### **ASX Announcement**

15 April 2024

**ASX: MKR** 



## Mineral Resource Update – Mt Boppy Gold Project

# Sonic drilling program delivers significant increase in Resource confidence to support gold production at Mt Boppy

Manuka Resources Limited ("**Manuka**" or the "**Company**") is pleased to release an updated Mineral Resources Estimate for Mt Boppy. The Resource update supports Manuka's strategy to install a purpose-built gold processing plant at Mt Boppy and recommence on-site gold production from Q4 2024.

#### **Highlights:**

- The results of a recently completed Sonic Drilling Program over the Main Waste Rock Dump and Dry Tailings have successfully delivered an updated Mineral Resource Estimate for Mt Boppy.
- The updated Resource comprises 4.28Mt at 1.19g/t Au for 163koz of contained gold. Importantly, the updated Resource has seen an 100% increase in the portion of contained gold ounces classified as Indicated.
- The Mt Boppy Measured and Indicated Resource categories now comprises 82% of total Resource Estimate.
- A high-grade component of the Resource comprising 1.8Mt at 1.74g/t containing 102koz Au has been identified as a basis for future mine planning.
- The results support Manuka's strategy to install on-site processing plant at Mt Boppy and provides confidence in the development of a mine plan that will underpin the recommencement of gold doré production.

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

"The Sonic Drilling Program was critical precursor to the recommencement of the processing of rock dumps and dry tailings at Mt Boppy. The results of this program have been extremely positive allowing us to significantly improve the confidence of our Mt Boppy Resource.

Consequently, Manuka is confident in its strategy to progress the establishment a fit-forpurpose on-site gold processing plant at Mt Boppy in the coming months and in turn free up our Wonawinta process plant, most recently used to process Mt Boppy ore, for future silver production from the existing Wonawinta Silver mine.

The bullish gold and silver markets, combined with the fact that Manuka has two granted mining licenses - both fully permitted for on-site processing - and existing processing infrastructure, translate to a very exciting time for the Company."

#### Mt Boppy Resource Statement Summary

The Mineral Resource Estimate at Mt Boppy has been updated subsequent to the completion of a 26 borehole 506m sonic drilling evaluation programme over the Mt Boppy Rock Dumps and Dry Tailings completed in December 2023 (Figure 1).



Figure 1: Location Sonic drilling collars over Mt Boppy Rock Dump (left) and TSF3 PAF (right)

The updated Resource comprises 4.28Mt at 1.19g/t Au for 163koz of contained gold of which 82% is contained in the Measured and Indicated categories (Table 1). Importantly, the Resource update sees the ounces classified as Indicated increase by 100% over the previous estimate.

The Resource for Mt Boppy comprises (Table 2):

**Rock dumps and tailings depositories**, with gold grades derived from recent Sonic drilling to bedrock, and fire assay head grades of +90, -90+20, +10-20, and -10mm size fractions, each weighed to ascertain mass % distribution. The rock dump and tailings Resources are reported at a cutoff of 0.25g/t Au total 3.9Mt tonnes at a grade of 0.89g/t Au for 110,628oz Au.

#### In-situ hard rock Resources including:

- a Mt Boppy open cut pit shell that reaches a depth of 215m below surface at the southern end of the Mt Boppy deposit. Material within the current pit design is reported at a 1.6g/t Au cut off and material below the pit design is reported to a 3.0g/t Au cut off
- the Boppy South mineral zone based on a grade shell modelled at a 1.6g/t cut off.
   This prospect still requires final drilling and evaluation before assessing the viability of establishing a small opencast mine.

The incremental change to the overall Mt Boppy Resource relates to updates to Rock dumps and Tailings depositories. The combined Mt Boppy Open Cut and Boppy South Resource of 282kt at a grade of 4.95 g/t Au for 44,820 ounces gold remain unchanged from that previously reported (ASX Release 25 August 2023) and all material assumptions continue to apply.

