

## Eastman PGE: Successful RC Drilling Program Completed

16 August 2023

### Highlights:

- 2023 RC drilling program recently completed
- 12 holes were drilled for 1462m, including 10 holes at the Brumby Prospect testing 1.4km of ultramafic strike
- Geological logging of the RC chips confirmed the Brumby ultramafic unit was present across the length of the prospect
- Reconnaissance field trip undertaken to tenement application areas identified as potentially hosting Lithium-bearing pegmatites

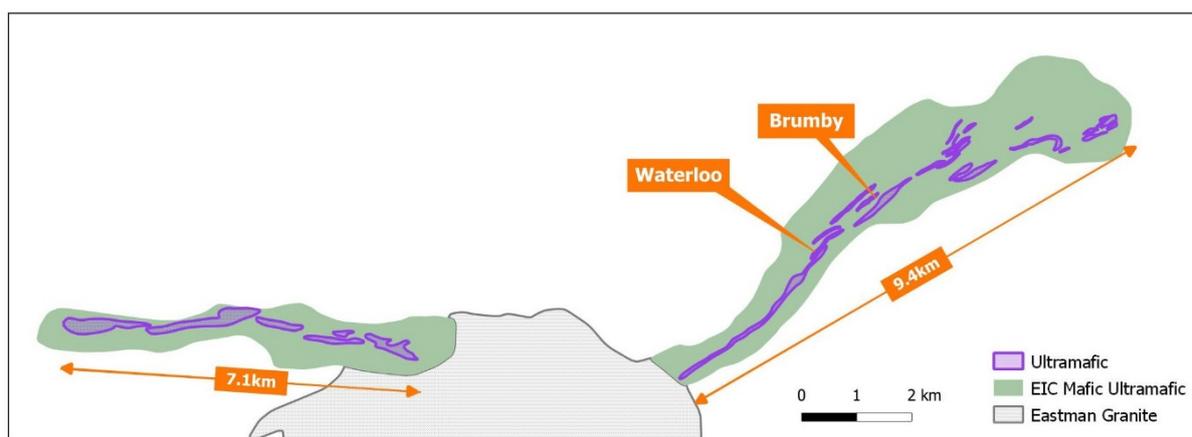
Peako Limited (ASX:PKO, Peako) advises that a reverse circulation (RC) drilling program at its Eastman Platinum Group Element (PGE) Project in the Kimberley region of WA has been completed.



Figure 1. Drill Rig at the Brumby Prospect.

**Peako Executive Director, Rae Clark, commented on the completed RC drill program:**

*“We are delighted to have completed the RC program after the unseasonal rain delays. Geological logging of the drill chips has confirmed the presence and location of extensive ultramafic units. We are particularly happy with the strike length and downhole width of the logged ultramafic units intersected in the holes drilled at the Brumby Prospect. Whilst laboratory analysis is required to confirm the tenor of any PGE mineralisation, the size dimensions of the ultramafics indicates there is potential for high-grade mineralisation at Brumby over significant strike length, and widths .”*



**Figure 2. Location of the Brumby and Waterloo Prospects within the Eastman Intrusion.**

The RC drilling was focused on the Brumby Prospect (**Figures 1 & 2**) with the aim of extending the strike length of the high-grade mineralisation as well as testing the grade continuity and width at the prospect. A total of 10 holes were drilled at Brumby for 1240m.

The Brumby Prospect is interpreted to host a mineralised ultramafic that extends for a strike length of at least 1.4 kms. To date, PGE mineralisation has been defined over a length of 300m and includes high-grade PGE widths within an extensive mineralised envelope (**Figure 3**):

- **6m @ 2.93 g/t PdEq** within 30m @ 1.44 g/t PdEq
- **7m @ 2.75 g/t PdEq** within 33m @ 1.34 g/t PdEq
- **4m @ 2.84 g/t PdEq** within 14m @ 1.5 g/t PdEq
- **3m @ 2.48 g/t PdEq** within 26m @ 1.10 g/t PdEq

