167	RC	698493	7669751	185	-60	271	85.0	24	45	22	1.69	83
PLS1167	RC	698493	7669751	185	-60	271	85.0	25	8	19	0.78	105
PLS1168	RC	697547	7669748	188	-60	271	75.0	60	48	16	1.72	88
PLS1169	RC	697492	7669748	194	-60	271	48.0	60	24	1	0.12	82
PLS1170	RC	698443	7669748	184	-60	271	60.0	24	20	27	1.36	101
PLS1171	RC	698112	7669751	183	-60	271	148.0	34	49	6	0.52	64
PLS1171	RC	698112	7669751	183	-60	271	148.0	36	116	10	1.18	106
PLS1172	RC	698121	7669801	185	-60	271	150.0	1	5	4	0.08	74
PLS1172	RC	698121	7669801	185	-60	271	150.0	34	54	18	1.05	85
PLS1172	RC	698121	7669801	185	-60	271	150.0	36	128	14	1.68	92
PLS1173	RC	698349	7669853	203	-60	271	334.0	34	280	11	1.14	68
PLS1173	RC	698349	7669853	203	-60	271	334.0	36	327	5	0.63	84
PLS1173	RC	698349	7669853	203	-60	271	334.0	24	48	8	1.31	113
PLS1173	RC	698349	7669853	203	-60	271	334.0	1	176	6	0.61	62
PLS1173	RC	698349	7669853	203	-60	271	334.0	33	192	9	0.07	65
PLS1174	RC	698198	7669852	196	-60	271	220.0	1	65	12	1.43	119
PLS1174	RC	698198	7669852	196	-60	271	220.0	33	88	6	1.61	69
PLS1174	RC	698198	7669852	196	-60	271	220.0	34	134	9	1.31	85
PLS1174	RC	698198	7669852	196	-60	271	220.0	36	201	16	1.54	89
PLS1175	RC	698292	7669951	215	-70	271	352.0	1	161	23	1.47	97
PLS1175	RC	698292	7669951	215	-70	271	352.0	36	304	12	1.33	85
PLS1175	RC	698292	7669951	215	-70	271	352.0	24	7	9	1.50	67
PLS1175	RC	698292	7669951	215	-70	271	352.0	34	270	14	1.89	86
PLS1176	RC	697432	7669931	203	-60	271	94.0	60	24	3	1.88	73
PLS1176	RC	697432	7669931	203	-60	271	94.0	61	46	2	1.69	106
PLS1177	RC	697498	7669955	214	-60	271	100.0	60	90	4	1.06	98
PLS1179	RC	698330	7670053	229	-60	271	388.0	24	78	8	2.30	86
PLS1179	RC	698330	7670053	229	-60	271	388.0	34	322	4	1.19	66
PLS1179	RC	698330	7670053	229	-60	271	388.0	36	334	26	1.74	60
PLS1179	RC	698330	7670053	229	-60	271	388.0	1	210	21	0.65	86
PLS1180	RC	697444	7670046	199	-60	271	82.0	60	29	13	0.96	102
PLS1180	RC	697444	7670046	199	-60	271	82.0	61	57	7	0.29	194
PLS1181	RC	698317	7670097	236	-60	271	412.0	36	330	29	1.74	75
PLS1181	RC	698317	7670097	236	-60	271	412.0	37	365	17	1.16	85
PLS1181	RC	698317	7670097	236	-60	271	412.0	28	172	3	1.06	68
PLS1181	RC	698317	7670097	236	-60	271	412.0	24	92	6	1.26	117
PLS1181	RC	698317	7670097	236	-60	271	412.0	1	214	36	1.03	114
PLS1181	RC	698317	7670097	236	-60	271	412.0	38	393	6	0.37	65
PLS1182	RC	698294	7670151	233	-60	271	259.0	1	194	36	0.58	128
PLS1182	RC	698294	7670151	233	-60	271	259.0	24	76	8	1.08	163
PLS1182	RC	698294	7670151	233	-60	271	259.0	28	161	7	1.46	172

