



PILBARA MINERALS LIMITED

ACN 112-425-788

ASX ANNOUNCEMENT

17th June, 2014

PILBARA SIGNIFICANTLY EXPANDS WA STRATEGIC METALS PORTFOLIO WITH MAIDEN TANTALUM-LITHIUM RESOURCE AT PILGANGOORA

NEWLY ACQUIRED PROJECT PROVIDES ATTRACTIVE GROWTH OPPORTUNITY ALONGSIDE TABBA TABBA TANTALUM PROJECT

HIGHLIGHTS:

- **Maiden JORC compliant tantalum-lithium resource defined for the newly acquired Pilgangoora Project** in WA's Pilbara region, calculated from a historical database comprising 100 RC drill-holes totalling 7,757m:
 - *Inferred Resource of **10.4M tonnes @ 0.024% Ta₂O₅ (tantalite)** containing **5,500,000lbs Ta₂O₅**;*
 - *Within the 10.4M tonnes Inferred Resource is **8.6M tonnes @ 1.01% Li₂O (spodumene)** containing **87,000 tonnes of lithium**;*
- **Higher grade tantalite and spodumene zones** within pegmatites provide focus for next phase of drilling.
- **Significant potential for future resource growth** through further in-fill and step-out drilling.
- **Pilgangoora is located just 55km from Pilbara's Tabba Tabba Tantalum Project** with the potential to provide long term mine life extension to Tabba Tabba operations.
- **Tabba Tabba treatment plant upgradeable** with the addition of a flotation section which would enable extraction of Pilgangoora spodumene.

Pilbara Minerals Ltd (ASX: PLS) is pleased to advise that it has laid strong foundations for its longer term growth strategy as a strategic metals producer in the Pilbara region of WA after unveiling a substantial maiden **JORC compliant hard rock tantalum-lithium resource** for its newly acquired **Pilgangoora Project**.

The new resource, comprising **5.5 million pounds of contained tantalum** and **87,000 tonnes of contained lithium**, adds significantly to the Company's portfolio of strategic metal assets in the Pilbara region and provides an attractive future growth opportunity alongside its soon-to-be-commissioned Tabba Tabba Tantalum Project.

This is consistent with Pilbara's broader strategic objective to leverage off its initial production base at Tabba Tabba to establish a **longer-term development pipeline of strategic metals assets in the Pilbara region**. Permitting is in its final stages for the Tabba Tabba Project, with commissioning of the plant scheduled for August 2014.

The Pilgangoora Project comprises five tenements, including two Exploration Licences (EL45/2232 and EL45/2241) and three Mining Leases (M45/78, M45/333 and M45/511) covering an area of 31km², which are prospective for tantalum and lithium mineralisation.

Pilgangoora is being acquired from Global Advanced Metals Wodgina Pty Ltd (“GAMW”), owner of the nearby world-class Wodgina Tantalum Mine, located 25km south-west of Pilgangoora. The Project is located immediately north of and along strike from Altura Mining Limited’s (ASX: AJM) Pilgangoora Lithium Deposit, which hosts a JORC Resource of **25.2Mt @ 1.23% Li₂O** (lithium oxide).²

GAMW completed three phases of Reverse Circulation (RC) drilling on EL45/2232 between 2008 and 2012. The database supplied by GAMW contains 100 drill holes totalling 7,757m. Broad-spaced RC drilling has been undertaken along a strike length of 3.2km over the main pegmatite field on EL45/2232.

JORC Resource Estimation

The initial work undertaken by Pilbara at Pilgangoora has involved the estimation of a maiden 2012 JORC compliant mineral resource for the Project using all historical data plus the updated drilling supplied by GAM and applying modern resource estimation methods. The calculation was carried out by independent resource consultancy Trepanier Pty Ltd (Trepanier), resulting in the estimation of an Inferred Resource.

The reporting of all domains (capturing material above 0.01% Ta₂O₅) results in an Inferred Mineral Resource estimate of:

- **10.4 million tonnes @ 0.024% Ta₂O₅ containing 5,500,000 lb of Ta₂O₅**

Within this, there is **8.6 million tonnes @ 1.01% Li₂O containing 87,000 tonnes of lithium oxide.**

The data utilised for the estimation process includes a drill-hole database of 100 holes plus surface geological mapping (Figure 1) and current topographical survey data. The geological model was developed by Pilbara and Trepanier using a constrained envelope that lies within the host pegmatite only.

The envelope was wire-framed using both geological logging information (in particular logging of zoning within the pegmatite and assay data for Ta₂O₅ and Li₂O. Note that there were insufficient samples analysed to allow populating of Li₂O into 7 of the 20 domains, hence the different tonnage reported above for the Li₂O resource. Details of the data used for the estimation, site inspection information and the quality control checks completed on the data are documented in Appendix 1 and 2 (Tables 1 to 3).

The Pilgangoora pegmatite field comprises a series of extremely fractionated dykes and veins up to 15m thick within the immediate drilling area (Figure 1). These dykes and veins dip to the east at 45-60° and thicken slightly with depth, are parallel to sub-parallel to the main schistose fabric within the greenstones and are typically separated by 20-30m horizontally (Figures 2 to 4).

Updated Exploration Target

Due to the initial estimation of the Inferred Resource being in excess of 10M tonnes based on the limited RC drilling completed to date, Pilbara Minerals has updated its **Exploration Target¹ to 15 – 25 million tonnes @ 200 - 300ppm Ta₂O₅ and 1.2-1.5% Li₂O** (Table 1). An Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource in compliance with the JORC Code and it is uncertain if further exploration will result in the estimation of a Mineral Resource as defined by the JORC Code.

Table 1 – Pilgangoora Tantalum-Lithium Exploration Target¹ on E45/2232

Exploration Target ¹	Tonnes (Mt)	Grade Li ₂ O %	Grade Ta ₂ O ₅ ppm
Northern Area	5-10	1.2 - 1.5	200 - 300
Central & Southern Area	10-15	1.2 - 1.5	200 - 300
TOTAL	15-25	1.2 - 1.5	200 - 300

Exploration Target¹ : The potential quantities and grades are conceptual in nature and there has been insufficient exploration to date to define a Mineral Resource. It is not certain that further exploration will result in the determination of a Mineral Resource under the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code” (JORC 2012). The Exploration Target is not being reported as part of any Mineral Resource or Ore Reserve.