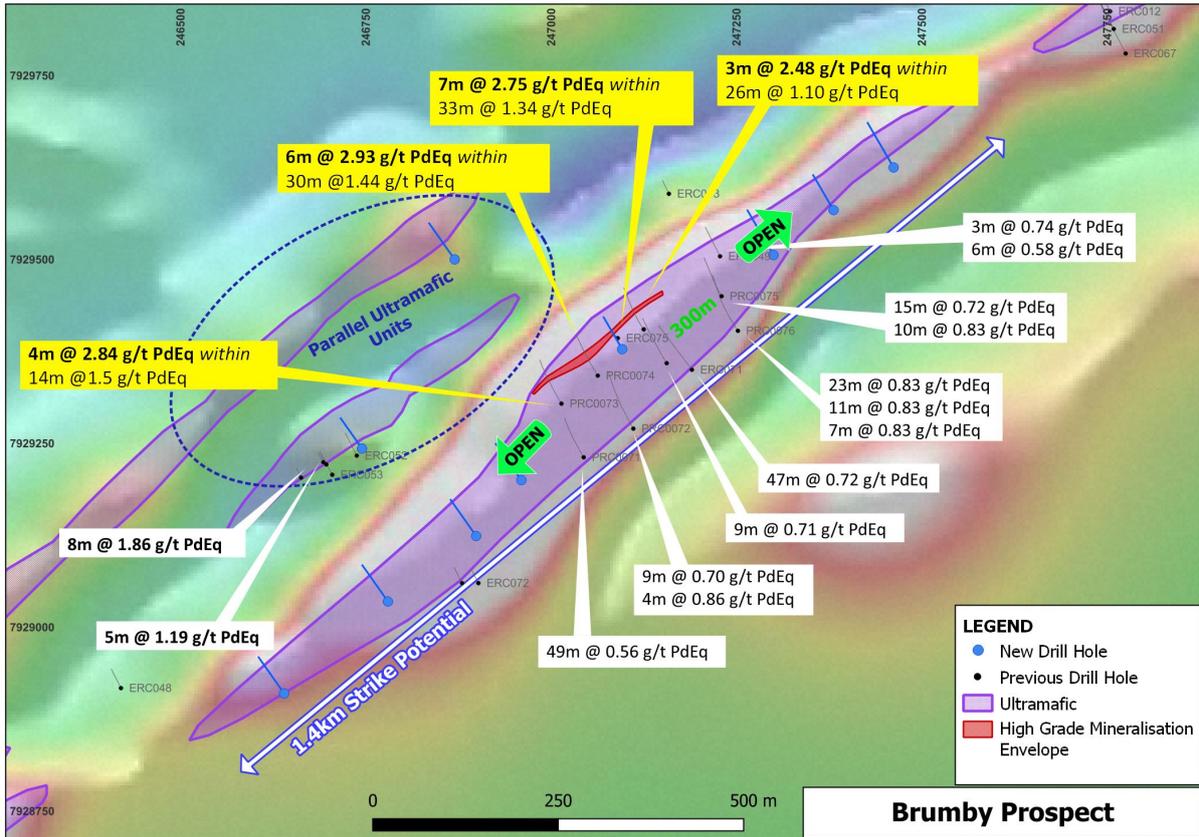


Figure 3. Brumby Prospect showing previous drill results over an interpreted Ultramafic intrusion draped over a background aeromagnetic image. The latest completed drillhole traces are shown in blue.

During the latest program all drill holes intersected the target ultramafic unit at the Brumby Prospect, confirming the potential for the PGE mineralisation to extend for 1.4kms. Visual inspection and logging during drilling also confirmed relatively wide downhole intersections of the ultramafic unit with six holes returning downhole widths of greater than 90m.

Two of the holes drilled at Brumby were designed to explore two parallel ultramafic units slightly to the north of the main Brumby Prospect. Limited historical drilling of these ultramafic units produced results that included **8m @ 1.86 g/t PdEq** and **5m @ 1.19 g/t PdEq**. Both new holes intersected the targeted parallel ultramafic units which were narrower than the ultramafic unit drilled at the main Brumby Prospect.