PLS1182A	RC	698292	7670151	233	-60	271	382.0	28	165	3	0.30	82
PLS1182A	RC	698292	7670151	233	-60	271	382.0	38	372	6	1.26	66
PLS1182A	RC	698292	7670151	233	-60	271	382.0	36	318	19	1.46	70
PLS1182A	RC	698292	7670151	233	-60	271	382.0	1	195	34	1.80	106
PLS1182A	RC	698292	7670151	233	-60	271	382.0	24	75	6	1.25	135
PLS1182A	RC	698292	7670151	233	-60	271	382.0	37	350	14	1.98	53
PLS1183	RC	698103	7670221	228	-60	271	412.0	1	51	35	1.71	120
PLS1183	RC	698103	7670221	228	-60	271	412.0	31	101	1	2.34	67
PLS1183	RC	698103	7670221	228	-60	271	412.0	32	105	6	2.26	63
PLS1183	RC	698103	7670221	228	-60	271	412.0	34	152	13	1.61	54
PLS1183	RC	698103	7670221	228	-60	271	412.0	35	198	17	1.43	89
PLS1183	RC	698103	7670221	228	-60	271	412.0	36	238	22	0.63	86
PLS1183	RC	698103	7670221	228	-60	271	412.0	39	301	3	1.09	49
PLS1183	RC	698103	7670221	228	-60	271	412.0	56	401	1	1.12	77
PLS1184	RC	699247	7674661	203	-60	271	80.0	81	6	15	0.19	83
PLS1184	RC	699247	7674661	203	-60	271	80.0	84	40	11	0.15	55
PLS1185	RC	699129	7674598	203	-60	271	80.0	84	8	8	0.84	160
PLS1186	RC	699113	7674546	205	-60	271	80.0	84	34	7	0.13	181
PLS1187	RC	698960	7674712	200	-60	271	100.0	85	68	14	2.10	109
PLS1188	RC	698277	7670204	234	-60	271	502.0	39	385	5	1.38	90
PLS1188	RC	698277	7670204	234	-60	271	502.0	24	62	4	0.35	150
PLS1188	RC	698277	7670204	234	-60	271	502.0	28	167	2	0.90	144
PLS1188	RC	698277	7670204	234	-60	271	502.0	36	308	13	1.58	85
PLS1188	RC	698277	7670204	234	-60	271	502.0	37	324	22	1.64	76
PLS1188	RC	698277	7670204	234	-60	271	502.0	38	353	4	1.06	58
PLS1188	RC	698277	7670204	234	-60	271	502.0	1	195	29	1.63	96
PLS1189	RC	698347	7670004	226	-60	271	424.0	39	393	15	1.66	100
PLS1189	RC	698347	7670004	226	-60	271	424.0	36	335	30	1.92	51
PLS1189	RC	698347	7670004	226	-60	271	424.0	24	61	5	1.41	144
PLS1189	RC	698347	7670004	226	-60	271	424.0	1	215	24	1.40	71
PLS1189	RC	698347	7670004	226	-60	271	424.0	2	0	9	0.81	290
PLS1194	RC	698004	7670391	211	-60	271	358.0	30	73	1	0.76	430
PLS1194	RC	698004	7670391	211	-60	271	358.0	39	270	5	0.51	58
PLS1194	RC	698004	7670391	211	-60	271	358.0	56	332	4	0.58	40
PLS1194	RC	698004	7670391	211	-60	271	358.0	1	0	12	1.07	138
PLS1194	RC	698004	7670391	211	-60	271	358.0	36	133	58	1.50	161
PLS1194	RC	698004	7670391	211	-60	271	358.0	34	124	9	1.45	179
PLS1195	RC	697942	7670589	221	-60	271	350.0	1	2	27	0.98	150
PLS1195	RC	697942	7670589	221	-60	271	350.0	34	134	3	0.68	233
PLS1195	RC	697942	7670589	221	-60	271	350.0	36	149	25	0.81	110
PLS1195	RC	697942	7670589	221	-60	271	350.0	39	199	2	0.38	41
PLS1195	RC	697942	7670589	221	-60	271	350.0	56	271	7	0.11	54
PLS1196	RC	697987	7671003	190	-60	271	276.0	1	34	4	0.40	365
PLS1196	RC	697987	7671003	190	-60	271	276.0	36	143	10	0.98	116
PLS1196	RC	697987	7671003	190	-60	271	276.0	37	164	3	0.60	322
PLS1196	RC	697987	7671003	190	-60	271	276.0	39	187	7	1.54	64
PLS1196	RC	697987	7671003	190	-60	271	276.0	56	248	4	1.74	44
PLS1200	RC	698334	7669894	203	-60	271	328.0	24	37	6	1.33	136
PLS1200	RC	698334	7669894	203	-60	271	328.0	34	277	6	0.81	72
PLS1200	RC	698334	7669894	203	-60	271	328.0	1	168	26	1.41	75
PLS1200	RC	698334	7669894	203	-60	271	328.0	36	316	11	0.99	61
PLS1203	RC	698250	7670695	195	-60	271	472.0	1	295	20	1.42	90
PLS1203	RC	698250	7670695	195	-60	271	472.0	4	39	3	0.84	187
PLS1203	RC	698250	7670695	195	-60	271	472.0	28	193	12	0.40	79
PLS1203	RC	698250	7670695	195	-60	271	472.0	35	334	8	1.79	88
PLS1203	RC	698250	7670695	195	-60	271	472.0	36	421	33	1.37	58
PLS1204	RC	698170	7670796	193	-60	271	400.0	39	375	6	1.82	82
PLS1204	RC	698170	7670796	193	-60	271	400.0	1	212	12	1.63	81
PLS1204	RC	698170	7670796	193	-60	271	400.0	28	126	16	1.77	133
PLS1204	RC	698170	7670796	193	-60	271	400.0	30	199	3	1.34	51
PLS1204	RC	698170	7670796	193	-60	271	400.0	34	232	5	1.44	75
PLS1204	RC	698170	7670796	193	-60	271	400.0	35	283	3	1.10	189
PLS1204	RC	698170	7670796	193	-60	271	400.0	36	317	27	1.94	59
PLS1204	RC	698170	7670796	193	-60	271	400.0	37	354	10	1.73	293

