

## OUTSTANDING NEW DRILLING RESULTS CONFIRM SIGNIFICANT GROWTH POTENTIAL OF PILGANGOORA LITHIUM-TANTALUM PROJECT

*LATEST DRILLING RETURNS THICK, HIGH-GRADE INTERCEPTS UP TO 1KM BEYOND CURRENT RESOURCE ENVELOPE*

### **HIGHLIGHTS:**

- **Further broad intersections of high-grade lithium and tantalum** mineralisation in pegmatites returned from additional Reverse Circulation (RC) drill holes completed at Pilbara's 100%-owned **Pilgangoora Lithium-Tantalum Project**, in WA's Pilbara region.
- **Outstanding results received from the Priority 3 Area**, well outside of the current resource, with results including:
  - **35m @ 1.60% Li<sub>2</sub>O and 102ppm Ta<sub>2</sub>O<sub>5</sub> from 0m (PLS078) including:**
    - 4m @ 2.02% Li<sub>2</sub>O and 180ppm Ta<sub>2</sub>O<sub>5</sub> from 10m;**
  - **21m @ 1.69% Li<sub>2</sub>O and 78ppm Ta<sub>2</sub>O<sub>5</sub> from 29m (PLS079); including:**
    - 5m @ 2.06% Li<sub>2</sub>O and 68ppm Ta<sub>2</sub>O<sub>5</sub> from 29m;**
  - **9m @ 1.40% Li<sub>2</sub>O and 79ppm Ta<sub>2</sub>O<sub>5</sub> from 3m (PLS080); and**  
**24m @ 1.35% Li<sub>2</sub>O and 137ppm Ta<sub>2</sub>O<sub>5</sub> from 27m; including:**
    - 4m @ 2.11% Li<sub>2</sub>O and 135ppm Ta<sub>2</sub>O<sub>5</sub> from 27m.**
- **Additional results also confirm the prospectivity of the south-western pegmatite (Priority 2 Area)**, also outside of the current high-grade lithium resource, with intercepts including:
  - **9m @ 1.55% Li<sub>2</sub>O and 211ppm Ta<sub>2</sub>O<sub>5</sub> from 29m (PLS069);**
  - **19m @ 1.57% Li<sub>2</sub>O and 182ppm Ta<sub>2</sub>O<sub>5</sub> from 29m (PLS072); and**  
**2m @ 3.28% Li<sub>2</sub>O and 260ppm Ta<sub>2</sub>O<sub>5</sub> from 51m;**
  - **23m @ 1.82% Li<sub>2</sub>O and 132ppm Ta<sub>2</sub>O<sub>5</sub> from 59m(PLS073) including:**
    - 6m @ 2.17% Li<sub>2</sub>O and 92ppm Ta<sub>2</sub>O<sub>5</sub> from 59m; and**  
**8m @ 2.06% Li<sub>2</sub>O and 170ppm Ta<sub>2</sub>O<sub>5</sub> from 73m;**
  - **18m @ 1.50% Li<sub>2</sub>O and 177ppm Ta<sub>2</sub>O<sub>5</sub> from 22m (PLS073A); and**
  - **13m @ 1.54% Li<sub>2</sub>O and 90ppm Ta<sub>2</sub>O<sub>5</sub> from 50m(PLS074) including:**
    - 4m @ 2.14% Li<sub>2</sub>O and 128ppm Ta<sub>2</sub>O<sub>5</sub> from 59m.**
- **Further drilling to resume immediately in the Priority 3 Area** to in-fill and extend the mineralisation, allowing it to be included in an upgraded JORC resource estimate.

Australian strategic metals company Pilbara Minerals Ltd (ASX: PLS) is pleased to advise that recent drilling has intersected **significant widths of high-grade lithium-tantalum mineralisation** well beyond the current resource envelope at its flagship **Pilgangoora Project**, located near Port Hedland in WA.

The results confirm the significant additional growth potential of the Pilgangoora Project, which is already well-established as one of the largest hard rock lithium-tantalum deposits in the world.