Pilbara has set a longer-term objective of defining a significant hard rock lithium and tantalum resource. Initial RC drilling in Q4 2014 (subject to funding) will focus on the higher-grade tantalum lenses. Exploration results from the initial phase of RC drilling is expected to be available in December 2014. Pilbara will concurrently scope the potential for utilising PLS’ proposed Tabbatabba Tantalum Project plant and infrastructure, located 55km to the north.

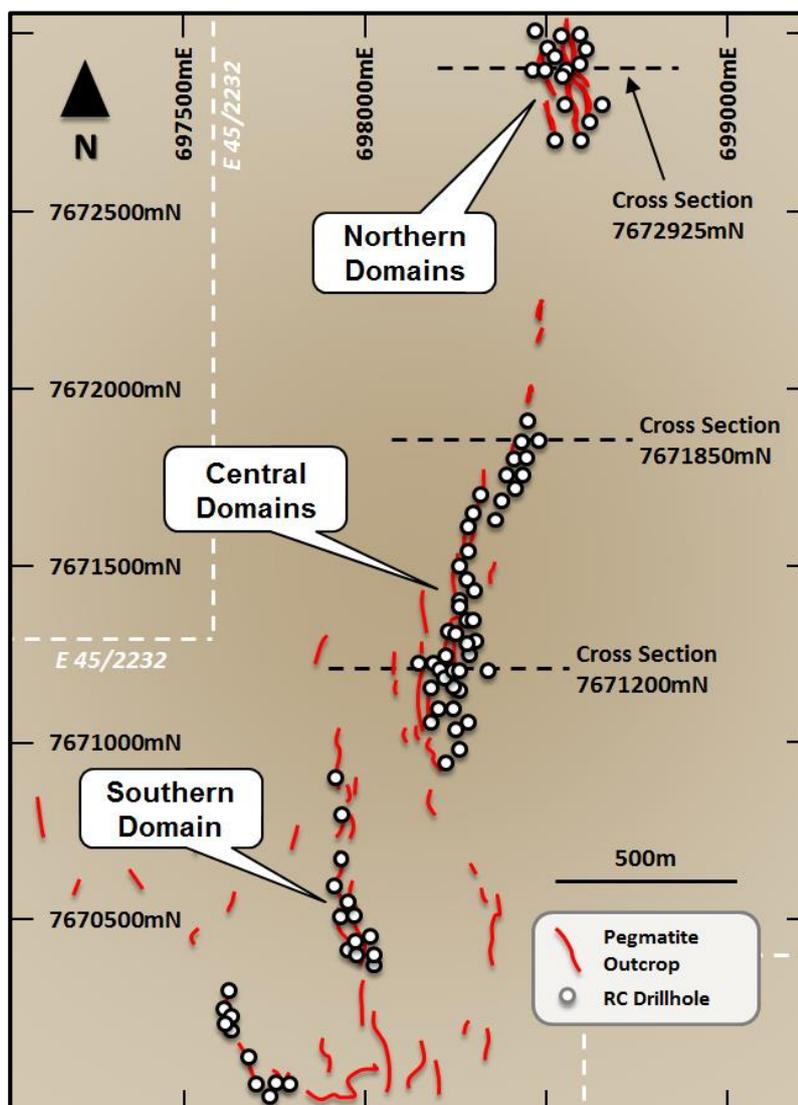


Figure 1 – Pilgangoora RC Collar Locations within Exploration licence E45/2232

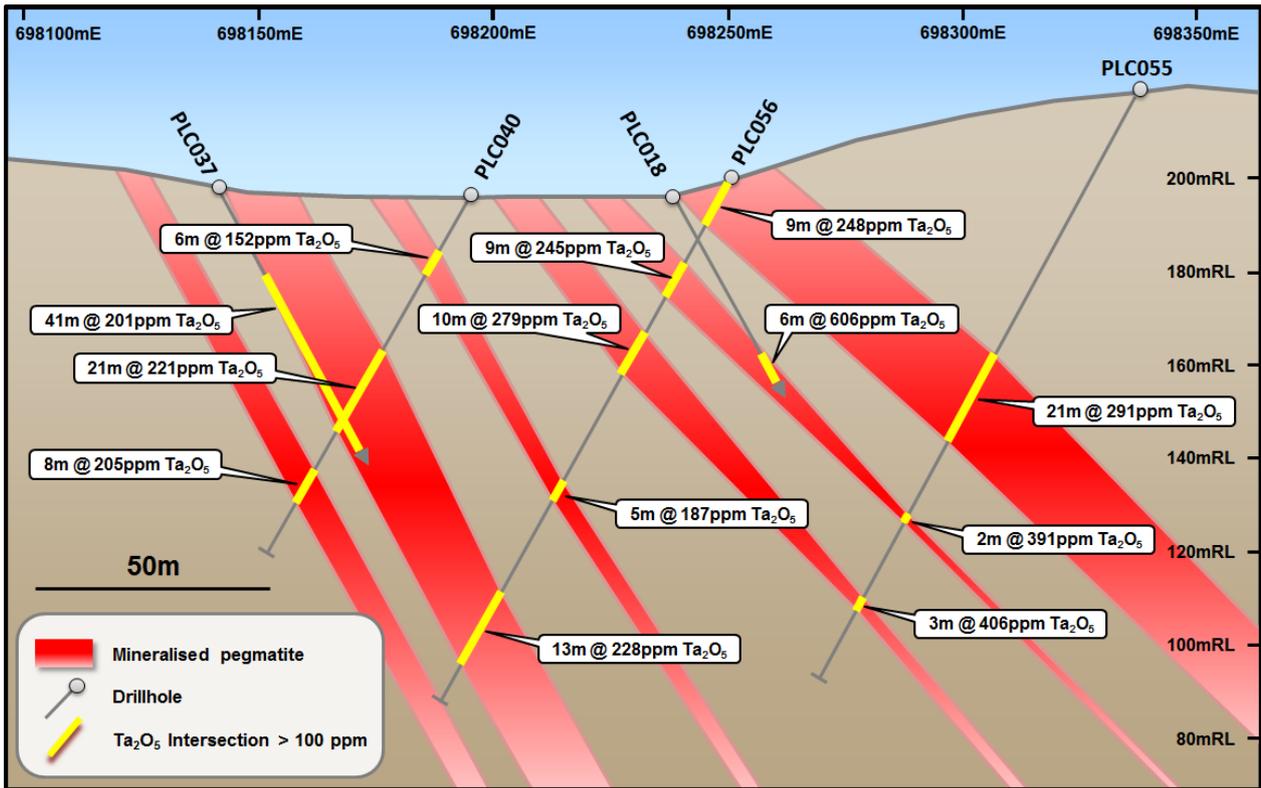


Figure 2 – Geology Cross Section 7,671,200mN

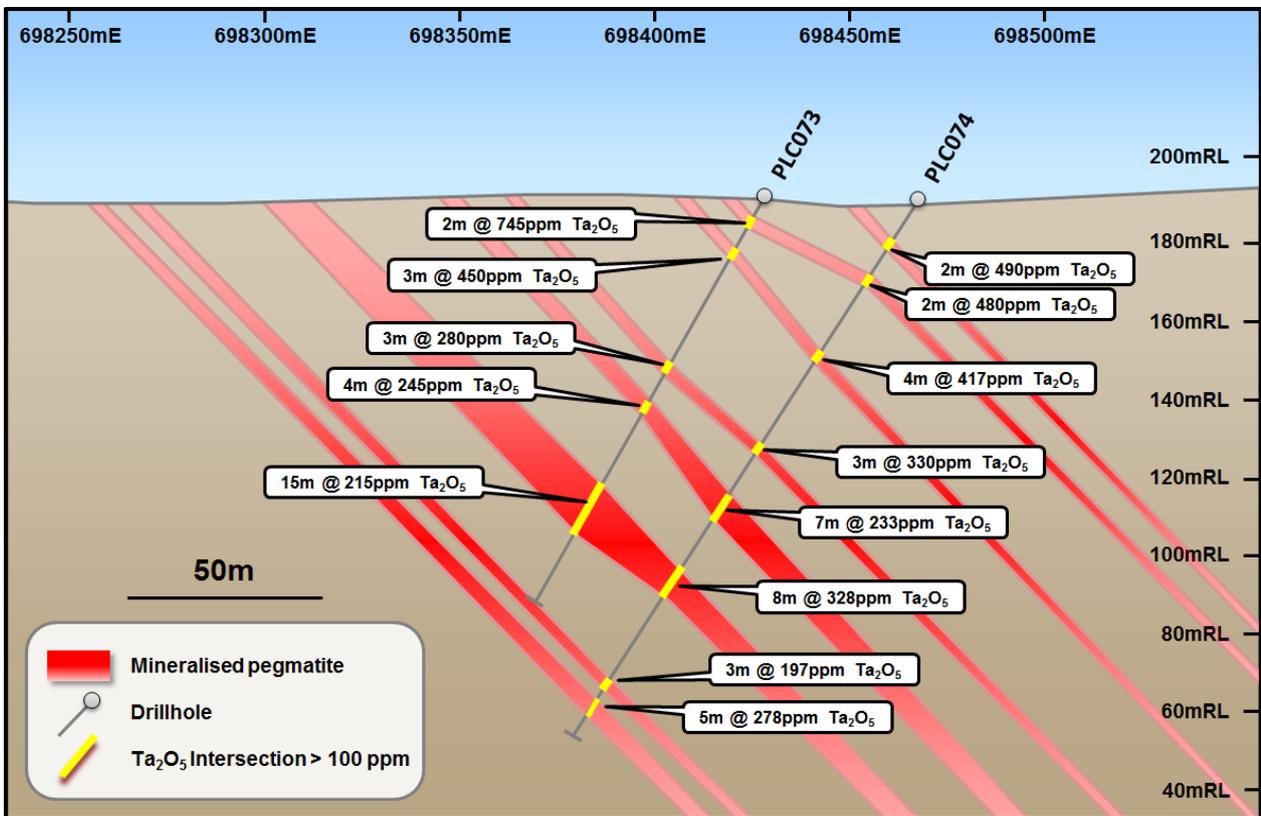


Figure 3 – Geology Cross Section 7,671,850mN

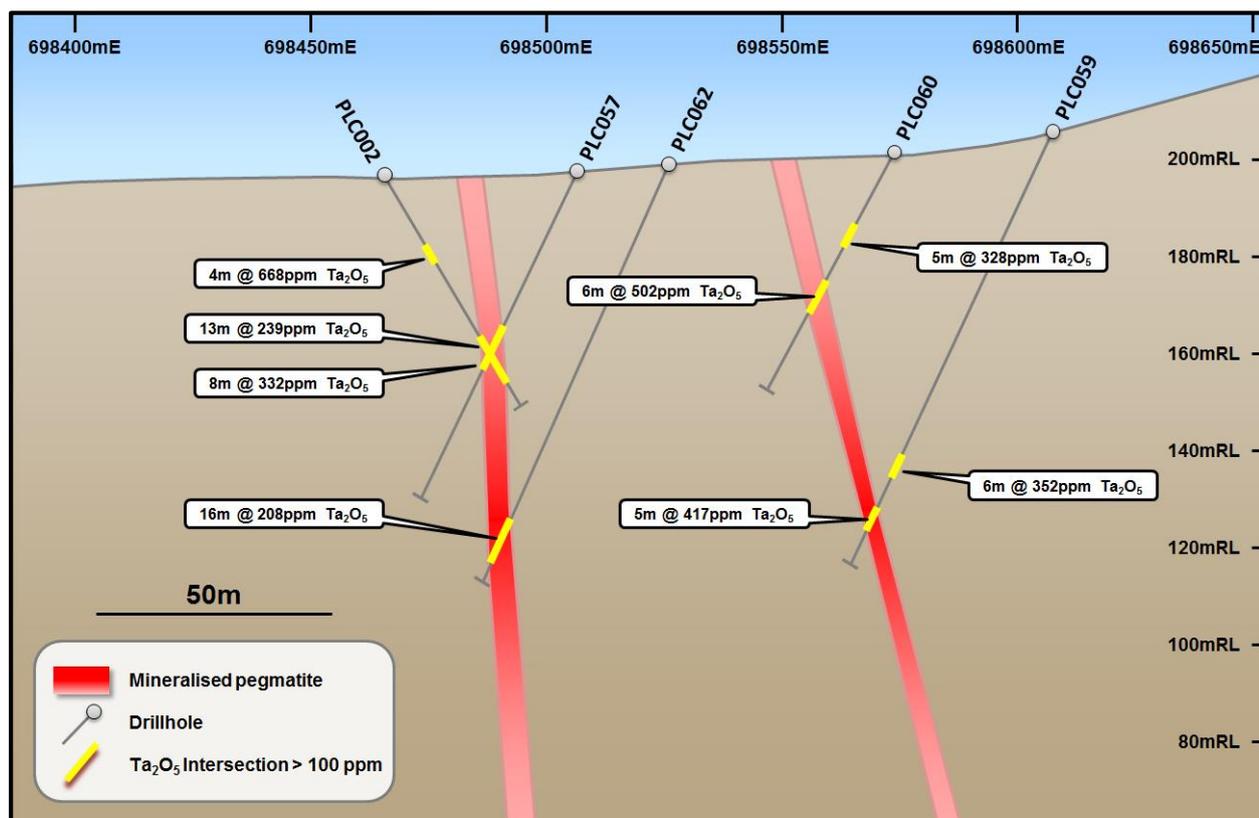


Figure 4 – Geology Cross Section 7,672,925mN

Pilgangoora History

Mining of four small hard rock tantalum prospects has been undertaken in the area around Pilgangoora, with recorded production taking place from 1947 to 1978. Tantalum production from Pilgangoora (Hickman 1983) was obtained from alluvial and colluvial