Appendix 2

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• The deposit has been sampled using a series of reverse circulation ("RC") holes and selected diamond holes for metallurgical sampling and checking of existing RC holes by drilling "twins". • Talison Minerals Pty Ltd ("Talison") conducted a 54 drill hole RC program in 2008 totalling 3,198m and 29 drill holes for a total of 2,783m in 2010. • Between 2010 and 2012, Talison changed its name to Global Advanced Metals ("GAM"). GAM completed 17 RC holes for 1,776m in 2012. • PLS has completed a total of 1,703 holes for 152,031 since acquiring the Pilgangoora Project. This includes 119,636m of exploration RC drilling, 19,808m infill RC grade control drilling, 5,475m of RC water exploration and 5,276m RC (Lynas Find-Dakota Minerals) and 6,843m of diamond drill core.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Talison/GAM RC holes were all sampled every metre, with samples split on the rig using a cyclone splitter. The sampling system consisted of a trailer 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 pre-numbered, draw-string calico sample bags (12-inch by 18-inch). • PLS RC holes were all sampled every metre within pegmatite zones and one metre into footwall & hanging wall country rock for the 2015 drilling. Samples were collected using a cyclone and cone splitter attached to the rig with a steel brace. 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

Criteria	JORC Code explanation	Commentary
		sample bags (12-inch by 14-inch). • In subsequent RC drilling completed by PLS during 2015 & 2016 samples were collected every metre in pegmatite zones and a combination of 2 to 6 metres into footwall & hanging wall country rock for waste rock characterisation studies. • PLS diamond core (PQ and HQ) was sampled by taking a 15-20mm fillet at 1m intervals within the pegmatite zones. NQ was cut and sampled as half-core. • Dakota RC samples were sampled every metre and collected using a rig-mounted cyclone splitter including a dust suppression system. Approximately 85% of the RC chips were split to 600mm x 900mm green plastic mining bags for storage and logging and 15% was captured at the sample port in draw-string calico sample bags. Diamond holes were PQ core and were twins of RC holes drilled for metallurgical purposes. Half core was used for metallurgical testwork, whilst quarter core was used for assaying. • PLS RC holes were sampled every metre, with samples split on the rig using a cyclone splitter. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system. The cyclone splitter was configured to split the cuttings at 85% to waste (to be captured in 600mm x 900mm green plastic mining bags) and 15% to the sample port in draw-string calico sample bags (10-inch by 14-inch).
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Talison/GAM holes are all RC, with samples split at the rig sent to the Wodgina site laboratory and analysed by XRF for a suite of 36 elements. • Selected pulps from the 2008 and 2010 drilling plus all pegmatite pulps from the 2012 drilling were collected and sent to SGS Laboratories in Perth for analysis of their lithium content. Lithium analysis was conducted by Atomic Absorption Spectroscopy (AAS). • PLS RC samples were split at the rig and sent to the Nagrom laboratory in Perth and analysed by XRF and ICP. • PLS Diamond core was cut at Nagrom (2015) and IMO (2016), and then

Criteria	JORC Code explanation	Commentary
		crushed and pulverised in preparation for analysis by XRF and ICP. • All Dakota RC 1m split samples were sent to Nagrom laboratory in Perth and analysed using ICP for 5 elements (Li_2O, Cs, Be, Fe and Ta). Quarter core samples were sent to SGS in Perth for analysis using XRF and ICP techniques for a suite of elements. • PLS RC holes drilled in 2017 and 2018 were sampled and split at the rig, samples are then sent to NAGROM Perth laboratory and analysed for a suite of 18 elements. Analysis was completed by XRF and ICP techniques.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• The drilling rig used in 2008 is not noted in any reports. • The 2010 drilling was completed by Australian Drilling Solutions using an Atlas Copco Explorac 220 RC truck mounted drill rig with a compressor rated to 350psi / 1200cfm and a booster rated to 800psi, with an expected 600psi down-hole. An auxiliary booster/compressor was not required at any point during the drilling. • The 2012 drilling was completed by McKay Drilling using an 8x8 Mercedes Truck-mounted Schramm T685WS rig with a Foremost automated rod-handler system and on-board compressor rated to 1,350cfm/500psi with an auxiliary booster mounted on a further 8x8 Mercedes truck and rated at 900cfm/350psi. Drilling used a reverse circulation face sampling hammer. The sampling system consisted of a trailer mounted cyclone with cone splitter and dust suppression system. • The PLS 2014 drilling was completed by Quality Drilling Services (QDS Kalgoorlie) using a track mounted Schramm T450 RC rig with a 6x6 truck mounted auxiliary booster & compressor. Drilling used a reverse circulation face sampling hammer with nominal 51/4” bit. The system delivered approximately 1800cfm @ 650- 700psi down hole whilst drilling. • The 2015 RC drilling was undertaken by Orbit Drilling (200 holes), Mt Magnet Drilling (44 holes) and Strike Drilling (11 holes). Orbit used two track mounted rigs; a Schramm T450 RC Rig, and a bigger Hydco 350 RC Rig. Mt Magnet also used a track mounted Schramm T450 RC Rig;

