ASX Announcement
24 August 2023
ASX: MKR

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360% increase in Mt Boppy Total Gold Resources
80% increase in 'Measured & Indicated'

Manuka Resources Limited ("**Manuka**" or the "**Company**") is pleased to release an updated Mineral Resources Estimate at Mt Boppy. Gold production recently recommenced from the Project, initially from the screening of rock and tailings dumps[1].

Highlights:

- **Mt Boppy Total Gold Resources increased nearly 4 fold, to 160,100ozs grading 2.01g/t Au, including**

  Measured Resources of 106,850t at 5.25 g/t Au for 18,028 oz gold;

  Indicated Resources of 715,088t at 2.54 g/t Au for 58,477 oz gold; and

  Inferred Resource of 1,770,335t at 1.47 g/t Au for 83,608 oz gold.
- **Measured & Indicated (M&I) Resources are up ~79% to ~76.5koz grading 3.53g/t**
- **First Resource upgrade in over 12 months and incorporates results of recent bulk sampling and screening evaluation of rock dumps & tailings**
- **Manuka reasonably expects to convert most of the Inferred Resource to an Indicated Resource category as production continues, as well as add additional ounces to the Inferred Resource**
- **Manuka is yet to test Mt Boppy depth extensions which provides scope for continued Resource growth**

Dennis Karp**, Manuka's Executive Chairman,** commented**:**

"Mt Boppy has the makings of an exceptional gold asset. Having started life as a listed company with 44koz Au in Resources at Mt Boppy, we have produced >41koz Au (560kt @ 3g/t) and still have slightly more than that in current M&I Resources. To this we have just added another 280koz and we have yet to test our most prospective exploration targets.

With the anticipated cash flow from our gold production we are in a strong position to not only upgrade our Inferred ounces to higher categories but also continue to grow the overall resource."

[1] Dry tails emplacements from historic underground operations

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Mt Boppy Resource Statement

Mineral resources at Mt Boppy totalling 2,090,423 tonnes at a grade of 1.46 g/t Au for 98,367 oz Au have been delineated through a bulk sampling and screening evaluation of rock and tailings dumps on the property ML's. These are incremental to the total Mt Boppy Opencut Resource, previously reported to the ASX on 29 July 2022, of 281,850 tonnes at a grade of 4.95 g/t Au for 44,820 ounces, that remain unchanged. The revised total classified Mineral Resources are shown in Table 1.

The mineral resource estimate for Mt Boppy is contained within:

- in situ rock dumps and tailings depositories, with in situ gold grades derived from bulk sampling material derived from mechanically pitting and trenching to 2-3m depth and screening +200, -200+20, +8-20, and -8mm size fractions, with cone measurements to ascertain mass % distribution and total volume treated.

- an open cut pit shell that reaches a depth of 215m below surface at the southern end of the Mt Boppy deposit. Resources were reported July 2022 with respect to the current pit design. Material within the pit design is reported at a 1.6 g/t Au cut off and material below the pit design is reported to a 3.0 g/t Au cut off. The open cut is currently flooded and inaccessible for mining. Dewatering and a sidewall pushback is necessary to access and mine these resources.

- a grade shell modelled at a 1.6 g/t cut off over the Boppy South mineral zone. This prospect still requires final drilling and evaluation before assessing establishing a small opencast.

Resource Category	Tonnes Kt	Grade Au g/t	Contained gold Troy KOzs
Measured	107	5.25	18.0
Indicated	605	3.01	58.5
Inferred	1,770	1.47	83.6
Total	**2,482**	**2.01**	**160.1**

Table 1 - Mt Boppy Gold Resources at 21 August 2023

The previous resource statement from July 2022 is shown in Table 2.

Resource Category	Tonnes Kt	Grade Au g/t	Contained gold Troy KOzs
Measured	107	5.25	18.0
Indicated	158	4.85	24.7
Inferred	17	3.93	2.1
Total	**282**	**4.95**	**44.8**

Table 2 - Mt Boppy Gold Resource at 19 May 2022

A summary of the split of the current resources (vis rock dumps, tailings[2] and hard rock opencast) is shown in Table 3.