placer deposits. However, ore grades were quite variable as mineralogy ranged from good-grade manganotantalite to manganocolumbite (Miles 1945 et al). Concentrate production at Pilgangoora up to 1977 is recorded at **33.31t of tantalite and 13.1t of tantalite–columbite** (Featherstone 2004).

In 1968, Ishihara Sangyo Kaisha Limited carried out sampling of about 30 creeks and gullies in the area. The survey established resources of about 0.288Mm³ of alluvial sediments containing an estimated 220g/m³ Ta₂O₅ and 100g/m³ of both Nb₂O₅ and SnO₂, using a cut-off grade of 60g/m³ (Hickman, 1983).

Pilgan Mining continued large-scale mining operations between 1978 and 1982, and then continued by the Pilgangoora Mining Venture from 1992 to 1996. These operations produced approximately 140t of tantalite concentrates, from an estimated 800,000 bank cubic metres (UBCMU) of screened alluvial and eluvial material.

Pilgans's disused tin–tantalum gravity separation plant is still in evidence at Pilgangoora and is situated adjacent to a large tailings dump. This plant is relatively sophisticated and has several trommel screens, vibrating jigs, and a series of spiral separators and shaking tables.

In recent years, a number of companies have shown an interest in the Pilgangoora area. In 2000, Kanowna Lights drilled over 27 auger holes in areas of tantalum enriched placer deposits. From this drilling the company estimated that the area had a resource of 400,000m³ of treatable sands from placer deposits that contained about 19.05t of Ta₂O₅ concentrate.

In November 2001, Haddington International Resources (now Altura Mining Limited – ASX: AJM) acquired Australian Tantalum which held several exploration licences to the north and west of GAMW’s Pilgangoora Project. Altura recently completed a Scoping Study on its Pilgangoora Lithium Project which has resources of **25.2 million tonnes @ 1.23% Li₂O, containing 310,000 tonnes of lithium oxide (see AJM’s ASX announcement - 3rd October 2012).**

Altura’s Scoping Study outlined an 830,000tpa operation to produce up to 150,000tpa of spodumene concentrate at +6% Li₂O.

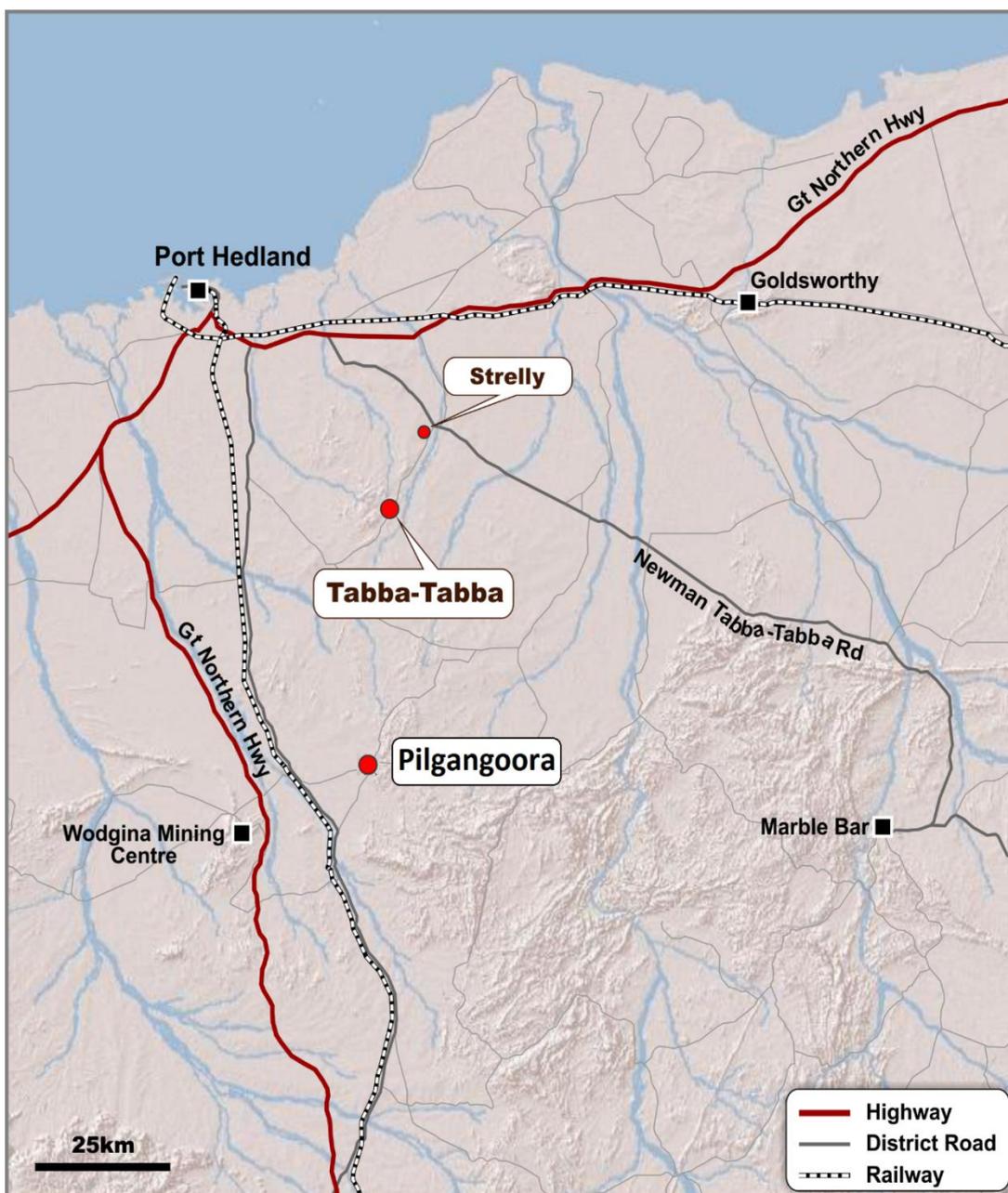


Figure 5 – Location Plan Pilgangoora Project

More Information:

What is Lithium?