Criteria	JORC Code explanation	Commentary
		Strike drilling used an Atlas Copco X350 RC Rig mounted on a VD3000 Morooka rubber track base with additional track mounted booster & auxiliary compressor. • Diamond drilling during 2015 was completed by Orbit Drilling, using a truck mounted Hydco 1200H rig, drilling HQ sized core. • The 2016 resource RC drilling was completed by 4 track mounted RC rigs & 2 diamond rigs. 2 Atlas Copco X350 RC rigs mounted on a rubber track mounted Morooka base were used by Strike drilling together with track mounted booster & auxiliary compressor. 2 track mounted RC rigs were also used by Mt Magnet Drilling, a Schramm T450 rig and a UDR250 rig. • Diamond drilling during 2016 was completed by 2 Mt Magnet Drilling rigs drilling a combination of PQ, HQ & NQ size core. A truck mounted Hydco 650 rig and support truck and a TR1000 track mounted rig & track mounted support vehicle was used. • Dakota RC Drilling was predominantly reverse circulation drilling with 2 diamond drillholes. Holes range in dip from approximately 60º to vertical. Average depth of drilling is 85 m and ranging from 16 to 206 m. RC drilling was undertaken by two drilling companies. • Mount Magnet Drilling using a track-mounted rig (Schramm T450) and compressor (rated 1,350 cfm/800 psi) and 6WD support truck. The drill rig utilised a reverse circulation face sampling hammer, with 138mm bit. The sampling was conducted using a rig-mounted cyclone with cone splitter and dust suppression system. • Strike Drilling, using a truck-mounted KWL700 RC rig, which used a rig-mounted cyclone and cone splitter, and dust suppression system. • RC Drilling in 2018 was completed by Strike Drilling Pty Ltd using a KWL1000 truck mounted rig and Mt Magnet Drilling Pty Ltd using an RC300 track mounted Schramm drill rig. Drilling used a reverse circulation face sampling hammer. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Recoveries for the majority of the historical holes are not known, while recoveries for 2012 GAM holes were overwhelmingly logged as "good." • Recoveries for PLS RC and diamond holes were virtually all dry and overwhelmingly logged as "good." • Recoveries for Dakota RC and diamond holes were recorded as "good" by the geologist. • Sample recovery for PLS 2017 and 2018 holes were recorded as good for RC holes.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Whilst drilling through the pegmatite, rods were flushed with air after each metre drilled for GAM and PLS holes; and after every 6m for Dakota holes. In addition, moist or wet ground conditions resulted in the cyclone being washed out between each sample run. • Loss of fines as dust was reduced by injecting water into the sample pipe before it reached the cyclone. This minimises the possibility of a positive bias whereby fines are lost, and heavier, tantalum bearing material, is retained.
	• *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.*	• No material bias has been identified. • The assay results of duplicate RC and paired DD hole samples do not show sample bias caused by a significant loss of/gain in lithium values caused by loss of fines.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• 1m samples were laid out in lines of 20 or 30 samples with cuttings collected and geologically logged for each interval and stored in 20 compartment plastic rock-chip trays with hole numbers and depth intervals marked (one compartment per 1m). Geological logging information was recorded directly onto digital logging system and information validated and transferred electronically to Database administrators in Perth. The rock-chip trays are stored on site at Pilgangoora in a secured containerised racking library.

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• 1m samples were laid out in lines of 20 or 30 samples, with RC chips collected and geologically logged for each interval, and stored in 20 compartment plastic rock-chip trays annotated with hole numbers and depth intervals (one compartment per 1m composite). Geological logging information from GAM was recorded directly into an Excel spreadsheet using a Panasonic Toughbook laptop computer. For PLS and Dakota data were recorded directly onto hard copy sheets which were then transferred to an Excel spreadsheet. • For all PLS logging post Q2 2016, data was directly entered into the OCRIS data logging system to streamline data entry to the DataShed database management system. • The GAM rock-chip trays were later stored onsite at Wodgina in one of the exploration department sea containers. • The PLS rock-chip trays are all stored in racks in a secure sea container at Pilgangoora. • Dakota rock-chip trays are also stored at Pilgangoora. • PLS Diamond core was transported to Nagrom laboratories for cutting, sampling and detailed logging in 2015. • During the 2016 drilling program diamond core was logged in detail on site & dispatched to ALS laboratories in Perth for cutting, sampling & assaying. • During the 2017 PQ drilling program diamond core was logged in detail and cut on site & the filleted samples were sent to NAGROM in Perth for analysis. The remnant core is also stored at NAGROM for advanced metallurgical testwork. • All remnant drill core (excluding 2017 PQ core) is currently stored on pallets at Pilgangoora and is in the process of being transferred into a covered storage facility.

Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	• The database contains lithological data for all holes in the database.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• RC samples collected by Talison/GAM were generally dry and split at the rig using a cyclone splitter. • RC samples collected by PLS and Dakota were virtually all dry and split at the rig using a cone splitter mounted directly beneath the cyclone. • A 15 to 20mm fillet of core was taken every metre of PQ or HQ core. NQ core was halved. • Dakota drilled PQ sized diamond holes, and cut and sampled half core for metallurgical tests, and quarter core for assaying. • All 2017-2018 drill core was cut and sampled at the core logging facility at Pilgangoora.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• Talison/GAM/PLS samples have field duplicates as well as laboratory splits and repeats. • 110 sample pulps were selected from across the pegmatite zones for umpire checks of results from the Nagrom Lab by ALS Laboratory Perth in 2015. • Similarly 238 sample pulps were collected to check ALS Laboratory results by Nagrom in 2016. • 55 Dakota GAM Wodgina laboratory splits of the samples were taken at twenty metre intervals with a repeat/duplicate analysis also occurring every 20m and offset to the lab splits by 10 samples. In total one field duplicate series, one splits series and one lab duplicate/repeat series were used for quality control purposes assessing different stages in the sampling process. This methodology was used for the samples from the 2010 and 2012 drilling programs. Comparison of these splits and duplicates by using a scatter chart to compare results show the expected strong linear relationship reflecting the strong repeatability of the analysis process.