Summary Mt Boppy In Situ Resources	Type	Resource Classification	Insitu Mineral		
			Kt	Au g/t	Au Oz
Hard Rock	Open cut & below	Measured	107	5.25	18.0
		Indicated	158	3.85	33.1
		M & I	265	4.24	51.2
		Inferred	127	2.59	10.6
Rock Dumps	Rock dumps in situ	Indicated	447	1.76	25.3
		Inferred	890	1.42	40.6
Tailings	Tailings in situ	Inferred	753	1.34	32.4
Grand Total		Measured	107	5.25	18.0
		Indicated	605	3.01	58.5
		Total M & I	**712**	**3.34**	**76.5**
		Inferred	1,770	1.47	83.6
		Total Mineral Resources	**2,482**	**2.01**	**160.1**

Table 3 - Mt Boppy Gold Resource by type at 21 August 2023

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated or Measured Mineral Resource and cannot be converted to an Ore Reserve. It is reasonably expected that most of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Based on the study herein reported, delineated mineralization of the Mt Boppy deposits is classified as Measured, Indicated and Inferred resources according to the definitions of the JORC Code (2012) as presented in **Error! Reference source not found.**. The mineral resource is depleted for the Boppy opencut to the November 30th 2021 projected pit pick-up, and treated (screened) material on the Boppy ROM dump as at 21 August 2023.

[2] Dry tails emplacements from historic underground operations

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Rock Dump and Tailings Evaluation

The Company has started producing gold from screening rock dump and tailings material at the Mt Boppy ROM. Bulk sample evaluation has continued and has progressed evaluation of the Mt Boppy Main waste rock dump, the low grade rock dump and tailings at the TSF3 impoundment.

This estimate incorporates rock dump evaluation data compiled since the last mineral resources update 29 July 2022.

The evaluation methodology has enabled assessment of the economic viability of treating screened rock dump fines plus tailings (these have already been subject to milling and cyanidation).

The methodology to date has involved:

- preliminary hand screening on a 40m grid
- excavation using a 200mm skeleton bucket of 2-3m deep pits on a 40m grid
- sub 8mm trommel screening of the sub200mm pile, which evolved to sub12mm trommel screening
- Triple deck flat screening of sub 200mm piles producing sub10, +10-22, +22-200mm cones
- Cones of material were sampled for assay every two front end loader buckets processed
- Backup splits of each size sample were also taken, as well as pulps prior to bottle roll analysis

Table 4 (below) shows the quantum of material evaluated for the various material sources. Over 5,000 tonnes of dump material has been bulk sampled to date.

Mt Boppy Ore Source	Dump	No Bulk samples	Tonnes Screened	Resource Classification	Notes
ROM	ROM	281	2,708	Indicated Remaining	In Production
Main Waste Rock Dump	Main Waste Level 1	102	1,207	Indicated	
Main Waste Rock Dump	Main Waste Level 2	38	684	Inferred	
PAF (on top Tailings)	LG over Tailings	11	582	Inferred	
TSF3 Main Tailings dam	Leighton tailings			Inferred	Historic production
TSF3 Main Tailings dam	Poly Metals tailings			Inferred	Met Tailings records
	Total	**432**	**5,182**		

Table 4 - Mt Boppy Dump Evaluation Material Tested

Figure 1 shows a drone image of the Boppy ROM bulk sampling. The screening operation is centralised, with -8 and +8-20 stockpiles being generated. The work has shown a clear increase of grade in the -8mm fraction. A +8-20mm split is also generated as a low grade stockpile. Figure 2 shows the indicated grades for the various screened sizes for the Mt Boppy ROM.

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Figure 1: Drone view of Trench evaluation of the Mt Boppy ROM rock dump and tailings