Lithium (Li) is recovered from the mineral spodumene and lithium-rich brines. It is used in a range of products such as ceramics, glass, batteries and pharmaceuticals. Lithium use has expanded significantly in recent years due to increasing use in rechargeable batteries in portable electronic devices and in batteries and electric motors for hybrid and electric cars.

What is Tantalum?

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 Starck and Global Advanced Metals.

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

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 Young (Executive and Chief Geologist of Pilbara Minerals Limited). Mr Young is a shareholder of Pilbara Minerals. Mr Barnes and Mr Young are members of the Australasian Institute of Mining and Metallurgy and have 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 is the Competent Person for the database, geological model and completed the site inspection. Mr Barnes is the Competent Person for the database and the resource estimation. Mr Barnes and Mr Young consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

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 E45/2232 comprises a series of extremely fractionated dykes and veins up to 15m thick within the immediate drilling area. These dykes and veins dip to the east at 45-60° and thicken slightly with depth, are parallel to sub-parallel to the main schistose fabric within the greenstones and are typically separated by 20-30m horizontally (Figures 2 to 4).

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. Sections are generally spaced 25m to 50m (Grid North), while holes on section are spaced 5m to 50m apart (see Figures 1 to 4 above).

Sampling and sub-sampling techniques

Sample information used in resource estimation was derived exclusively from RC drilling. The drill samples have been geologically logged and sub-sampled for lab analysis.

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). No geophysical tools were used to determine any element concentrations used in the resource estimate.

Cut-off grades

Grade envelopes have been wireframed to an approximate 100ppm Ta₂O₅ cut-off which generally coincides with pegmatite boundaries and which allows for geological continuity of the mineralised zones.

Estimation Methodology

Grade estimation was by Ordinary Kriging (“OK”) for Ta₂O₅ and Li₂O using GEOVIA Surpac™ software. Note that there were insufficient samples analysed to allow populating of Li₂O into 7 of the 20 domains. 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, top-cuts of between 550ppm and 1100ppm for Ta₂O₅ were applied to 6 of the 20 domains prior to estimation. Outlier analysis identified that no top-cut was required for Li₂O.

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 has all been classified 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 Ta₂O₅ and Li₂O, the potential mining method is considered to be open pit mining.

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.

APPENDIX 1

Exploration Results – Downhole intercepts (to be read in conjunction with JORC Table 1)

HoleID	Hole Type	MGA Northing	MGA Easting	RL	Dip	MGA Azimuth	Hole Depth	Domain	Depth From	Interval Length	Ta ₂ O ₅ ppm	Li ₂ O pct ¹
PLC002	RC	7,672,900	698,471	200	-60	78	59	24	43	13	239	
PLC008	RC	7,672,702	698,588	197	-60	276	45	25	0	19	318	
PLC008A	RC	7,672,701	698,587	197	-60	94	30	25	0	15	262	
PLC013	RC	7,671,700	698,315	190	-60	90	121	8	58	58	202	
PLC013A	RC	7,671,652	698,293	192	-60	96	76	8	43	25	194	
PLC014	RC	7,671,600	698,277	195	-60	96	80	8	34	25	259	1.5 ²
PLC014A	RC	7,671,544	698,273	195	-70	100	64	8	23	25	224	
PLC015	RC	7,671,500	698,254	193	-60	90	85	8	15	8	194	
								10	48	8	184	
								15	62	6	416	
PLC016	RC	7,671,400	698,247	193	-60	72	60	8	0	2	459	
								10	15	2	99	
								15	40	3	134	
PLC016A	RC	7,671,342	698,275	199	-60	227	80	8	7	21	212	
								15	31	4	274	
								7	46	16	363	
								6	62	16	253	
PLC016B	RC	7,671,381	698,254	194	-60	109	79	8	1	33	294	0.9
								15	54	4	174	0.7
								7	65	8	153	0.7
PLC017	RC	7,671,300	698,240	196	-70	88	50	8	0	4	174	
PLC017A	RC	7,671,305	698,239	196	-60	50	88	7	40	45	318	1.4
PLC017B	RC	7,671,300	698,246	197	-60	88	80	8	0	20	227	
PLC018	RC	7,671,200	698,238	196	-60	84	50	8	0	4	84	
								7	41	6	606	
PLC018A	RC	7,671,169	698,231	196	-60	140	60	8	0	25	259	
								7	27	6	362	
PLC019	RC	7,671,095	698,236	211	-60	90	52	28	10	4	154	1.4
								8	21	19	270	0.9
								7	45	4	213	1.4
PLC019A	RC	7,671,093	698,190	206	-60	266	64	4	3	8	174	
								3	27	15	197	
								5	53	7	173	
PLC023	RC	7,670,670	697,927	203	-90	90	60	2	0	7	243	
PLC024A	RC	7,670,540	697,939	221	-60	0	30	2	0	21	191	
PLC025A	RC	7,670,512	697,961	223	-80	20	34	2	0	28	174	1.3
PLC026	RC	7,670,401	697,980	218	-60	96	124	2	43	81	118	
PLC026A	RC	7,670,438	697,967	221	-60	80	60	2	0	9	314	
PLC032	RC	7,670,370	698,026	211	-60	260	70	2	12	34	135	
PLC033	RC	7,670,403	698,016	214	-60	268	80	2	11	12	188	
PLC034	RC	7,670,448	698,001	223	-60	274	80	2	0	18	162	
PLC036	RC	7,671,223	698,179	192	-60	281	80	4	1	6	193	0.8
								3	24	13	211	1.7
								5	60	3	201	0.2