Further to the results reported from the Priority 1 Resource Area on 15 April, Pilbara is pleased to advise that recent extensional drilling in the Priority 2 and 3 Areas has also been successful in intersecting significant widths of mineralised pegmatite.

A single line of RC drilling completed in the Priority 3 Area returned outstanding results including an outstanding thick intersections of **35m @ 1.60% Li<sub>2</sub>O and 102ppm Ta<sub>2</sub>O<sub>5</sub>** from surface in PLS078, **21m @ 1.69% Li<sub>2</sub>O and 78ppm Ta<sub>2</sub>O<sub>5</sub>** from 29m in PLS079 and **24m @ 1.35% Li<sub>2</sub>O and 137ppm Ta<sub>2</sub>O<sub>5</sub>** from 27m in PLS080.

**Further drilling is planned to commence immediately on 100m sections in order to define this potential new resource area.**

The results represent the balance of assays from the program of resource in-fill and extensional drilling which was completed at Pilgangoora in early April. Drilling resumed on the 30th April 2015 to complete the rest of the 2014 10,000m program.

Full intersections and assay results are provided in Table 1 (refer page 4 below).

The new phase of resource in-fill and extensional drilling at Pilgangoora builds on the updated Mineral Resource announced on 9 March 2015. The updated Pilgangoora resource comprises Indicated and Inferred Resources of **21.7Mt @ 0.022% Ta<sub>2</sub>O<sub>5</sub> (tantalite)** containing **10.7Mlbs Ta<sub>2</sub>O<sub>5</sub>** and a Lithium Resource of **16.6Mt @ 1.16% Li<sub>2</sub>O** (spodumene) containing **192,000 tonnes of lithium oxide**.

Pilbara's Executive Director, Mr Neil Biddle, said the latest batch of assays represented by far the most significant drilling results to come from the Pilgangoora Project to date.

"To intersect high-grade lithium-tantalum mineralisation in pegmatites over down-hole widths of up to 35m from surface in an area almost 1km beyond the currently defined resource is a fantastic result," Mr Biddle said.

"We have now confirmed that the pegmatites are strongly mineralised for significant distances beyond the 2.5km long resource zone, with extensive drilling now completed in the south-western extensions," he said. "Additional drilling will be carried out immediately in the Priority 3 Area to in-fill and extend this mineralisation for inclusion in a revised resource estimate.

"We have now accumulated significant evidence to show that the Pilgangoora deposit, which is already a globally significant hard rock tantalum resource, will grow considerably both in terms of overall size and grade," Mr Biddle continued.

"Given the extremely favourable outlook for the lithium market, we are looking forward to completing further drilling as quickly as possible and moving rapidly towards a revised resource estimate which we believe will clearly demonstrate that Pilgangoora is a world-class asset," he added.

#### **Pilgangoora Reverse Circulation Program – Detailed Discussion**

The Pilgangoora drilling program on Exploration Licences (EL45/2232) re-commenced on 11 March 2015 and was completed on the 3<sup>rd</sup> of April. The drilling in-filled the existing resource zone along the Eastern pegmatite body, as well as testing extensions to the known mineralisation in Priority Areas 2 and 3 (see Figure 1).

## Results

The Priority 2 Area is also known as the South Western pegmatite. 13 historical holes were drilled along this pegmatite, but only one drill hole in this area had been assayed for lithium.

The northern end (PLS065 to PL070) returned narrow intersections of +1% Li<sub>2</sub>O, but include some significant widths and grades of Ta<sub>2</sub>O<sub>5</sub>. The drilling results from the southern end (PLS071-PLS076) returned some significant intersections of both Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub> such as **19m @ 1.57% Li<sub>2</sub>O and 182ppm Ta<sub>2</sub>O<sub>5</sub>** from 29m in PLS072; **23m @ 1.82% Li<sub>2</sub>O and 132ppm Ta<sub>2</sub>O<sub>5</sub>** from 59m in PLS073; **18m @ 1.50% Li<sub>2</sub>O and 177ppm Ta<sub>2</sub>O<sub>5</sub>** from 22m in PLS073A; and **13m @ 1.54% Li<sub>2</sub>O and 90ppm Ta<sub>2</sub>O<sub>5</sub>** from 50m in PLS074.