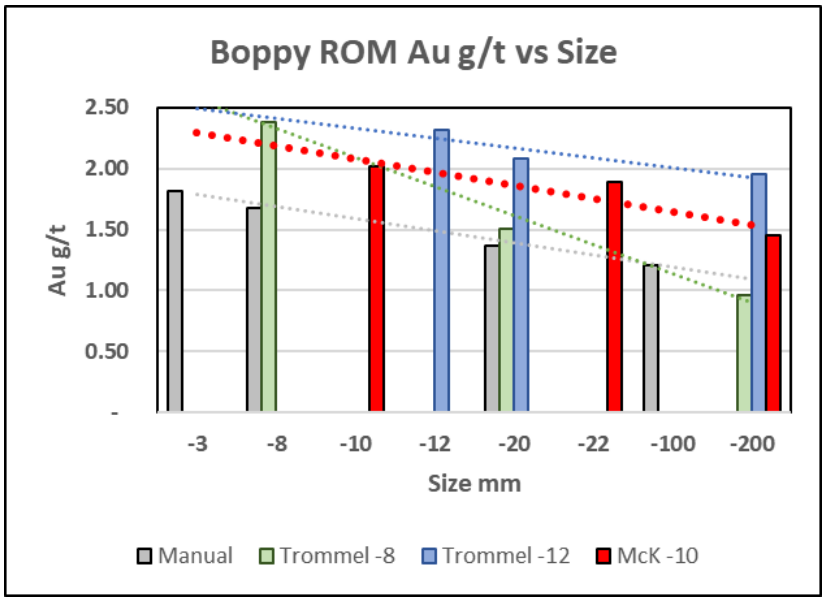


Figure 2: Mt Bppy ROM Au g/t vs Screen fraction

Gold analyses have been undertaken on the various size fractions at the Wonawinta Laboratory, with third party checks conducted at Gekko Laboratory (Ballarat) and ALS (Orange). Analyses include systematic bottle roll estimation of gold in solution amenable to cyanidation (AAS), analysis of tails for gold in acid soluble solids (Aqua Regia), combined to give an analysis of total gold in solution. Bottle Roll and Fire Assay checks were also conducted at Gekko.

Table 5 shows the various surface dumps and current resource estimation

Mt Boppy Rock Dump Sources	Locality	Resource Classification	Insitu Mineral Resources		
			Kt	Au g/t	Au KOz
ROM	ROM	Indicated Remaining	58	2.13	4.0
Main Waste Rock Dump	Main Waste Level 1	Indicated	389	1.71	21.4
Main Waste Rock Dump	Main Waste Level 2	Inferred	796	1.42	36.2
PAF (on top Tailings)	LG over Tailings	Inferred	94	1.43	4.3
Rock dumps		Total Indicated	447	1.76	25.3
		Total Inferred	890	1.42	40.6
		Total	**1,337**	**1.53**	**65.9**
Mt Boppy Tailings Sources	**Locality**	**Resource Classification**	**Insitu Mineral Resources Estimate**		
	Tailings		**Kt**	**Au g/t**	**Au KOz**
TSF3 Main Tailings dam	Leighton tailings	Inferred	250	1.80	14.5
TSF3 Main Tailings dam	Poly Metals tailings	Inferred	503	1.11	18.0
Tailings		Total Inferred	753	1.34	32.4
		Total	**753**	**1.34**	**32.4**
Grand Total Rock and Tailings		**Grand Total**	**2,090**	**1.46**	**98.4**
Main Waste Rem Extent	Geological resource	KT range	2,460	3,006	
		Au grade range	1.28	1.56	
		Contained Au KOz range	101.1	151.0	

Table 5: Mt Boppy surface rock dump and tailings sources and estimated resources

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Notably the remaining extent of the Mt Boppy Main Waste dump provides an ongoing evaluation target ranging from 101-151 Koz Au at in situ grades estimated to be between 1.28 and 1.56 g/t gold.

*The preceding statements of Mineral Resources conforms to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2012 Edition. Due to rounding to appropriate significant figures, minor discrepancies may occur. All tonnages reported are dry metric

COMPETENT PERSON'S STATEMENT

The information in this report that relates to Mt Boppy Dump Mineral Resources is based on, and fairly represents, information and supporting documentation prepared by Mr Philip Bentley, who is a Certified Professional by The South African Council for Natural Sciences (SACNASP # 400208/05) and is the Chief Geologist employed by Manuka Resources Ltd. Mr Bentley has sufficient experience which is relevant to the style of mineralisation and type of deposit 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'. Mr Bentley consents to the inclusion in the statement of the matters based on his information in the form and context in which it appears.