Criteria	JORC Code explanation	Commentary
		• The GAM and PLS RC drilling contains QC samples (field duplicates and laboratory pulp splits, GAM internal standard, selected CRM's for PLS), and have produced results deemed acceptable. • 110 sample pulps (10% of the June 2015 resource composite samples) were selected from across the pegmatite zones for umpire checks with ALS Laboratory Perth. 238 sample pulps from the 2016 drilling were selected from across the pegmatite zones for umpire checks with Nagrom. All closely correlated with the original assays. • Dakota field RC duplicates, pulp duplicates and coarse diamond field duplicates generally indicate good repeatability of samples. • Samples were selected from pegmatite pulps for re-assaying by ALS (original lab was Nagrom), and were also resampled and sent to ALS for analysis. • QAQC has been maintained regularly on the Nagrom results from the 2017-2018 drilling, with duplicates and standards showing consistent precision and accuracy.
	• *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.*	• For the Talison/GAM/PLS RC drilling, field duplicates were collected every 20m, and splits were undertaken at the sample prep stage on every other 20m. • Talison/GAM/PLS RC samples have field duplicates as well as laboratory splits and repeats. • PLS diamond holes have laboratory splits and repeats. • Duplicates submitted by Dakota included field RC duplicates, pulp duplicates from diamond core, and coarse crushed diamond core duplicates.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The Talison/GAM/PLS/Dakota drilling sample sizes are considered to be appropriate to correctly represent the tantalum mineralisation at Pilgangoora, based on the style of mineralisation (pegmatite), and the thickness and consistency of mineralisation.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total*	• The Talison/GAM samples were assayed by the Wodgina Laboratory, for a 36 element suite using XRF on fused beads. • During late 2014 &2015 the PLS samples were assayed at the Nagrom Perth laboratory, using XRF on fused beads plus ICP to determine Li_2O, ThO_2 and U_3O_8. • All the 2016 the PLS samples were assayed by ALS laboratories in Perth using a Sodium Peroxide fusion with ICPMS finish. • Dakota RC samples were assayed at NAGROM's laboratory in Perth, for a five element suite using XRF with a sodium peroxide fusion, and total acid digestion with an ICP-MS finish. Diamond drill samples were assayed at SGS's laboratory in Perth, for a 19 element suite using XRF with a sodium peroxide fusion, and total acid digestion with an ICP-MS finish. • Since 2017, PLS samples were assayed by NAGROM Perth laboratory and analysed for a suite of 9 elements via ME-MS91 Sodium Peroxide for ICPMS finish and Peroxide fusion with an ME-ICP89 ICPAES finish.
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• No geophysical tools were used to determine any element concentrations used in this resource estimate.
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• GAM Wodgina laboratory splits of the samples were taken at 20m intervals with a repeat/duplicate analysis also occurring every 20m and offset to the lab splits by 10 samples. In total one field duplicate series, one splits series and one lab duplicate/repeat series were used for quality control purposes assessing different stages in the sampling process. This methodology was used for the samples from the 2010 and 2012 drilling programs. Comparison of these splits and duplicates by using a scatter chart to compare results show the expected strong linear relationship reflecting the strong repeatability of the analysis process. • The GAM and PLS RC drilling contains QC samples (field duplicates and

Criteria	JORC Code explanation	Commentary
		laboratory pulp splits, GAM internal standard, selected CRM's for PLS), and have produced results deemed acceptable. • 110 sample pulps (10% of the June 2015 resource composite samples) were selected from across the pegmatite zones for umpire checks with ALS Laboratory Perth. 238 sample pulps from the 2016 drilling were selected from across the pegmatite zones for umpire checks with NAGROM. All closely correlated with the original assays. • Dakota field RC duplicates, pulp duplicates and coarse diamond field duplicates generally indicate good repeatability of samples.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• Infill drilling completed by GAM in 2012 and PLS in 2014 to 2016 confirmed the approximate width and grade of previous drilling. • Eight of the diamond holes were drilled as twins to RC holes, and compared to verify assays and lithology during 2015. • An additional 8 diamond holes were drilled as twins to RC holes to verify assays & lithology during 2016. The remainder were drilled for metallurgical or geotechnical testwork. • Dakota drilled two twin RC/DDH holes which show good constancy of mineralisation. • A number of the 2017 PQ diamond core holes were also drilled as twin holes to verify results from RC drilling. Results compare favourably.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• An electronic database containing collars, surveys, assays and geology was provided by GAM. • All GAM assays were sourced directly from Wodgina internal laboratory files. • All PLS assays were sourced directly from NAGROM as certified laboratory files during late 2014 and 2015. • All PLS assays were sourced directly from ALS as certified laboratory files in 2016.