Table 1 - Mt Boppy Global Resource by Classification at 15 April 2024

Resource Classification	Tonnes	Grade	Contained	Contained
Resource Classification	kt	g/t Au	koz	%
Measured	107	5.25	18.0	11%
Indicated	3,127	1.16	116.5	71%
M+I Sub Total	3,233	1.29	134.5	82%
Inferred	1,046	0.87	29.4	18%
Total	4,279	1.19	163.9	100%

Table 2 - Mt Boppy Global Resource by Location at 15 April 2024

Ore Location	Classification	Tonnes (kt)	Au (g/t)	Au (koz)
	Measured	107	5.25	18.0
	Indicated	158	4.86	24.7
	M & I	265	5.01	42.7
In-ground Hard Rock	Inferred	17	3.90	2.1
	Mt Boppy Open Pit	282	4.95	44.8
	Inferred	110	2.39	8.5
	Mt Boppy South Pit Shell	110	2.39	8.5
	Indicated	2,116	0.80	54.3
Rock Dumps	Inferred	881	0.61	17.2
	Total Rock Dumps	2,997	0.74	71.6
	Indicated	853	1.37	37.5
Tailings	Inferred	38	1.30	1.6
	Total Tailings	891	1.36	39.0
	Measured	107	5.25	18.0
	Indicated	3,127	1.16	116.5
Total	Total M & I	3,233	1.29	134.5
	Inferred	1,046	0.87	29.4
	Total Resource	4,279	1.19	163.9

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 evaluation.



Figure 2: Drone image looking south showing the main components of the Rock Dump and Tailings Resources in relation to the Mt Boppy open pit.

An evaluation of the total Resource update has identified a **high-grade subset** including both the Open Pit, Rock Dumps and Tailings and comprising 1.8Mt at 1.74g/t for 102koz of gold as the basis for future mine planning (Table 3, Figure 3). Table 3 is therefore a portion of the Global Resource reported in Table 2 above and has less tonnes in some sources.

Table 3 - High-Grade component of the overall Mt Boppy Resource

Source	Tonnes (kt)	Grade (g/t)	Contained Gold (koz)
Boppy Main Waste Dump (Oxide)	231	1.74	13
Boppy Main Dump (Fresh)	243	1.45	11
Current Stockpiles (+22mm)	85	1.11	3
TSF3 PAF	135	1.37	6
Mt Boppy Open Cut <sup>1</sup>	233	4.14	31
Sub Total	928	2.15	64
Tailings Boppy ROM	12	1.45	1
Tailings Boppy Main Waste Dump	121	1.33	52
Tailings TSF3	758	1.29	32
Sub Total	891	1.30	37
Grand Total	1,818	1.74	102

<sup>&</sup>lt;sup>1</sup> This is a pit shell constrained open cut and has less tonnes than the non-constrained global resource in Table 2

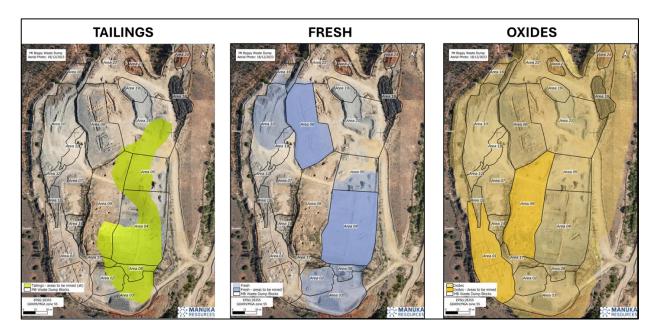


Figure 3: Priority areas with the Main Waste Rock Dump for future mine planning

#### **Additional Information**

The Company most recently produced gold by screening rock dump and tailings material at the Mt Boppy ROM over the period May to December 2023. A decision was taken to halt operations to allow for the derisking of the grade distribution control ahead of mining the Boppy Main Waste Rock Dump and Dry Tailings.

#### **Sonic Drilling Program**

A 26-borehole sonic drilling evaluation was completed on the Boppy Main Waste dump and the TSF3 impoundment including Potential Acid Forming (PAF) material overlying part of the tailings. The sonic evaluation drilling has enabled sampling of the full profile of the rock and tailings dumps, and thus assessment of the economic viability of treating crushed and screened rock dump fines plus tailings (these have already been subject to milling and cyanidation).

Sonic drilling proved to be an excellent method in evaluating unconsolidated rock dump and tailing dam material producing a more representative sample than reverse circulation or diamond core methods. The method is similar to diamond drilling in that a core (90mm diameter core in this case) of undisturbed material is collected in a core barrel, and then pressured out into a similar diameter plastic tube, which is trayed for logging and sampling purposes (Figure 4). Sonic drilling penetrates strata with a combination of very high resonant vibrations, hydraulic pressure and a rotating drill string.