About Manuka

Manuka Resources Limited (ASX: MKR) is an Australian mining and exploration company with key assets located in the Cobar Basin, central west New South Wales. In addition to its recent acquisition of Trans-Tasman Resources Limited owner of the Taranaki VTM Project, it is the 100% owner of two fully permitted mining projects, one gold and one silver, both within the Cobar Basin, which include the following:

- Gold - Mt Boppy Gold mine, 48-person mine camp and neighbouring tenements, hosting an existing open pit mineral resource[3] and combined ROM, waste and tailings material all of which lend themselves to upgrading through screening. The Company has commenced a screening and gold recovery project, processing the product at its Wonawinta plant. It has confidence the gold from these sources can be extracted profitably and over a period of ~3 years. Manuka also awaits the outcome of its forthcoming exploration program to determine as to whether the future for mining any Mt Boppy extensions will be as an underground or open cast mine.

- Silver - Wonawinta silver project, with mine, 84 person mine camp, processing plant and neighbouring tenements. Previously renowned as the largest primary producer of silver in Australia, the mine hosts a significant JORC resource[4]. The Wonawinta processing plant has a nameplate capacity of >850,000 tonnes per year (which the Company now sees expanded to >1.0Mt/yr. The Company has recently completed a plant and metallurgical recovery optimisation.

There exists a number of highly prospective base metals exploration targets on Manuka's ~1,150km^2 tenement package within the Cobar Basin.

[3] ASX release 29 July 2022

[4] ASX release 1 April 2021

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The Taranaki VTM Iron Sand Project recently released its maiden vanadium resource[5] which ranks it as one of the largest drilled vanadium projects globally. The Project has a granted mining licence and is in the lowest quartile of the iron ore production cost curve. The Company awaits the reissuance of its Environmental Approval before completing its Bankable Feasibility Study.



This announcement has been approved for release by the chairman of Manuka Resources Limited.

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Important Information

This report includes forward-looking statements and comments about future events, including the Company's expectations about the performance of its businesses. Forward-looking words such as "expect", "should", "could", "may", "predict", "plan", "will", "believe", "forecast", "estimate", "target" or other similar expressions are intended to identify forward-looking statements. Such statements involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company and which may cause actual results, performance or achievements to differ materially from those expressed or implied by such statements. Forward-looking statements are provided as a general guide only, and should not be relied on as an indication or guarantee of future performance. Given these uncertainties, recipients are cautioned to not place undue reliance on any forward-looking statement. Subject to any continuing obligations under applicable law, the Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements in this report to reflect any change in expectations in relation to any forward-looking statements or any change in events, conditions or circumstances on which any such statement is based. No Limited Party or any other person makes any representation, or gives any assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statements in the report will occur.

[5] ASX release 1 March 2023

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Appendix 1: JORC Code 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	• *JORC Code explanation*	Commentary
Sampling techniques	• *Nature and quality of sampling (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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	• *Samples were collected from a variety of methods from three main phases of drilling: Polymetals (PML, 2002-2015), Black Oak Minerals (BOK, 2015), MAAS (2016) and Manuka Resources (MKR, 2020-present).* • *From historic reports, PML and BOK sampling techniques all followed industry best practice.* • *Sampling techniques for RC drilling comprised 1 m reverse circulation samples, from which 3 kg was pulverised to produce a 50 g charge for fire assay.* • *Diamond drill core was cut in half over varying interval lengths depending on logged geological units and was crushed and pulverised to produce a 50 g charge for fire assay.* • *Open hole percussion and blast hole samples collected over 2.5 m intervals sectioned the drill returns and pulverised to produce a 50g charge for fire assay or 200g charge for bottle roll leach* • *Rock and tailings dump samples were collected by mechanical excavations from 2-3m deep pits excavated on a 40m grid, followed by trenching joining the pits together. This material was screened initially through a rotating 8mm and subsequently 12mm trommel. Grade samples were taken from cones generated from each 2 Front End Loader (FEL) bucket feeds.*
Drilling techniques	• *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).*	• *PML and BOK: Diamond (HQ diameter) and RC drilling (5.5 inch face sampling bit), Open hole percussion blasthole drilling* • *MAAS: RC drilling (5.5 inch face sampling bit)* • *MKR: RC drilling (5.5 inch face sampling bit), open hole percussion blasthole drilling* • *Not applicable to dump evaluation*
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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 recovery information is available for pre-2011 drilling* • *For PML and BOK RC drilling from 2011 onwards, recoveries were recorded by comparing the weight of each metre of sample to a theoretical sample weight, estimated using the hole diameter and the degree of weathering. The average recovery was calculated to be 80%, with no appreciable difference between weathering domains.* • *PML and BOK Diamond drilling recoveries were measured and recorded, with average recoveries of 98% within mineralized zones. There was no correlation between recovery and gold grades.* • *MKR RC drilling did not quantitatively record recovery but RC piles were qualitatively assessed. Poor to no recovery zones were commonly associated with historic stopes.* • *No relationship exists between gold grades and recoveries in either RC or diamond logging.*
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage*	• *Drill holes were geologically logged to various standards over the project history. Hardcopy logs are available for historic drilling.* • *For post-2011 PML diamond core drilling, core recovery and RQD data were recorded for the core run intervals, and core was routinely photographed.* • *It is unlikely that the historical grade control drilling was logged geologically. Recent (post-2013, BOK and MKR) grade control RC and blasthole drilling was logged for the presence of stope fill.* • *Dump samples were logged recording date, gps locality, volume and tonnage of resultant cones. Tonnages were*