An additional two holes were drilled to the west of the Waterloo Prospect (south west of Brumby, **Figure 2**). These holes were designed to test for the presence and location of ultramafic units where the bedrock geology is covered by recent transported sediments. The drill holes successfully intersected the target ultramafic unit below the transported cover.

Drill samples are currently on route to the assay laboratory in Perth, with results expected in late September.

## **Petrography Study of PGE Mineralisation**

Initial findings have been received from a preliminary petrological and mineral geochemical study aimed at identifying the mineral species hosting PGEs at the Eastman Project. The study was designed to identify minerals that host or are affiliated with the PGEs in order to refine the geological model for the Eastman Intrusion and provide the framework for future metallurgical test work.

The study was completed at the Australian National University (ANU). Ten samples from six prospects across the Eastman PGE Intrusion were analysed using a range of specialised analytical tools including Electron Microscopy, Electron Microprobe, Laser Ablation and 3D X-ray Contrast Tomography (CT Scan).

The draft ANU Report indicates that the Eastman PGEs are predominately hosted within PGMs (platinum group metals) and importantly, were not found locked up within silicate minerals such as the amphiboles. Metallurgical testwork will still be required to detail any potential extraction flowsheet.

The ANU Report also identified an association between PGEs and the sulphide mineral cobaltite (CoAsS), which suggests that cobalt and arsenic may potentially be used as pathfinder elements in exploration targeting.

## **Reconnaissance Field Trip for Lithium Pegmatites Over New Exploration Tenure**

Peako has two tenements under application located approximately 85kms to the south-east of the Eastman PGE Project, E80/5703 and E80/5704, over which a Lithium and Rare Earth Element (REE) prospectivity assessment was recently completed. The desktop study identified evidence of potential Lithium-bearing pegmatite systems and large untested alkaline granitoid bodies within the area having potential for several mineralisation styles including structurally-controlled Li-pegmatite dykes as well as intrusion hosted and intrusion related REE mineralisation.

In preparation for these tenements being granted, a reconnaissance field visit and rockchip sampling program was made to the area to determine access and logistical requirements for exploration of these tenements.

**This announcement is approved by the Board of Peako Limited**

**For more information**

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## **COMPETENT PERSON DECLARATION**

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Dr Paul Kitto who is a member of the Australian Institute of Geoscientists. Dr Kitto is Technical Director of and a consultant to Peako Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Kitto consents to the inclusion in this report of the matters based on information provided by him and in the form and context in which it appears.

## **References**

The information in this report that relates to Exploration Results previously reported in ASX announcements are listed below. The Company is not aware of any new information or data that materially affects the information included in each relevant market announcement.

Further details can be found in the following Peako ASX announcements:

20 February 2023	High-Grade PGE Results at Brumby – Table 1 Corrected
24 October 2022	Reconnaissance Drilling Extends Eastman PGE Project
31 January 2022	Significant PGE Potential – Peako East Kimberley Project

## Palladium Equivalent (PdEq)

The Company reports individual grades for each of the elements palladium, platinum, gold, nickel, copper and cobalt as well as an aggregate 3E value, being the aggregate of Pd, Pt and Au.

Peako cautions that while many PGE explorers report 3E grades, such grades, being aggregates, do not reflect the varying value contribution of each element. As such, 3E PGE mineralisation with a high proportion of Palladium, such as that reported from the Eastman Project, will have a higher value than the same grade 3E PGE mineralisation calculated from a different project that is comprised largely of Platinum, due to the higher value of Palladium per gram compared to Platinum.

### *Basis for Palladium Equivalent Calculation*

Accordingly, Peako has calculated Palladium Equivalent (PdEq) grades in order to reflect the potential contributions of the elements to contribute to a resource and assist in providing a concise indication of the potential value of mineralisation at Eastman. Palladium Equivalent (PdEq) calculation represents the total metal value for each metal, multiplied by the conversion factor, summed and expressed in Equivalent Palladium (PdEq) grade.

Given the Eastman Project's stage of development, no metallurgical test work has yet been conducted. However, it is the Company's opinion that all elements included in the metal equivalent calculation (palladium, platinum, gold, nickel, copper and cobalt) have a reasonable potential to be recovered and sold. Based on the similar Panton deposit, located approximately 185km to the north-east, the Company has assumed metallurgical recoveries based on the Panton deposit model.