**This mineralised pegmatite is open to the south.**

A single line of drilling has been completed in the Priority 3 Area, with all four holes on 7660990mN intersecting pegmatite some 500m south of the Priority 2 Area.

Results here were exceptional with widths in excess of 20m. This pegmatite is open north and south of drill section 7660990mN with highlights from this drilling including **35m @ 1.60% Li<sub>2</sub>O and 102ppm Ta<sub>2</sub>O<sub>5</sub>** from surface in PLS078, **21m @ 1.69% Li<sub>2</sub>O and 78ppm Ta<sub>2</sub>O<sub>5</sub>** from 29m in PLS079 and **24m @ 1.35% Li<sub>2</sub>O and 137ppm Ta<sub>2</sub>O<sub>5</sub>** from 27m in PLS080.



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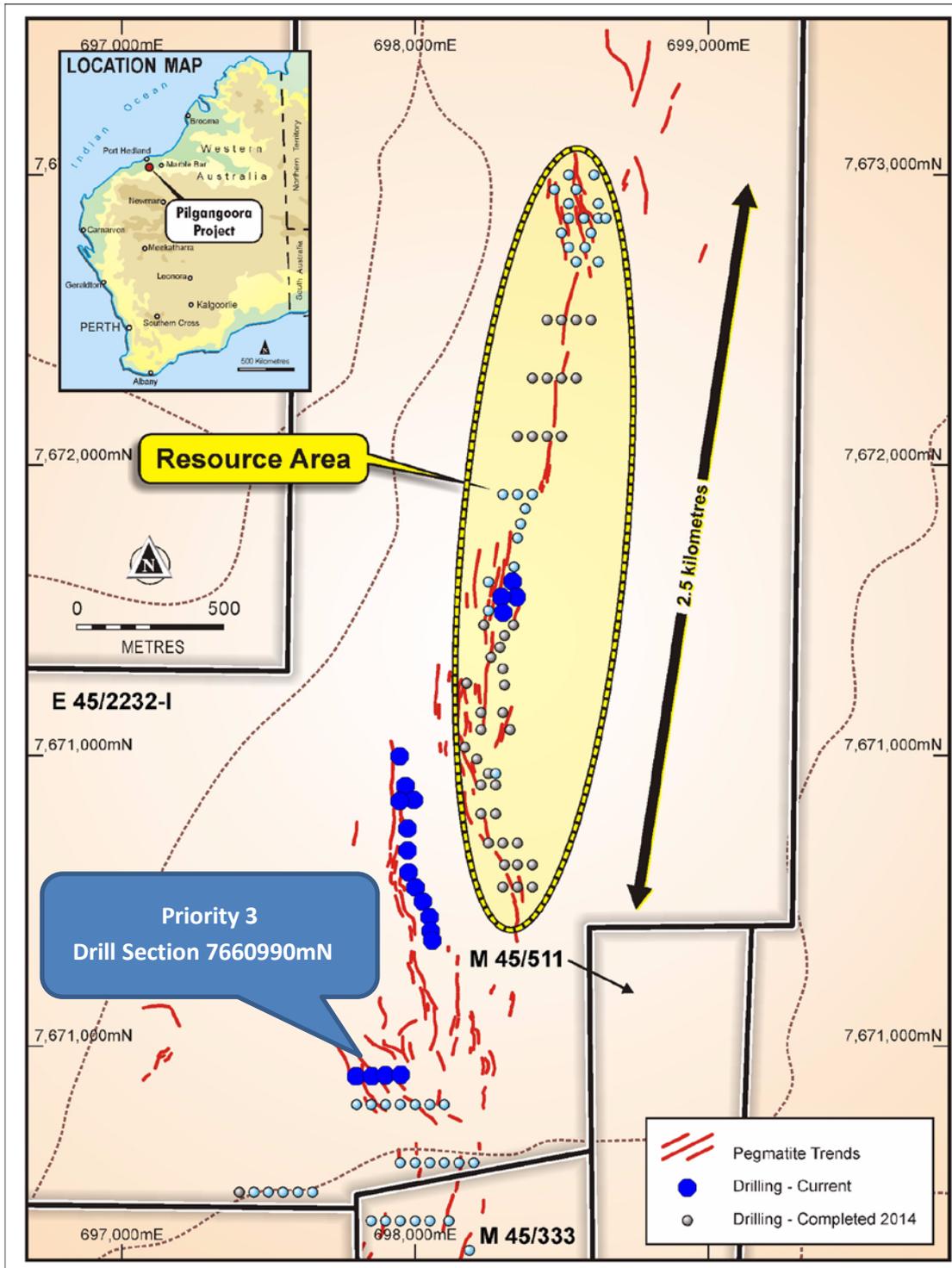