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Criteria	• JORC Code explanation	Commentary
	of the relevant intersections logged.	*calculated from no of buckets and the FEL calibrated weightometer.*
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of 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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• *PML Diamond core intervals for sampling were cut in half, following the orientation line to ensure a consistent side of the core was sent for assay.* • *PML and BOK RC samples were split at the rig by cone splitter at 1 m intervals.* • *MKR RC samples were split at the rig by a 3 tier riffle splitter at 1 m intervals* • *BOK and PML blasthole grade control samples were split at the rig by a 3-tier riffle splitter.* • *MKR blasthole samples were collected by quartering of the blasthole cuttings cone.* • *MKR Field duplicate results for RC data showed > 87% above 0.1g/t Au within ± 40%.* • *Laboratory duplicate results for RC and diamond core samples for PML, BOK and MKR showed >95% of data within ±15%, with no appreciable difference between drilling phases.* • *Drilling muds and bit shrouds were used to improve recovery.* • *Gold is finely disseminated and associated with sulphides in quartz veins and the RC sub-sample size is considered appropriate. Drill chips dried and pulverised to a nominal 90% passing 75 µm screen before further sub sampling at the laboratory.*
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• *PML, BOK, MAAS and MKR RC samples were analysed at ALS Laboratories Orange using Fire Assay with a 50g charge. Fire Assay is considered a 'total' technique for non-coarse gold.* • *Blank and standard samples were included in batches sent to ALS at a rate of 1 standard and one blank for every 30 routine samples. No issues were noted with blank and standard analysis.* • *ALS laboratories undertake internal QC checks including standards, blanks and duplicates.* • *Some BOK and MKR blasts hole grade control samples were analysed by 200 g bottle roll leach with AAS finish. A series of BOK duplicates were analysed by both fire assay and bottle roll leach to determine an average leach recovery.* • *Wonawinta Laboratory undertook bottle roll analyses (AAS and Aqua Regia) of the various size fractions. Duplicate samples and duplicate pulps were periodically submitted for check bottle roll and fire assay analysis at Gekko Laboratory (Ballarat). Acceptable levels of accuracy or reproduceability of analyses were irregular (not always achieved) probably due to localized nugget effect of the dump mineralization. A project Certified reference sample is being created for future QAQC.*
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* •	• *Two PML RC holes were twinned with diamond core holes.* • *Analyses of twinned RC and diamond holes showed a very close match between grade and length of intersected mineralization.* • *No recent MKR RC drill holes have been twinned with diamond* • *The bulk sampling was utilized to reduce potential nugget effects in the feed material. Dupicate splits of pulverized material prior to bottle roll analysis were also taken, and checked at Gekko Lab. Fairly erratic correlation suggests possibility of nugget effect of gold deportment in screened material.*
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.*	• *Drill hole collars were located by either Total Station or differential GPS (DGPS) surveys to a high degree of accuracy using the Map Grid of Australia zone 55 coordinate system.* • *Down hole surveys were collected Reflex magnetic single system at 30 m intervals.* • *Some RC grade control and other drill holes were unable to be surveyed due to hole collapse during or after drilling.* • *Topographic control is via a triangulated wireframe surface*