Criteria	JORC Code explanation	Commentary
		• Dakota drilling data was supplied as Excel spreadsheets, and assays were supplied in original laboratory format. • All PLS assays were sourced directly from NAGROM as certified laboratory files in 2017 and 2018.
	• *Discuss any adjustment to assay data.*	• Tantalum was reported as Ta_2O_5 %, and converted to ppm for the estimation process. • A two-step adjustment has been applied to the Fe_2O_3 assays to account for (i) contamination of pulps by the steel bowl at the grinding stage, and (ii) contamination of RC chips with the drill bit and tube wear. Step one is to subtract 0.33% from all Nagrom Fe_2O_3 assays and 0.47% from all ALS Fe_2O_3 assays, step 2 is to subtract a further 0.3% from all PLS Minerals RC samples, and 0.10% from all historic RC samples. No second factor has been applied to the PLS diamond core Fe_2O_3 assays. • For Dakota assays Li_2O was used for the purposes of reporting, as reported by NAGROM and SGS. Ta was adjusted to Ta_2O_5 by multiplying by 1.2211. Fe was adjusted to Fe_2O_3 by multiplying by 1.4297. Fe_2O_3 values were adjusted by subtracting 0.52% Fe_2O_3 from all RC samples, which is the total correction factor for contamination caused by steel RC drill bits, and pulverising the samples in steel bowls.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Talison/GAM holes were surveyed using a DGPS with sub one metre accuracy by the GAM survey department. • PLS drill hole collar locations were surveyed at the end of the program using a dual channel DGPS with +/- 10cm accuracy on northing, easting & RL by PLS personnel. • No down hole surveys were completed for PLC001-039 (Talison). • Gyro surveys were completed every 5m down hole for PLC040-068 (Talison). • Eastman Single Shot surveys were completed in a stainless steel starter rod approximately every 30m for PLC069-076 & PLRC001-009 (GAM).

Criteria	JORC Code explanation	Commentary
		• Reflex EZ-shot, electronic single shot camera surveys were completed in a stainless steel starter rod for each hole for the PLS November-December 2014 RC drilling completed by QDS Drilling. Reflex instruments were also used by Mt Magnet Drilling for the PLS RC and diamond drilling completed in 2015 and 2016. Measurements were recorded at 10m, 40m, 70m and 100m (or EOH) for each hole. • Camteq Proshot, electronic single shot cameras were completed in a stainless steel starter rod for each hole from the PLS 2015 RC and diamond drilling campaigns completed by Orbit drilling. Camteq down hole survey equipment was also used for each hole for the PLS RC drilling by Strike. Measurements were recorded at 10m, 40m, 70m and 100m (or EOH) for each hole. • Downhole survey information was also collected using a KEEPER High-Speed Gyro Survey/Steering System Gyro instrument for selected RC and diamond holes completed in 2016. This included surveying a number of holes as an audit on the single shot surveys which compared well. • For the Dakota drilling drill-hole locations were located using a Navcom 3040 Real time GPS, with an accuracy of +/- 10 cm vertical and +/-5 cm horizontal. Down hole surveying of drill holes was conducted roughly every 30m using a Reflex multi-shot camera to determine the true dip and azimuth of each hole. Subsequently, more detailed down hole surveying was conducted to verify this data, using a High Speed True North Seeking Keeper Gyroscope.
	• *Specification of the grid system used.*	• The grid used was MGA (GDA94, Zone 50).
	• *Quality and adequacy of topographic control.*	• The topographic surface used was a 50cm resolution Digital Surface Model (DSM) derived by stereoscopic photogrammetric processes from 5cm resolution imagery. • Surveyed DGPS drill hole collar elevation data was then compared to this surface, and found to have an average difference of -0.7m. The differences in RL has been attributed to pad preparation which was done post generation of the DSM.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results*	• Drilling spacings vary between 12.5m to 200m apart.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• The continuity of the mineralization can confidently be interpreted from the geology of the pegmatite sheets, which can be mapped on surface as extending over several hundred metres in strike length.
	• *Whether sample compositing has been applied.*	• No compositing was necessary, as all samples were taken at 1m intervals.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The mineralisation dips between 20 and 60 degrees at a dip direction between 050 and 115 degrees for the majority of the domains. The Monster zone strikes 040 to 045 degrees and dips moderately to the south-east. In the Lynas area the pegmatite varies between horizontal and 50-degree dip towards the south and south-east. • The drilling orientation and the intersection angles are deemed appropriate.
	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• No orientation-based sampling bias has been identified.
Sample security	• *The measures taken to ensure sample security.*	• Talison sampling security measures are unknown, but assumed to be equal to industry standards since the drilling is as recent as 2008. • Chain of custody for GAM holes were managed by GAM personnel. Samples were delivered to the Wodgina laboratory by GAM personnel where samples were analysed. • Chain of custody for PLS holes were managed by PLS personnel. Samples for analysis were delivered to the Regal Transport Depot in Port Hedland by PLS personnel. Samples were delivered from the Regal Transport Depot in Perth to the Nagrom laboratory in Kelmscott by Regal Transport courier truck during late 2014 and 2015.