Figure 1 – Pilgangoora RC collar locations, EL45/2232

Table 1 on the following page lists all recently received assay results from drill holes PLS065 to PLS80



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**Table 1: Drilling Intersections (>1% Li<sub>2</sub>O)**

Hole Id	From (m)	To (m)	Thickness (m)	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> (ppm)
PLS065	7	10	3	1.36	233
	93	94	1	1.1	90
PLS066	11	14	3	2.12	193
PLS067	21	24	3	1.66	177
PLS068	57	58	1	1.36	220
PLS069	29	38	9	1.55	211
PLS070	33	34	1	1.04	110
	37	39	2	1.77	165
	41	42	1	1.15	90
PLS071	30	31	1	1.05	260
	36	38	2	1.16	275
PLS072	29	48	19	1.57	182
	51	53	2	3.28	260
PLS073	59	82	23	1.82	132
inc	59	65	6	2.17	92
and	73	81	8	2.06	170
PLS073A	22	40	18	1.5	177
	42	44	2	1.46	280
PLS074	50	63	13	1.54	90
inc	59	63	4	2.14	128
PLS075	58	82	24	1.53	103
	85	86	1	2.52	50
PLS076	57	58	1	1.29	40
	61	65	4	1.57	38
	70	75	5	1.47	128
	78	81	3	1.6	140
	107	108	1	1.35	280
PLS077	14	16	2	1.2	280
PLS078	0	35	35	1.6	102
inc	10	14	4	2.02	180
PLS079	9	15	6	1.75	182
	29	50	21	1.69	78
	29	34	5	2.06	68
PLS080	3	12	9	1.4	79
	14	16	2	1.27	0
	27	51	24	1.35	137
inc	37	41	4	2.11	135
	55	58	3	1.49	90



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**Table 2: Drilling Intersections (>100ppm Ta<sub>2</sub>O<sub>5</sub>)**

Hole Id	From (m)	To (m)	Thickness (m)	Ta <sub>2</sub> O <sub>5</sub> (>100ppm)	Li <sub>2</sub> O (%)
PLS065	6	11	5	218	0.99
	19	20	1	110	0.02
PLS066	11	14	3	193	2.11
	39	45	6	302	0.31
	51	52	1	120	0.05
	65	66	1	200	0.1
PLS067	21	27	6	263	1.09
	39	41	2	260	0.06
PLS068	29	30	1	150	0.05
	57	61	4	345	0.8
	69	70	1	130	0.42
PLS069	9	10	1	180	0.02
	28	41	13	189	1.21
	58	60	2	125	0.11
PLS070	17	20	3	120	0.67
	29	43	14	169	0.72
	48	50	2	200	0.03
PLS071	19	20	1	120	0.27
	22	40	18	231	0.34
PLS072	25	54	29	189	1.42
	71	72	1	120	0.16
PLS073	58	59	1	100	0.64
	63	64	1	160	1.48
	67	83	16	154	1.72
PLS073A	22	27	5	170	1.48
	30	44	14	236	1.34
PLS074	48	49	1	100	0.4
	55	68	13	143	1.06
PLS075	58	59	1	100	1.25
	62	63	1	100	1.07
	69	84	15	145	1.35
PLS076	67	80	13	115	1.12
	106	108	2	120	1.04
PLS077	7	10	3	150	0.14
	13	20	7	209	0.51
	67	68	1	100	0.77
	69	70	1	140	0.08
PLS078	4	5	1	180	0.07
	7	19	12	147	1.65
	22	25	3	120	1.67
	35	37	2	305	0.55