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Criteria	• JORC Code explanation	Commentary
	• Quality and adequacy of topographic control.	derived from an aerial photogrammetry survey as well as Total station surveys of the pit. • Topographic control is considered adequate given the relatively subdued relief in the resource area. • All dump samples were located using a handheld GPS.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied.	• Drilling was undertaken on a nominal 10-12.5 m (along strike) by 20 m grid throughout the majority of the Resource as well as closely spaced grade control drilling (2.5 m x 3 m). • The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for estimation by Ordinary Kriging and the classifications of Measured, Indicated and Inferred Resources. • RC and diamond core samples were composited over 2 m and grade control holes over 2.5 m to minimize sample splitting. • Dump sampling was initially conducted on pits 40m apart, then followed up with trenches that joined the pits together. No compositing was undertaken.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • 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.	• Mineralisation is controlled by steeply west dipping vein structures. • PML, BOK and MKR surface RC and diamond drilling is generally at high angles to the gold mineralisation, drilled towards the east at 50°-70°, several recent (2021) MKR holes had to be drilled from the west due to wall stability issues. • MKR in-pit grade control RC drilling was completed using a variety of drill hole orientations due to access and space constraints on the pit floor, with vertical holes avoided where possible. • All blast hole grade control holes are vertical, however the greater density of this sampling reduces the chances of introducing bias. • Not applicable to dump sampling
Sample security	• The measures taken to ensure sample security.	• BOK and MKR sampling was supervised by a company representative up to the point of dispatch to ALS laboratories using a local freight company. • Samples dispatched by MKR to ALS in Orange were bagged in larger polyweave sacks secured with zip ties and delivered by a local freight company. Sample numbers received by ALS were checked again dispatched numbers. • Samples dispatched by MKR to Gekko in Ballarat were bagged in larger polyweave sacks secured with zip ties and delivered by a local freight company. Sample numbers received by Gekko were checked again dispatched numbers.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits/reviews of sampling techniques and data have been undertaken on any drill programs or the dump evaluation.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	• ML1681, ML311, MPL 240, GL 3255, GL 5836, GL 5848, and GL5898 and exploration licence EL 5842 are all held by Mt Boppy Resources Pty Ltd. (wholly owned by MKR) • The property on which the Mount Boppy mine situated is Crown Land. • A Native Title Agreement is in place with the traditional owners. • The Company notes that no land within the licence area may be classified as sensitive land. No further approvals other than those required under the Mining Act 1992 are required.

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Criteria	JORC Code explanation	Commentary
	• *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.*	
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• *The deposit was first discovered in 1896 and mined by underground methods up to 1923.* • *Various companies (notably PML, Golden Cross and BOK) have conducted exploration activities around Mt Boppy since the 1960s, with treatment of tailings and open pit mining up until 2015, and MKR more recently open pit mining 2020-Nov 2021.*
Geology	• *Deposit type, geological setting and style of mineralisation.*	• *The Mount Boppy deposit is located in the northern part of Devonian Canbelego-Mineral Hill Rift Zone, flanked by the Kopyje Shelf, on the far eastern side of the Cobar Basin.* • *Mineralisation occurs in brecciated and silicified sediments and quartz veining developed along a west-dipping fault that down-throws Devonian aged Baledmund Formation rocks on its western side against Orodovician age Girilambone Group rocks on it eastern side.* • *The higher grades tend to lie in the hanging wall rocks (Baledmund Formation) on the western side of the Main Lode where the dip shallows.* • *The Main Lode strikes approximately north-south and dips at approximately 70-80° west.* • *Historical underground workings were supported with timber and back-filled with tailings sands from processing. Sand fill samples grade between 0.05 g/t Au and 38 g/t Au with an average of 3.5 g/t Au.* • *Mineralisation is predominantly gold, associated with grey quartz veins and minor pyrite.*