Metal recoveries used in the palladium equivalent calculations are shown below:

- Palladium 80%, Platinum 80%, Gold 70%, Nickel 45%, Copper 67.5% and Cobalt 60%

Metal prices used are also shown below:

- Palladium US\$1,700/oz, Platinum US\$1,300/oz, Gold US\$1,700/oz, Nickel US\$18,500/t, Copper US\$9,000/t and Cobalt US\$60,000/t

Metal equivalents were calculated according to the follow formula:

- $\text{PdEq (Palladium Equivalent g/t)} = \text{Pd(g/t)} + 0.76471 \times \text{Pt(g/t)} + 0.875 \times \text{Au(g/t)} + 1.90394 \times \text{Ni(\%)} + 1.38936 \times \text{Cu(\%)} + 8.23 \times \text{Co(\%)}$

Peako cautions that while it considers Panton a similar style deposit to Eastman, actual metallurgical recoveries at Eastman may differ from those at Panton. Further, that its opinion that all elements included in the metal equivalent calculation have a reasonable potential of being recovered and sold relies on defining sufficient mineable economic resources.

## Eastman PGE Project Overview

Peako Limited (ASX:PKO) is focused on the exploration of its large tenement holding in the East Kimberley region of Western Australia. Peako's flagship Eastman PGE Project incorporates a large, underexplored intrusive complex that Peako considers prospective for a major PGE resource.

Located within the Central Zone of the Halls Creek Orogen, a province with established PGE endowment, the intrusion is a layered mafic to ultramafic intrusive complex and is interpreted to extend along strike for approximately 16.5km.

Anomalous PGE intercepts from wide-spaced drilling indicate an extensive PGE mineralised system. Historical exploration focused on the outcropping ~6.9km length of the eastern zone of the intrusive complex, with a bias to evaluating narrow and discontinuous chromite lenses within the sequence.

Peako has been testing PGE endowment across the intrusion, with a focus on PGE mineralisation within the ultramafic horizons of the intrusion outside of the chromite lenses. Peako's results to date confirm PGE mineralisation is not confined to the chromite lenses and seams but has been intersected throughout the ultramafic units. Of particular interest to Peako are zones of higher-grade PGE mineralisation that have been intersected during drilling and which Peako considers encouraging for the potential of the Eastman Intrusion Complex to host economic PGE mineralisation.



## Appendix A

**Table 1 Drill Hole Collars**

Hole ID	East	North	RL (m)	Dip	Azim (UTM)	Depth (m)
PRC0086	245666	7928116	290.3	-60.4	304.13	102
PRC0087	245716	7928076	289.8	-61.1	311.13	120
PRC0088	247459	7929630	302.4	-60.9	329.33	162
PRC0089	247377	7929567	301.5	-60	330.73	114
PRC0090	247297	7929506	300.8	-60.3	333.63	114
PRC0091	247094	7929380	299.4	-59.8	333.33	96
PRC0092	246956	7929199	297.5	-59.8	330.33	180
PRC0093	246898	7929122	298.5	-60.6	328.53	138
PRC0094	246776	7929036	296.1	-50.1	324.93	100
PRC0095	246639	7928911	294.5	-49.6	320.53	108
PRC0096	246867	7929500	295.2	-60.2	320.93	144
PRC0097	246738	7929251	296.1	-55.3	319.43	84

Co-ordinate System GDA2020, zone52

## Appendix B: JORC Code (2012 Edition), Assessment and Reporting Criteria

### Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Explanation
<b>Sampling Techniques</b>	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	The sampling described in this report refers to RC drilling The RC samples are judged to be representative of the rock being drilled. The nature and quality of all sampling is carried out under QAQC procedures as per industry standards.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	All sampling is guided by Peako's protocols and Quality Control procedures as per industry standards. To ensure sample is representative of material being drilled all samples are collected directly from the cone splitter on the drill rig.
	Aspects of the determination of mineralisation that are Material to the Public Report.	RC samples are collected by downhole sampling hammers with nominal 127mm hole diameter. RC drilling was used to produce samples in 1m intervals..
<b>Drilling Techniques</b>	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple	Reverse Circulation (RC) holes were drilled. A face sampling hammer was used.