Criteria	JORC Code explanation	Commentary
		• Samples were delivered from the Regal Transport Depot in Perth to the ALS laboratory sites Perth by Regal Transport courier truck during 2016. • Samples for the 2017 and 2018 programs were transported using an independent contractor directly from Pilgangoora to Nagrom Laboratory. • Dakota samples were then delivered via road freight to Nagrom and SGS laboratories in Perth.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The collar and assay data have been reviewed by compiling a SQL relational database. This allowed some minor sample numbering discrepancies to be identified and amended. • Drilling locations and survey orientations have been checked visually in 3 dimensions and found to be consistent. • All GAM assays were sourced directly from the laboratory (Wodgina laboratory). It has not been possible to check these original digital assay files.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites*	• PLS owns 100% of tenements M45/1256, M45/333, M45/511. An application is current for M45/1266 (overlying E45/4523). • The Pilgangoora resource is located within M45/1256 and M45/333 which are 100% owned by PLS Minerals Limited. • The Lynas Find resource is located within M45/1266.
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• No known impediments.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Talison completed RC holes in 2008. • GAM completed RC holes between 2010 and 2012. • Dakota Minerals Ltd completed 63 holes for 5,276 metres and 2 diamond PQ holes for 99.7 metres in 2016. • Altura Mining drilling database subset (102 holes for 18,805m) as part of the PLS-Altura data sharing agreement signed in August 2016.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Pilgangoora pegmatites are part of the later stages of intrusion of Archaean granitic batholiths into Archaean metagabbros and metavolcanics. Tantalum mineralisation occurs in zoned pegmatites that have intruded a sheared metagabbro.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes, including easting and northing of the drill hole collar, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Refer to **Appendix 1** of this announcement. • Refer ASX announcement "Quarterly Activities Report" dated 27 April 2018.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Length weighed averages used for exploration results. Cutting of high grades was not applied in the reporting of intercepts in **Appendix 2**. • No metal equivalent values are used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Downhole lengths are reported in **Appendix 1** of this announcement. • It is noted that not all GAM samples analysed for Ta_2O_5 were also been analysed for Li_2O. All pegmatite pulps from the 2012 drilling were analysed for Li_2O but only selected pulps from the 2008 and 2010 drilling were. There are 7 intervals reported for Ta_2O_5 that were only partial analysed for Li_2O. This is no longer an issue with the significant additional PLS drilling and sampling.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See **Figures 2 to 7**.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Comprehensive reporting of drilling details of all holes post the January 2017 resource announcement has been provided in **Appendix 1** of this announcement. • Comprehensive reporting of drill details for the 2018 drilling has been previously reported in the PLS March 2018 quarterly activities report. **Appendix 2**. All other results have been previously reported.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All meaningful & material exploration data has been reported.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further planned drilling aims to test extensions to the currently modelled pegmatites zones and to infill where required to convert Mineral Resources to high confidence classification (i.e. Inferred to Indicated and Indicated to Measured).

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	• The original database was compiled by GAM and supplied as a Microsoft Access database. • The data have then been imported into a relational SQL Server database using DataShed™ (industry standard drill hole database management software). • Subsequent drilling data has been supplied in Excel templates, using drop down lists to verify codes and, more recently, PLS has used the OCRIS data logging software system which validates the data before it is imported to the SQL database. • The data are constantly audited and any discrepancies checked by PLS Minerals personnel before being updated in the database.
	• *Data validation procedures used.*	• Normal data validation checks were completed on import to the SQL database.

		• Historical data have not been checked back to hard copy results, but have been checked against previous databases supplied by GAM. • All logs are supplied as Excel spreadsheets/OCRIS files and any discrepancies checked and corrected by field personnel.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• John Holmes (Exploration Manager at Pilbara Minerals and a Competent Person) has been actively involved in the exploration programs with multiple site visits undertaken. Lauritz Barnes (Competent Person) has also completed two site visits.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The confidence in the geological interpretation is considered robust. Tantalum (occurring as tantalite) and lithium (occurring as spodumene) is hosted within pegmatite dykes intruded into basalts & sediments of the East Strelley greenstone belt. The area of the Pilgangoora pegmatite field within M45/1256 and M45/333 comprises a series of extremely fractionated dykes, sills and veins up to 65m thick within the immediate drilling area. These dykes and veins dip to the east at 20-60° and are parallel to sub-parallel to the main schistose fabric within the greenstones. • The geological interpretation is supported by drill hole logging and mineralogical studies completed by GAM (previously Talison) and Pilbara Minerals. • No alternative interpretations have been considered at this stage. • Grade wireframes correlate extremely well with the logged pegmatite veins. • The key factor affecting continuity is the presence of pegmatite.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The main modelled mineralized domains have a total dimension of 5,800m (north-south), ranging between 50-1,200m (east-west) in multiple veins and ranging between -370m and 220m RL (AMSL). The Monster and Southern areas each have a modelled strike of approximately 700m and Lynas Find 500m.

Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for Li_2O, Ta_2O_5 and Fe_2O_3. • Drill spacing typically ranges from 25m to 50m with some limited zones to 100m. Drill spacing at Central and Monster has been reduced to 12.5 x 12.5m in areas designated for Stage 1 mining operations. • Drill hole samples were flagged with wire framed domain codes. Sample data was composited for Li_2O, Ta_2O_5 and Fe_2O_3 to 1m using a best fit method. Since all holes were typically sampled on 1m intervals, there were only a very small number of residuals in the diamond core holes that were sampled to geological contacts. • Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population, no top-cuts were applied for Li_2O, and only one domain for Ta_2O_5. For Fe_2O_3, they typically varied between 1.0% and 9.0%. Some domains did not require top-cutting. • Directional variograms were modelled by domain using traditional variograms. Nugget values are moderate to low (between 15% and 30%) and structure ranges up to 500m. Domains with more limited samples used variography of geologically similar, adjacent domains. • Block model was constructed with parent blocks of 5m (E) by 25m (N) by 5m (RL) and sub-blocked to 2.5m (E) by 12.5m (N) by 2.5m (RL). For Lynas Find, it was constructed with parent blocks of 10m (E) by 10m (N) by 5m (RL) and sub-blocked to 5m (E) by5m (N) by 2.5m (RL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains. • Three estimation passes were used. The first pass had a limit of 75m, the second pass 150m and the third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 4 samples. The exceptions to this were domains with less than 20 samples, which used a maximum of 10 samples, a minimum of 4