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *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*
	  ○ *hole length.*
		• *Resources are the penultimate result of an exploration work programme.*
		• *All drill holes were considered in the definition of the resources.*
		• *Drill hole data is stored in the Manuka Drillhole Database off site (EarthSQL), Data is managed by Manuka staff.*
		• *Not applicable to Dump evaluation.*

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly*	• *Samples are generally taken over one metre lengths, all samples are composited to two metre lengths for estimation.* • *Grade capping is assessed on a domain basis and applied to individual composites* • *No minimum sample cuts were applied to drill hole data* • *Dump grade assays were top cut at 95% confidence.* • *Dump grades were weighted against mass and averaged*

Criteria	JORC Code explanation	Commentary
	stated.	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• *Shoots have long been recognised within the Mt Boppy ore body. There is a no correlation between thickness (true or downhole) and gold grades.* • *Generally true thickness is approximately 70% to 80% of the down hole drill intercept widths.* • *3D wireframes used to define mineralisation mitigate the difference between drill hole intercepts and true widths.* • *Not applicable to dump evaluation*
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• *Images and graphs are provided in the body of the Statement*
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• *All drill holes were used in the interpretate the location and thickness of the mineralised halo.* • *Reasonable prospects for economic extraction are considered when reporting resources*
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• *Geological Mapping (lithology and structure), historic workings and drill holes were used to aid the interpretation of mineralisation at Mt Boppy.* • *Mt Boppy ore was processed until February 2022 at MKR's Wonawinta plant, which uses a carbon-in-leach (CIL) process to extract gold, generally achieving recoveries of between 75% and 80%.* • *Dump sampling has been described above, and was based on systematic multiple approximate 5-10t FEL samples derived from mechanically excavated material.* • *Densities for dump material were derived from a FEL weightometer*
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• *There is scope for further definition of high grades that extend below the current planned pit floor. Note this area is currently classified as indicated.* • *Dump bulk sampling will continue on the Mt Boppy Main Waste dump. Material will be systematically bulk sampled (as described using a mobile triple deck flat screen) as the mining faces and / or level progress.*

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Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• *MA was provided with an export of the current MKR drill hole database* • *The database contained tables for Collar details and metadata, downhole surveys, assays, lithology, alteration, core recoveries, veins, minerals and oriented structures.* • *MS Access queries were used to perform basic validation checks, and holes were then loaded into Surpac for a second round of validation, hole lengths, sample lengths, down hole survey errors.*
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• *Phil Bentley is the Chief Geologist for Manuka Resources and visits the site 2 weeks per month.*
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• *Geological and mineralisation interpretation was carried out on approximately 10 m spaced sections, oriented perpendicular to the strike of mineralization.* • *Mineralisation was modelled as a single domain above 1 g/t Au, which represents a clear natural break in grade statistics.* • *Intercepts of lesser grade were included where necessary to aid continuity.* • *The mineralised domain surrounds the 3D shapes modelled to represent historic underground workings.* • *Historic workings outlines were derived from old mine plans and drill hole logging.* • *Historic underground workings are generally filled with tailings material and timber supports.* • *Drill hole logging and sampling, surface mapping and grade control blast hole sampling were all used to help build the geological and mineralisation model to a high degree of confidence.* • *Mineralisation displayed very good continuity between sections.* • *Not applicable to dump evaluation*
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• *The Mineral Resource has a strike length of 455 m and a maximum depth below surface of 230 m. The horizontal width of combined mineralised domains averages 60 m near surface, where the western lode peters out, the main lode maintains approximately 10 - 12 m width.* • *Mineralisation dips 85° to the west.* • *Rock and tailings dumps have been surveyed using Drone imagery and GPS coordination, and then modelled in Micromine.*
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	• *Estimation of hard rock resources was carried out in Surpac 7.5.* • *Statistical analyses was carried out on composite samples from mineralization within the domains to establish declustered means, top cuts and spatial variability (Variography).* • *Directional variography indicated differences in spatial anisotropy between the northern and southern parts of the deposit, divided by an interpreted cross-structure striking northwest.* • *Gold grades were estimated by Ordinary Kriging (OK) interpolation methods into a Surpac block model with parent block dimensions of 10 m (along strike) by 5 m (across strike) by 5 m (vertical).* • *The parent block size is approximately equal to the sample separation distance within the pit and*