Criteria	JORC Code Explanation	Explanation
	or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	
<b>Drill sample recovery</b>	Method of recording and assessing core and chip sample recoveries and results assessed.	RC sample recovery was good. Drill samples were collected in 1m intervals.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Drill samples are visually checked for recovery, moisture and contamination. A technician is always present at the rig to monitor and record recovery. Recoveries are recorded in the database. There are no significant sample recovery problems.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No sample bias is due to preferential loss/gain of any fine/coarse material due to the acceptable sample recoveries obtained RC drilling.
<b>Logging</b>	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.	Logging of RC drill chips recorded lithology, mineralogy, mineralisation, weathering, alteration, colour and other features of the samples. The geological logging was done using a standardised logging system. This information and the sampling details were transferred into Peako's drilling database.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging is both qualitative and quantitative, depending on the field being logged.
	The total length and percentage of the relevant intersections logged.	All RC drill holes are logged in full and to the total length of each drill hole. 100% of each relevant intersection is logged in detail.
<b>Sub-sampling techniques and sample preparation</b>	If core, whether cut or sawn and whether quarter, half or all core taken.	No drill core is described in this report.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Peako routinely collects 1m samples for the entirety of all holes. The RC rig has a cone splitter below the cyclone. The drill offside collect the bulk drill spoil and 1m calico sample every metre and place on the ground in rows. All samples were dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation for all samples follows industry best practice.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Peako has protocols that cover the sample preparation at the laboratories and the collection and assessment of data to ensure that accurate steps are used in producing representative samples
	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.	Sampling is carried out in accordance with Peako's protocols as per industry best practice. Peako collects field duplicates at a rate of 1 for every 50 samples to ensure the sample collected is representative of in situ material.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered appropriate to correctly represent the style of mineralisation, the thickness and consistency of the intersections

Criteria	JORC Code Explanation	Explanation
<b>Quality of assay data and laboratory tests</b>	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	RC samples were submitted to Intertek Genalysis for analysis using code FA50/MS, which is a Lead collection Fire Assay for Au, Pd and Pt on a 50g charge with grade determined by ICP/MS.
	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.	NA
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Sample preparation checks for fineness will be carried out by the laboratory as part of their internal procedures to ensure the grind size of 90% passing 75 microns. Internal laboratory QAQC checks will be reported by the laboratory. Peako inserted a QAQC sample (Certified standards, certified blanks and field duplicates) at a rate of approximately 1 per every 25 primary samples.
<b>Verification of sampling and assaying</b>	The verification of significant intersections by either independent or alternative company personnel.	Reported results are compiled and verified by the Company's Senior Geologist and Competent Person
	The use of twinned holes.	No twinned holes are reported in this release
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary field data is collected by Peako's geologists on standardised logging sheets. This data is compiled and digitally captured. The compiled digital data is verified and validated by the Company's geologists.
	Discuss any adjustment to assay data.	No assay data is reported.
<b>Location of data points</b>	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.	Drill hole collar locations are captured by hand-held GPS with a positional accuracy is approximately +/-5 metres. Drillhole downhole surveys are undertaken for all holes using a north seeking gyroscopic tool at down hole intervals of 30m.
	Specification of the grid system used.	Location data was collected in GDA2020, MGA Zone 52.
	Quality and adequacy of topographic control.	Topographic control is adequate for the current drill program. It is based on 2007 IKONOS satellite Digital Terrain Model (DTM) data which has an accuracy of 0.5m.
<b>Data spacing and distribution</b>	Data spacing for reporting of Exploration Results.	Drillholes were completed on wide-spaced fences considered appropriate for reconnaissance drill testing.
	Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Spacing and distribution of drill holes is not sufficient to establish a Mineral Resource
	Whether sample compositing has been applied.	Peako routinely collects 1m samples directly from the cone splitter on the drill rig.