Sampling was conducted on a 1 metre basis or if there was a lithological change. Gold analyses have been undertaken on the sonic core at the Gekko Laboratory (Ballarat). Analyses include fire assay head grade, bottle roll and residual tails fire assay on -10, +10-20, +20-90mm size fractions. Selected intervals from the drilling program are shown int Table 5.

The Mt Boppy open pit mined and stockpiles have previously been mined and processed by the Company through the Wonawinta Processing Plant located 150km south. The Company has indicated it intends to establish a new fit-for-purpose process plant on-site at Mt Boppy.

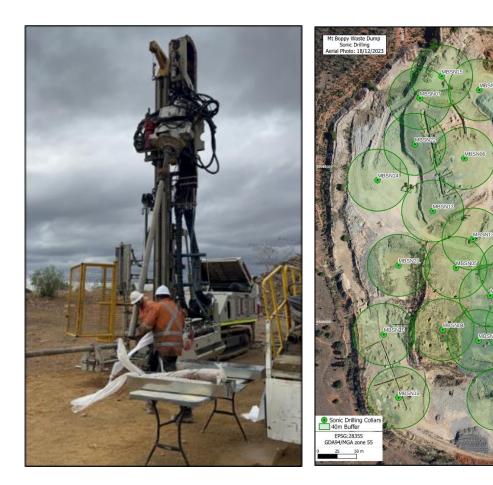


Figure 4: Sonic drilling and sampling (Left). Boppy Main Waste Rock dump sonic drilling AoI for each borehole, defining Indicated Resource areas (Right).

Table 5: Selected Intersections of sonic boreholes

	Main Was		p and TS	F3 FA I	lead Gra	de Inte	rsection A	Analysis										
Bh No		From	То	m	Au g/t	Au g	Waste	From	То	m	Au g/t	Au g	Waste	From	То	m	Au g/t	Au g
1	Fresh	-	7.4	7.4	1.49	11	Oxide	7.4	9.9	2.5	0.96	2	Tailings	18.0	22.9	4.9	1.23	6
2	Fresh	-	2.2	2.2	0.44	1	Oxide	15.0	17.0	2.0	0.92	2	Tailings	17.0	18.8	1.8	0.90	2
3	Fresh		No Fresh	١			Oxide	3.0	6.0	3.0	0.63	2	Tailings	17.5	18.4	0.9	1.54	1
4	Fresh		No Fresh	1			Oxide	8.0	13.5	5.5	2.25	12	Tailings	13.5	17.0	3.5	4.08	14
5	Fresh		No Fresh	١			Oxide	7.0	17.0	10.0	2.72	27	Tailings	17.0	18.0	1.0	1.82	2
6	Fresh		No Fresh	١			Oxide	14.0	19.3	5.3	0.47	3	Tailings	N	o Tailing	s		
7	Fresh	-	5.5	5.5	1.52	8	Oxide	VI	ow Gra	de		-	Tailings	N	o Tailing	s		
8	Fresh	-	5.4	5.4	1.14	6	Oxide	5.4	8.0	2.6	2.24	6	Tailings	15.6	21.3	5.7	1.18	7
9	Fresh	-	8.4	8.4	1.03	9	Oxide	VI	ow Gra	de		-	Tailings	15.6	19.0	3.4	1.26	4
10	Fresh	-	6.0	6.0	1.53	9	Oxide	8.0	11.5	3.5	1.19	4	Tailings	16.7	23.0	6.3	1.18	7
11	Fresh	-	4.6	4.6	0.31	1	Oxide	19.0	20.7	1.7	1.18	2	Tailings	N	o Tailing	s		
12	Fresh		Nil			-	Oxide	L	ow grad	e		-	Tailings	19.0	20.0	1.0	0.35	0
13	Fresh	-	7.5	7.5	1.68	13	Oxide	7.5	15.0	7.5	1.05	8	Tailings	N	o Tailing	s		-
14	Fresh	4.7	10.0	5.3	1.43	8	Oxide	-	4.7	4.7	0.43	2	Tailings	N	o Tailing	s		-
15	Fresh		No Fresh	١		-	Oxide	VI	ow Gra	de		-	Tailings	N	o Tailing	5		-
16	Fresh	L	ow grad	e		-	Oxide	N	lo Oxide	s		-	Tailings	N	o Tailing	s		-
17	Fresh		No Fresh	1		-	Oxide	5.8	11.0	5.2	1.08	6	Tailings	N	o Tailing	s		-
18	Fresh	-	5.0	5.0	1.18	6	Oxide	VI	ow Gra	de		-	Tailings	9.0	14.8	5.8	1.03	6
19	Fresh		No Fresh	١		-	Oxide	1.0	7.0	6.0	2.50	15	Tailings	N	o Tailing	s		-
20	Fresh		No Fresh	1		-	Oxide	-	4.0	4.0	0.51	2	Tailings	N	o Tailing	S		-
21	Fresh	9.8	11.2	1.4	33.31	47	Total	-	11.2	11.2	4.54	51	Tailings	N	o Tailing	s		-
22	Fresh	8.0	14.7	6.7	1.05	7	Oxide	VI	ow Gra	de		-	Tailings	N	o Tailing	s		-
Αv				5.5	1.92	125				5.0	1.92	144				3.4	1.45	50
				65.40						74.70						34.30		
23	Fresh PAF	-	9.2	9.2	1.00	9			NA				Tailings	9.2	20.7	11.5	1.17	13
24	Fresh PAF	-	8.4	8.4	1.00	8			NA				Tailings	8.4	20.9	12.5	1.13	14
25	Fresh PAF	-	8.0	8.0	2.34	19			NA				Tailings	8.0	17.6	9.6	1.04	10
26	Fresh PAF	-	7.3	7.3	1.00	7			NA				Tailings	7.3	19.3	12.0	0.94	11
Av			Av	8.2	1.32	44			NA						Av	10.8	1.07	49