HoleID	Hole Type	MGA Northing	MGA Easting	RL	Dip	MGA Azimuth	Hole Depth	Domain	Depth From	Interval Length	Ta ₂ O ₅ ppm	Li ₂ O pct ¹
PLC037	RC	7,671,215	698,143	196	-60	110	63	3	19	41	201	
PLC038	RC	7,671,068	698,175	203	-60	264	80	4	0	2	149	
								3	9	13	187	
								5	37	9	200	
PLC039	RC	7,671,145	698,179	203	-70	280	77	4	2	7	180	
								3	24	14	266	
								5	59	3	124	
PLC040	RC	7,671,204	698,195	195	-60	265	87	4	13	6	152	
								3	36	21	221	
								5	66	8	205	
PLC041	RC	7,671,173	698,220	196	-61	277	93	7	4	4	250	
								4	36	4	115	
								3	60	14	200	
								5	80	7	212	
PLC042	RC	7,671,249	698,214	193	-60	270	99	6	6	4	430	0.5 ²
								4	43	5	159	
								3	62	10	261	
								5	88	5	232	
PLC043	RC	7,671,681	698,373	193	-60	275	117	12	35	5	210	
								16	43	3	248	
								8	65	9	190	
								15	102	9	296	
PLC044	RC	7,671,625	698,348	194	-60	264	105	16	28	11	179	
								8	52	12	266	
								15	88	13	426	0.4 ²
PLC045	RC	7,671,253	698,279	207	-60	233	81	8	20	20	242	1.3
								7	56	7	297	1.8
								6	68	4	233	0.1
PLC046	RC	7,671,285	698,281	206	-60	277	87	8	19	19	222	1.6
								7	53	8	298	1.7
								6	69	7	200	0.7
PLC047	RC	7,671,341	698,288	202	-60	269	93	8	12	21	211	1.3
								15	50	3	92	0.8
								7	57	14	392	1.1
								6	71	8	318	1.4
PLC048	RC	7,671,429	698,303	205	-59	239	81	8	27	29	292	1.5
								15	61	2	73	0.6
PLC049	RC	7,671,452	698,270	198	-71	263	87	8	0	15	234	1.0
								10	33	2	65	0.3
								15	40	2	174	1.4
								6	60	11	338	1.1
PLC050	RC	7,671,143	698,256	204	-61	266	123	8	15	17	407	1.8
								7	34	2	304	0.2
								6	51	3	147	0.2
								4	75	6	204	1.0
								3	88	28	197	1.3
PLC051	RC	7,671,058	698,273	219	-60	273	135	28	20	8	211	1.2
								8	40	1	269	2.2

HoleID	Hole Type	MGA Northing	MGA Easting	RL	Dip	MGA Azimuth	Hole Depth	Domain	Depth From	Interval Length	Ta ₂ O ₅ ppm	Li ₂ O pct ¹
PLC051	RC	7,671,058	698,273	219	-60	273	135	4	69	8	153	1.1
								3	80	17	201	1.7
								5	113	5	143	0.9
PLC052	RC	7,671,036	698,237	213	-60	266	93	28	13	2	197	1.7
								8	18	3	160	1.3
								4	40	11	256	1.4
								3	52	26	272	1.8
								5	80	4	179	1.2
PLC053	RC	7,670,982	698,256	208	-60	284	125	3	40	30	230	1.7
								5	100	3	150	
PLC054	RC	7,670,940	698,219	199	-59	273	75	3	4	28	196	
								5	67	2	93	
PLC055	RC	7,671,201	698,338	218	-59	262	141	8	64	21	291	
								7	103	2	391	
								6	123	3	406	0.8 ²
PLC056	RC	7,671,200	698,252	200	-59	269	129	8	2	9	248	
								7	21	9	245	
								6	38	10	279	
								4	75	5	187	
								3	102	13	228	
PLC057	RC	7,672,954	698,496	190	-60	273	69	24	26	8	332	1.1
PLC059	RC	7,672,949	698,599	199	-60	272	93	27	78	5	417	1.0
PLC060	RC	7,672,906	698,580	203	-60	265	57	27	33	6	502	1.4
PLC061	RC	7,672,891	698,504	203	-60	270	45	24	21	5	212	1.3
PLC062	RC	7,672,930	698,524	198	-61	265	93	24	74	16	208	0.9
PLC063	RC	7,672,794	698,648	210	-59	273	81	25	53	6	432	1.5
PLC064	RC	7,672,743	698,619	202	-60	277	57	25	32	7	261	1.0
PLC065	RC	7,671,343	698,297	202	-89	49	141	8	25	23	213	
								15	52	10	319	
								7	98	6	550	0.7 ²
								6	108	2	281	
PLC066	RC	7,671,291	698,291	206	-89	108	117	8	23	30	278	0.6 ²
								7	90	6	365	0.8 ²
								6	106	4	155	
PLC067	RC	7,671,144	698,257	205	-77	276	147	8	14	16	248	
								7	38	8	233	
								6	65	3	313	
								4	93	11	201	
								3	125	17	211	
PLC068	RC	7,671,303	698,232	195	-60	270	81	7	5	5	158	1.1
								6	20	9	351	0.9
PLC069	RC	7,671,748	698,387	191	-60	270	89	12	29	7	201	0.4
								16	45	3	223	0.5
								8	70	13	312	1.0
PLC070	RC	7,671,748	698,422	193	-60	270	149	14	12	5	318	0.5
								12	63	10	177	0.9
								8	98	13	235	0.8
PLC070	RC	7,671,748	698,422	193	-60	270	149	15	135	8	248	0.6