Criteria	JORC Code Explanation	Explanation
<b>Orientation of data in relation to geological structure</b>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The RC drilling is early stage aimed at determining size, grade and orientation of any mineralisation. No structures have been accurately determined at this stage.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation-based sampling bias has been identified in the data at this point.
<b>Sample security</b>	The measures taken to ensure sample security.	Samples are bagged on site prior to road transport to the laboratory in Perth.
<b>Audits or reviews</b>	The results of any audits or reviews of sampling techniques and data.	No sampling techniques or data have been independently audited.

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Explanation
<b>Mineral tenement and land tenure status</b>	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, wilderness or national park and environmental settings.	Exploration Licence E80/4990 in which Peako's wholly owned subsidiary SA Drilling Pty Ltd has a 100% interest. The tenement is situated within the Gooniyandi Combined #2 Native Title Claim (WC 2000/010) and Determination (WCD2013/003).
	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.	The tenement is current and in good standing with all statutory commitments being met as and when required. There are no known impediments to obtaining a licence to operate pending the normal approvals process.
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	Historical exploration within the tenement area has been undertaken by numerous parties, commencing with Pickands Mather in 1967. Refer Peako Limited ASX release dated 15 August 2018, Appendix 3 and 28 November 2019, Appendix C for overview of exploration historically undertaken on the tenement.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	The tenement hosts a diverse Paleoproterozoic succession that is widely intruded by multiple granitoid phases and deformed by multiple orogenic episodes. The morphology of the mineralisation as well as the structural make up is not well understood. The area represents the western-most window of the Halls Creek Orogen where volcanic successions of the bimodal Koongie Park Formation volcanic belt (c.1845 Ma) and the Lamboo Ultramafic (LUM) intrusive belt (c.1850-1835 Ma) are well developed. Satellite imagery and rock geochemistry define an array of multistage, poorly constrained granitoid intrusions across the tenement, with

Criteria	JORC Code explanation	Explanation
		<p>compositions that include granite, granodiorite, diorite, monzogranite and granophyre.</p> <p>The geological diversity within the tenements has driven the search for a wide range of commodities by present and past explorers. Mafic to ultramafic intrusions of the Lamboo Ultramafic complex have demonstrated prospectivity for base metal (Ni, Cu) and precious (Au, PGE) metals with potential mineralisation styles varying across magmatic, cumulate to intrusion or orogenic-related gold associated with deep crustal-tapping fertile structures. In addition, the Koongie Park Formation (KPF) has demonstrated prospectivity for base (Cu-Pb-Zn) and precious (Ag, Au) metals with postulated mineralisation styles varying from VHMS to SVAL-hybrid styles, to epithermal and skarnoid mineralisation associated with widespread carbonate facies in the KPF stratigraphy.</p>
<b>Drill hole Information</b>	<p>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:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul>	<p>A summary of all relevant information is given in Appendix A.</p> <p>Collar locations are given in coordinate grid GDA2020, MGA Zone 52.</p> <p>RL is given as elevation above sea level in metres</p>
	<p>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.</p>	<p>There has been no exclusion of information</p>
<b>Data aggregation methods</b>	<p>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.</p>	<p>N/A</p>
	<p>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.</p>	<p>NA</p>
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>N/A</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p>	

Criteria	JORC Code explanation	Explanation
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Drill holes were designed to intersect perpendicular to the interpreted strike of mineralisation.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	N/A
<b>Diagrams</b>	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.	A plan view is provided in the body of the announcement.
<b>Balanced reporting</b>	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.	N/A
<b>Other substantive exploration data</b>	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.	<p>Geological observations of width and strike length of the ultramafic unit are based on visual observations of the RC drill chips.</p> <p>Observations relate to the interpreted extent of the ultramafic host unit, and do not refer to the PGE mineralisation.</p> <p>Peako cautions that laboratory assay results are required to validate the visual observations of the extent of the ultramafic unit and to assess any PGE mineralisation that may be hosted by the ultramafic unit.</p>
<b>Further work</b>	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Peako will await results from the current drill program before committing to future work. Peako plans to drill test numerous other prospects within the Eastman Ultramafic Intrusion.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	