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PLS079	9	16	7	183	1.63
	26	30	4	135	1.01
	46	51	5	160	1.03
PLS080	7	8	1	100	1.83
	10	14	4	138	1.2
	28	31	3	313	0.98
	34	39	5	280	1.62
	43	44	1	100	1.52
	57	59	2	120	1.01

## About Pilbara Minerals

Pilbara Minerals (Pilbara) is a mining and exploration company listed on the ASX, specialising in the exploration and development of the specialty metals tantalum and lithium. Pilbara is currently developing the Tabba Tabba Tantalum deposit, located approximately 50km south-east of Port Hedland through a 50% Joint Venture. Pilbara is also drilling out the advanced 100%-owned Pilgangoora tantalum-lithium deposit close to Tabba Tabba.

The primary source of tantalum is from minerals such as tantalite, columbite, wodginite and microlite contained in pegmatite ore bodies. The largest deposits are located in Australia, Brazil and Africa. Tantalum's **major use is** in the production of electronic components, **especially for capacitors**, with additional use in components for chemical plants, nuclear power plants, airplanes and missiles. It is also used as a substitute for platinum.

The tantalum market is boutique in size with around 1,300 tonnes required each year. However the market is rapidly growing due to capacitor use in wireless and handheld devices. PLS's Tabba Tabba Project could supply approximately 7% of the annual market consumption over two years. There are two major buyers of tantalum raw product worldwide: HC Stark and Global Advanced Metals.

Lithium is a soft silvery white metal and has the highest electrochemical potential of all metals. In nature it occurs as compounds within hard rock deposits and salt brines. Lithium and its chemical compounds have a wide range of beneficial properties 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 electric bikes, motor vehicles, buses, trucks and taxis.

## Contact:

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## Competent Person's Statement

*The Company confirms it is not aware of any new information or data that materially affects the information included in the March 9, 2015 Pilgangoora Mineral Resource Estimate and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its maiden resource announcement made on March 9, 2015.*

*The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr John Young (Exploration Manager of Pilbara Minerals Limited). Mr Young is a shareholder of Pilbara Minerals. Mr Young is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Young consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.*

#### **Appendix 1 – Total Drilling Completed 3/04/2015**

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

## 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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Pilbara Minerals Limited (PLS) have completed to 23 drill hole RC program totalling 2184m</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>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).</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>PLS holes were all RC, with samples split at the rig, samples are then sent to NAGROM Perth laboratory and analysed for a suite of 18 elements. Analysis was completed by XRF and ICP techniques.</li> </ul>



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Criteria	JORC Code explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling was completed by a track mounted Schramm T450 with an automated rod-handler system and on-board compressor rated to 1,350cfm/800psi. Drilling used a reverse circulation face sampling hammer. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system.</li> </ul>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p>	<ul style="list-style-type: none"> <li>• Sample recovery was recorded as good for RC holes.</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Whilst drilling through the pegmatite, rods were flushed with air after each 6 metre interval.</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples were dry and recoveries are noted as “good.”</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 1m samples were laid out in lines of 20 or 30 samples with cuttings collected and geologically logged for each interval and stored in 20 compartment plastic rock-chip trays with hole numbers and depth intervals marked (one compartment per 1m). Geological logging information was recorded directly onto hard copy logging sheets and later transferred an Excel spreadsheet. The rock-chip trays are to be stored in PLS Perth office..</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Logging has primarily been quantitative.</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The database contains lithological data for all holes in the database.</li> </ul>
<b>Sub-sampling techniques and sample</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC samples were generally dry and split at the rig using a cyclone splitter, which is appropriate and industry standard.</li> </ul>