HoleID	Hole Type	MGA Northing	MGA Easting	RL	Dip	MGA Azimuth	Hole Depth	Domain	Depth From	Interval Length	Ta ₂ O ₅ ppm	Li ₂ O pct ¹
PLC072	RC	7,671,797	698,446	192	-60	270	161	12	30	6	400	0.7
								16	43	7	286	0.2
								8	76	14	213	0.7 ²
								18	7	2	235	
								14	31	3	413	0.1
								12	68	3	267	
PLC073	RC	7,671,845	698,429	191	-60	270	119	16	76	6	255	0.6
								8	108	15	217	0.7 ²
								15	140	7	216	0.6
								17	5	2	745	
								14	14	3	450	0.1
								12	49	3	280	0.8
PLC074	RC	7,671,847	698,467	189	-60	270	163	16	60	4	245	0.5
								8	84	15	215	0.6
								18	11	2	490	0.4
								17	21	2	480	
								14	45	3	417	0.6
								12	73	3	330	0.6
PLC075	RC	7,671,899	698,440	187	-60	270	155	16	89	7	233	0.8
								8	111	8	328	0.5
								15	145	3	197	0.7
								20	150	5	278	0.5
								18	2	2	345	
								17	10	1	240	
PLC076	RC	7,671,714	698,407	194	-60	270	161	14	16	2	785	
								12	49	2	205	0.0
								16	54	5	266	0.1
								8	84	14	182	0.7
								15	122	3	427	0.3
								20	136	9	348	0.4
PLC076	RC	7,671,714	698,407	194	-60	270	161	14	0	2	145	
								12	55	12	193	0.8
								8	93	12	228	0.8
								15	121	11	234	0.6 ²
								19	145	9	297	0.3

Notes:

¹ Where Li₂O field is blank, it is because the interval was not sampled and analysed specifically for Li₂O.

² When compared to interval reported for Ta₂O₅, the interval length sampled and analysed specifically for Li₂O is a subset of the reported interval. This is the case for 8 of the intervals reported in the table above, including:

HoleID	Domain	Ta ₂ O ₅ interval	Li ₂ O interval
PLC014	8	25 m	21 m
PLC042	6	4 m	1 m
PLC044	15	13 m	5 m
PLC055	6	3 m	2 m
PLC065	7	6 m	1 m
PLC066	8	30 m	4 m
PLC066	7	6 m	4 m
PLC071	8	14 m	13 m
PLC072	8	15 m	14 m
PLC076	15	11 m	7 m

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	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. 	<ul style="list-style-type: none"> The deposit has been sampled using a series of reverse circulation (“RC”) holes. 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.
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> Talison/GAM RC holes were 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).
	<ul style="list-style-type: none"> Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘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 	<ul style="list-style-type: none"> 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).

Criteria	JORC Code explanation	Commentary
	<p><i>mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	
<p><i>Drilling techniques</i></p>	<ul style="list-style-type: none"> <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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> 	<ul style="list-style-type: none"> 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.
<p><i>Drill sample recovery</i></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <ul style="list-style-type: none"> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> 	<ul style="list-style-type: none"> Recoveries for the majority of the historical holes are not known, while recoveries for 2012 GAM holes were overwhelmingly logged as “good.” Whilst drilling through the pegmatite, rods were flushed with air after each metre drilled (GAM 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.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> No material bias has been identified.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	<ul style="list-style-type: none"> 1m composites 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 annotated with hole numbers and depth intervals (one compartment per 1m composite). Geological logging information was recorded directly into an Excel spreadsheet using a toughbook laptop computer. The rock-chip trays were later stored onsite at Wodgina in one of the exploration department sea containers.
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	<ul style="list-style-type: none"> Logging has primarily been quantitative, using RC chips.
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> The database contains lithological data for all holes in the database.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	<ul style="list-style-type: none"> RC samples collected by Talison/GAM were generally dry and split at the rig using a cyclone splitter.
	<ul style="list-style-type: none"> Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	<ul style="list-style-type: none"> Talison/GAM samples have field duplicates as well as laboratory splits and repeats.
	<ul style="list-style-type: none"> Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. 	<ul style="list-style-type: none"> For the Talison/GAM drilling, field duplicates were taken approximately every 20m, and splits were undertaken at the sample prep stage on every other 20m. Talison / GAM samples have field duplicates as well as laboratory splits and repeats.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> The Talison/GAM drilling sample sizes are considered to be appropriate to correctly represent the tantalum mineralization at Pilgangoora, based on the style of mineralization (pegmatite), and the thickness and consistency of mineralization.
Quality of assay data & laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	<ul style="list-style-type: none"> The Talison/GAM samples were assayed by the Wodgina Laboratory, for a 36 element suite using XRF on fused beads.
	<ul style="list-style-type: none"> For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 	<ul style="list-style-type: none"> No geophysical tools were used to determine any element concentrations used in this resource estimate.
	<ul style="list-style-type: none"> Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> 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. The GAM drilling contains QC samples (field duplicates and laboratory pulp splits, GAM internal standard), and have produced results deemed acceptable.

Criteria	JORC Code explanation	Commentary
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> 	<ul style="list-style-type: none"> Infill drilling completed by GAM in 2012 confirmed the approximate width and grade of previous drilling. No use of twins
	<ul style="list-style-type: none"> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> 	<ul style="list-style-type: none"> An electronic database containing collars, surveys, assays and geology was provided by GAM. All GAM assays were sourced directly from Wodgina internal laboratory files.
	<ul style="list-style-type: none"> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> Tantalum was reported as Ta₂O₅ %, and converted to ppm for the estimation process.
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Talison/GAM holes were surveyed using DGPS. 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. Measurements were recorded approximately every 30m and at the bottom of each hole. Drill hole collar locations were later surveyed by the GAM survey department using a differential GPS (DGPS) to an accuracy of +/-20mm.
	<ul style="list-style-type: none"> <i>Specification of the grid system used.</i> 	<ul style="list-style-type: none"> The grid used was MGA Zone 50, datum GDA94.
	<ul style="list-style-type: none"> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> The topographic surface used was sourced from open file SRTM data (90m per pixel), and clipped to cover the Pilgangoora area. Surveyed drillhole collar elevation data was compared to the SRTM data and incorporated into the constructed topographic surface.
<p><i>Data spacing and distribution</i></p>	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> Talison Completed 54 RC drillholes in 2008 GAM completed 46 between 2010 and 2012 Drilling spacings varied between 25m to 50m apart
	<ul style="list-style-type: none"> <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the</i> 	<ul style="list-style-type: none"> Despite the moderate drill spacing, the continuity of the mineralization can confidently be interpreted from the geology of

Criteria	JORC Code explanation	Commentary
	<p><i>Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> • <i>Whether sample compositing has been applied.</i> 	<p>the pegmatite sheets, which can be mapped on surface as extending over several hundred metres in strike length.</p> <ul style="list-style-type: none"> • No compositing was necessary, as all samples were taken at 1m intervals.
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<ul style="list-style-type: none"> • The mineralisation dips approximately 45 degrees at a dip direction of 90 degrees. • The drilling orientation and the intersection angles are deemed appropriate. • No orientation-based sampling bias has been identified.
<p><i>Sample security</i></p>	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • 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.
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • The collar and assay data have been reviewed by compiling a new 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). However 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
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • An agreement is in place between GAMW and PLS for the purchase of tenements E45/2232 and E45/2241.
	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • No known impediments.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • Talison completed RC holes in 2008 • GAM completed RC holes between 2010 and 2012.
<i>Geology</i>	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • The Pilgangoora pegmatites are part of the later stages of intrusion of Archaean granitic batholiths into Archaean metagabbros and metavolcanics. Tantalum mineralisation occurs in zoned pegmatites that intruded a sheared Archaean metagabbro.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> • <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> • <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</i> 	<ul style="list-style-type: none"> • Refer to Appendix 1 in this announcement.