		samples and maximum per hole of 3 samples for the second pass. • Search ellipse sizes were based primarily on a combination of the variography and the trends of the wire framed mineralized zones. Hard boundaries were applied between all estimation domains. • Validation of the block model included a volumetric comparison of the resource wireframes to the block model volumes. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing and elevation. Visual comparisons of input composite grades vs. block model grades were also completed. • As a potential deleterious element, Fe_2O_3 has been estimated for this resource, both as raw and factored Fe_2O_3. Identification of contamination during both the sample collection (steel from drill bit and rod wear) and assay phases (wear in the steel pulverisation containers) has resulted in a detailed statistical analysis and co-located data comparison between diamond core and RC twin hole assays. Factors have been applied to the raw Fe_2O_3 assays in two steps. Firstly, all Fe_2O_3 assays have been reduced by -0.33% (Nagrom analyses) or 0.47% (ALS analyses) to account for additional iron introduced by the steel pulverisation containers in the sample preparation phase. Secondly, PLS RC sample Fe_2O_3 assays have been reduced by -0.3% to account for additional iron introduced by wear on drill bits and rod in the drilling process, -0.1% to the historic RC for the same reason. No second factor has been applied to the PLS diamond core Fe_2O_3 assays.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnes have been estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Pegmatite boundaries typically coincide with anomalous Li_2O and Ta_2O_5 which allows for geological continuity of the mineralised zones. A significant increase in Fe_2O_3 at the contacts between the elevated iron mafic country rock and the iron poor pegmatites further refines the position of this contact in additional to the geological logs. At Lynas Find and a number of the main domains at Pilgangoora, internal zonation domains and/or grade shells were used to model

		mineralogical zonation. The pegmatite vein (and grade) contact models were built in Leapfrog™ Geo software and exported for use as domain boundaries for the block model.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Based on the orientations, thicknesses and depths to which the pegmatite veins have been modelled, plus their estimated grades for Ta_2O_5 and Li_2O, the expected mining method is open pit mining.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Historical mining operations and the presence of a tin-tantalum separation plant adjacent to a large tailings dump indicates that the assumption for potential successful processing of Pilgangoora ore is reasonable. • Nagrom Pty Ltd and Anzaplan have both completed scoping metallurgical testwork and have recovered both Ta_2O_5 and Li_2O of marketable qualities (refer ASX announcements 'Pilgangoora Testwork Confirms Potential" dated 25 May 2015 and "Quarterly Activities and Appendix 5B" dated 24 April 2015). • PLS released a Pre-Feasibility Study (refer ASX announcement dated 10 March 2016) which included information on mining parameters by consultants Mining Plus Pty Ltd and metallurgical testwork completed by ALS and Como Engineering Pty Ltd. • PLS more recently released a Definitive Feasibility Study (refer ASX announcement dated 20 September 2016) which included information on mining parameters by consultants Mining Plus Pty Ltd and further metallurgical testwork completed by ALS and Como Engineering Pty Ltd. • Pilot plant metallurgical testwork was also undertaken post completion of DFS. • Advanced metallurgical testwork utilising over 6 tonnes of pegmatite

		taken from drill core is currently in progress.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Appropriate environmental studies and sterilisation drilling are in progress for the confirmation of the locations of any waste rock dump (WRD) facilities.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Previously bulk density has been assigned on the basis of weathering state, based on a specific gravity study carried out in 2006 by the project holders at the time, Sons of Gwalia. Previous consultants as well as GAM personnel have referred to this study and used these figures for the previous resource estimations which were carried out in-house. • PLS completed specific gravity test work on nine samples across the deposit using both Hydrostatic Weighing (uncoated) on surface grab samples and Gas Pycnometry on RC chips which produces consistent results. Geological mapping and rock chip/grab sampling has not observed any potential porosity in the pegmatite. • PLS conducted hydrostatic weighing tests on uncoated HQ core samples to determine bulk density factors. A total of 419 core samples were tested. Measurements included both pegmatite ore and waste rock. • The bulk density factors applied to the current resource estimate are 2.53 g/cm^3 in the (minimal) oxide, and 2.72 g/cm^3 in fresh/transition zone material. • With mining recent initiated, further bulk density is planned.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	• The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling

	• *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	density, confidence in the underlying database and the available bulk density information. • All factors considered, the resource estimate has in part been assigned to Measured and Indicated resources with the remainder to the Inferred category.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• As part of the Definitive Feasibility Study completed in 2016, and subsequent project financing technical due diligence, multiple audits/reviews have been completed on the Pilgangoora Mineral Resource with no material flaws identified
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. • The statement relates to global estimates of tonnes and grade.