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Criteria	JORC Code explanation	Commentary
<b>preparation</b>	<i>sample preparation technique.</i>	
	<ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> </ul>	<ul style="list-style-type: none"> <li>• PLS samples have field duplicates, field standards and blanks as well as laboratory splits and repeats.</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Field duplicates were taken approximately every 20m, and standards and blanks every 50 samples.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> </ul>	<ul style="list-style-type: none"> <li>• PLS samples were assayed at NAGROM Pty Ltd 's Laboratory in Perth WA, for a 18 element suite using XRF on fused beads, and total acid digestion with an ICP finish.</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No geophysical tools were used to determine any element concentrations used in this resource estimate.</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• PLS duplicates of the samples were taken at twenty metre intervals with blanks and standards inserted every 50m. Comparison of duplicates by using a scatter chart to compare results show the expected strong linear relationship reflecting the strong repeatability of the sampling and analysis process.</li> <li>• The PLS drilling contains QC samples (field duplicates, blanks and standards plus laboratory pulp splits, and NAGROM internal standards), and have produced results deemed acceptable.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> </ul>	<ul style="list-style-type: none"> <li>Infill drilling completed by PLS in this program has confirmed the approximate width and grade of historical drilling.</li> <li>No use of twins</li> </ul>
	<ul style="list-style-type: none"> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> </ul>	<ul style="list-style-type: none"> <li>An electronic database containing collars, surveys, assays and geology is maintained by Trepanier Pty Ltd, an Independent Geological consultancy.</li> </ul>
	<ul style="list-style-type: none"> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Li was converted to Li<sub>2</sub>O for the purpose of reporting. The conversion used was Li<sub>2</sub>O = Li x 1.6</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>PLS holes were surveyed using DGPS in GDA94, Zone 50.</li> <li>Down hole surveying of drill holes was conducted using a Reflex EZ-shot, electronic single shot camera to determine the true dip and azimuth of each hole.</li> <li>Measurements were recorded at the bottom of each hole. Drill hole collar locations will be surveyed at the end of the program by a differential GPS (DGPS).</li> </ul>
	<ul style="list-style-type: none"> <li><i>Specification of the grid system used.</i></li> </ul>	<ul style="list-style-type: none"> <li>The grid used was MGA (GDA94, Zone 50)</li> </ul>
	<ul style="list-style-type: none"> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>The topographic surface used was supplied by GAM</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drilling spacings varied between 50m to 200m apart</li> </ul>
	<ul style="list-style-type: none"> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral</i></li> </ul>	<ul style="list-style-type: none"> <li>The interpretation of the mineralised domains are supported by a moderate drill spacing, plus both geological zones and assay grades can be</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<p>interpreted with confidence.</p> <ul style="list-style-type: none"> <li>No compositing</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> </ul>	<ul style="list-style-type: none"> <li>The mineralisation dips approximately 45-60 degrees at a dip direction of 090 degrees</li> <li>The drilling orientation and the intersection angles are deemed appropriate.</li> </ul>
	<ul style="list-style-type: none"> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>No orientation-based sampling bias has been identified.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody for PLS holes were managed by PLS personnel.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sampling techniques for historical assays have not been audited.</li> <li>The collar and assay data have been reviewed by checking all of the data in the digital database against hard copy logs.</li> <li>All PLS assays were sourced directly from the NAGROM laboratory</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land</b>	<ul style="list-style-type: none"> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>PLS owns 100% of tenement E45/2232</li> </ul>



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Criteria	JORC Code explanation	Commentary
<b>tenure status</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No known impediments.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Talison completed RC holes in 2008</li> <li>GAM completed RC holes between 2010 and 2012.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to Appendix 1 this announcement.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> </ul>	<ul style="list-style-type: none"> <li>Length weighed averages used for exploration results reported in Table 1 and 2 . Cutting of high grades was not applied in the reporting of intercepts in Table 1 and 2</li> <li>No metal equivalent values are used.</li> </ul>



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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Downhole lengths are reported in Table 1 and 2</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>See Figures 1</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive reporting of drill details has been provided in Appendix 1 of this announcement.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All meaningful &amp; material exploration data has been reported.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The aim is to upgrade the existing JORC compliant resource calculation.</li> </ul>