Criteria	JORC Code explanation	Commentary
<p><i>Data aggregation methods</i></p>	<p><i>Person should clearly explain why this is the case.</i></p> <ul style="list-style-type: none"> • <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> • <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • Length weighed averages used for exploration results are reported in Appendix 1 of this announcement. Cutting of high grades was not applied in the reporting of intercepts. • No metal equivalent values are used.
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).</i> 	<ul style="list-style-type: none"> • Downhole lengths are reported in Appendix 1 of this announcement. • It is noted in previous sections that not all samples analysed for Ta₂O₅ have also been analysed for Li₂O. All pegmatite pulps from the 2012 drilling were analysed for Li₂O but only selected pulps from the 2008 and 2010 drilling were. As noted in Appendix 1, there are 10 intervals reported for Ta₂O₅ that were only partial analysed for Li₂O – see Note 2 for Appendix 1.
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> • <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> • See Figures 1 to 4.
<p><i>Balanced reporting</i></p>	<ul style="list-style-type: none"> • <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> • Comprehensive reporting of drilling details have been provided in Appendix 1 in this announcement.

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All meaningful & material exploration data has been reported.
<i>Further work</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Further planned drilling aims to test extensions to the currently modelled pegmatites zones and to infill where required to increase the number of samples analysed for Li₂O in mineralised domains currently with insufficient data to allow for reporting Li₂O where Ta₂O₅ resources have already been reported.

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
<i>Database integrity</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 drillhole database management software).
	<ul style="list-style-type: none"> Data validation procedures used. 	<ul style="list-style-type: none"> Normal data validation checks were completed on import to the SQL database. Data has not been checked back to hard copy results, but has been checked against previous databases supplied by GAM.
<i>Site visits</i>	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and 	<ul style="list-style-type: none"> John Young (Executive and Chief Geologist - Pilbara Minerals and

Criteria	JORC Code explanation	Commentary
	<p><i>the outcome of those visits.</i></p>	<p>Competent Person) has visited the site in November 2013.</p>
<p><i>Geological interpretation</i></p>	<ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i> 	<ul style="list-style-type: none"> • The confidence in the geological interpretation is considered robust. Tantalum is hosted within pegmatite dykes intruded into mafic meta volcanics and amphibolites of the East Strelley greenstone belt. The area of the Pilgangoora pegmatite field within E45/2232 comprises a series of extremely fractionated dykes and veins up to 15m thick within the immediate drilling area. These dykes and veins dip to the east at 45-60° and thicken slightly with depth, are parallel to sub-parallel to the main schistose fabric within the greenstones and are typically separated by 20-30m horizontally (Figures 2 to 4). • The geological interpretation is supported by drill hole logging and mineralogical studies completed by GAM (previously Talison). • 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.
<p><i>Dimensions</i></p>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • The main central mineralized zone has dimensions of 980m (north-south), ranging between 50-100m (east-west) in multiple veins and ranging between 20m and 220m RL (AMSL).
<p><i>Estimation and modelling techniques</i></p>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for both Ta₂O₅ and Li₂O. Note that there were insufficient samples analysed to allow populating of Li₂O into 7 of the 20 domains. • Drill spacing typically ranges from 25m to 50m. • Drillhole samples were flagged with wireframed domain codes.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlation between variables.</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<p>Sample data was composited for Ta₂O₅ and Li₂O to 1m using a best fit method. Since all holes were sampled on 1m intervals, there were no residuals.</p> <ul style="list-style-type: none"> • 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, an upper cut of between 550ppm and 1100ppm for Ta₂O₅ was applied to six of the domains prior to estimation. No top-cuts were required for Li₂O. • Directional variograms were modeled by domain using traditional variograms. Nugget values are low (around 10%) and structure ranges up to 110m. 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). 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 wireframed 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 wireframed mineralized zones.

Criteria	JORC Code explanation	Commentary
		<p>Hard boundaries were applied between all estimation domains.</p> <ul style="list-style-type: none"> 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.
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnes have been estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> Grade envelopes have been wireframed to an approximate 100ppm Ta₂O₅ cut-off allowing for continuity of the higher-grade zone. Based on visual and statistical analysis of the drilling results and geological logging of the pegmatite zoning, this cut-off tends to be exactly the same or very close to the natural geological contact between the pegmatite and host mafic rocks.
Mining factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Based on the orientations, thicknesses and depths to which the pegmatite veins have been modelled, plus their estimated grades for Ta₂O₅ and Li₂O, the potential mining method is considered to be open pit mining.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual 	<ul style="list-style-type: none"> 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

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	<p>reasonable.</p>
<p><i>Environmental factors or assumptions</i></p>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Appropriate environmental studies and sterilisation drilling would be completed prior to determination of the location of any potential waste rock dump (WRD) facility.
<p><i>Bulk density</i></p>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> 	<ul style="list-style-type: none"> 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. In the absence of any additional data the same bulk density factors have been applied to the current resource estimate; namely 2.53 g/cm³ in the transition zone, and 2.65 g/cm³ in fresh material.
<p><i>Classification</i></p>	<ul style="list-style-type: none"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>Whether appropriate account has been taken of all relevant</i> 	<ul style="list-style-type: none"> 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

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	<p><i>factors (ie 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).</i></p> <ul style="list-style-type: none"> • <i>Whether the result appropriately reflects the Competent Person’s view of the deposit.</i> 	<p>density information.</p> <ul style="list-style-type: none"> • All factors considered; the resource estimate has been assigned at this stage to the Inferred category.
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> • Whilst Mr. Barnes (Competent Person) is considered Independent of PLS, no third party review has been conducted.
<p><i>Discussion of relative accuracy/ confidence</i></p>	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> • 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.