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Criteria	JORC Code explanation	Commentary
	• *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	*approximately half the sample separation distance below the pit. The parent blocks were sub-celled to 1.25 m (along strike) by 0.625 m (across strike) by 0.625 m (vertical) for volume resolution.* • *All estimates were made into parent blocks. Blocks were filled using two estimation passes, with an increasing search radius and decreasing minimum number of samples. Details are given in the report.* • *Search ellipse directions and anisotropy were aligned with variography results.* • *Domain boundaries were treated as hard boundaries (stopes and lodes), stope grade were estimated though a final decision to use a historic fixed grade (3.6 g/t) to all stope material was applied.* • *The estimates were validated by visual inspection of block grades and drill hole data, comparison of alternate estimation methods* • *Estimation for rock and tailings dumps was effected on a polygonal basis using weighted averages for grade estimation*
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• *Tonnages are based on dry tonnes.*
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• *Cut-off grades applied according to potential mining and processing methods. A cut-off grade of 1.6 g/t was used for material within the designed open pit, based on current production. Resources below the pit are reported to a 3.0 g/t Au cut off, to reflect higher mining costs associated with underground mining methods.*
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• *The current mineral resource does not include any dilution or ore loss associated with practical mining constraints.*
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• *Metallurgical test work and previous processing operations indicate recoveries of around 78% for CIL. Metallurgical recoveries average 75.3%, based on an aqua regia determined head grade at the plant. Average recovery for February 2022 were 80.6%.* • *Similar recoveries as above are forecast to being achieved on screened rock and tailings material*

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• *The project is located within existing mining leases* • *The Annual Rehabilitation Reports (to July 2023) for Mt Boppy have been finalised and submitted to the regulator.* • *No specific issues beyond normal requirements for open pit mining in NSW*
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• *Bulk density values used for conversion of block model volumes to tonnages were derived from 1,306 core sample density measurements using water displacement methods. No density readings by MKR have been undertaken.* • *Density was assigned to the block model based on weathering domain; 2.4 t/m3 for oxide, 2.68 t/m3 for transitional and 2.77 t/m3 for fresh material.* • *Weathering domains were defined by drill hole logging for the oxide/transitional boundary and an RL of 175 m for the transitional/fresh boundary.* • *Stope fill was assigned a density value 1.5 t/m3 based on a density of 1.8 t/m3 and ⅛th of the stopes assumed to be voids. Level drives are assumed to be open, not back filled. This figure is considered a representative based on recent mining and haulage experience.* • *No correlation was observed between grade and density.* • *Rock and tailings dump densities are based on calibrated FEL weightometer*
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant 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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• *Resources were classified according to the number of samples used, distance to samples and estimation confidence statistics:* • *relative confidence in tonnage and grade estimates are reflected in the resource classification, Input data quality, quantity and distribution is considered appropriate for use in resource estimation.* • *The understanding and confidence in the geology model is robust and has been tested with drilling.* • *Resource categories Measured, Indicated and Inferred were assigned to the resource reflecting the Competent Persons view of the deposit* • *Dump classifications were assigned on the quantum of bulk sampling and statistical normalization of the sampling.*
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• *No external audits or reviews of the resource estimate have been carried out to date.*
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify*	• *A combination of data spacing, geological understanding and the application geostatistical procedures to quantify the relative accuracy of the resource where considered when applying Resource confidence levels.* • *The interpretations of geology and mineralisation are well constrained and support high confidence in the estimate. Measured resources are considered*

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Criteria	JORC Code explanation	Commentary
	the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	*representative of local tonnes and grade. Grade control drilling and pit mapping has informed the measured resource areas. Indicated and inferred resources are considered representative of the global tonnes and grade contained within the area of the deposit tested by diamond and RC drilling* • *The deposit was mined by MKR between June 2020 and November 2021. Reconciliation to mill production is provided in the body of the report.* • *Dump resources are considered representative of the tonnes and grade contained within the area of the deposit tested by bulk sampling.* • *The recent commencement of gold production from screened products of these resources will provide ongoing accuracy through reconciliations of gold produced vs material processed.*

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)
No Reserves are reported at this time.

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