#### **Resource Estimation**

The Mt Boppy Mineral Resources have been updated through the completion of a sonic drill evaluation of the Boppy Main Waste Dump and parts of the TSF3 enclosure. The re-evaluation is subsequent to a period (May to December 2023) of mining and processing Boppy ROM dump and tailings material, and where independent (Gekko Lab) fire assays have been used for the estimation. Previous estimations of the Mt Boppy open cut resources remain unchanged.

The Boppy Main Waste Dump and TSF3 dumps have been re-estimated using the sonic drilling results. Models of the 3 lithological classes (Fresh, Oxide, Tailings) were generated in Micromine, and constrained by surface DTM's created from drone imagery and GPS surveys. Grade/Tonnage tabulations and Area / Block locality for the various lithological classes are shown in Annexure 1. Sonic drilling grades for each area were calculated using weighted average grade x width. A 0.25g/t cutoff grade was applied to all rock and tailings dump blocks, and mainly applies to low grade oxide material which is not deemed to be likely to be economically viable. Classification between Inferred and Indicated Resources was delineated by a 40m (Indicated) area of influence ("AoI") for each borehole (Figure 4). Material outside the AoI was classified as Inferred.

#### **Previous Mineral Resource Estimate**

Table 6 - Mt Boppy Resource by Classification at 25 August 2023

Resource Classification	Tonnes	Grade	Contained	Contained
Resource Classification	kt	g/t Au	koz	%
Measured	107	5.25	18.0	11%
Indicated	605	3.01	58.5	37%
M+I Sub Total	712	3.34	76.5	48%
Inferred	1,770	1.47	83.6	52%
Total	2,482	2.01	160.1	100%

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

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#### **Compliance Statements**

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. 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 30<sup>th</sup> 2021 projected pit pick-up, and treated (screened) material on the Boppy ROM dump as at 16 December 2023.

#### **Competent Persons 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 gold and silver assets located in the Cobar Basin, central west New South Wales and offshore vanadium bearing iron sands in the South Taranaki Bight of New Zealand. These projects include:

#### The Mt Boppy Gold Mine (Cobar Basin, NSW)

The Mt Boppy gold mine is located 43 km east of Cobar, in the Central West region of New South Wales. The current Mt Boppy Mineral Resource<sup>2</sup> is estimated at 4.3Mt at 1.19 g/t Au and comprises a mix of oxidised and transitional/fresh in-ground mineralisation, mineralised rock dumps and mineralised tailings.

The Company has to date processed its stockpiles and gold mineralised waste product through its Wonawinta plant. Manuka are currently pursuing a strategy of establishing of a fit-for-purpose, on-site crush-screen-mill-float facility to enhance the economics of the Mt. Boppy Mine and the value of near-mine prospects. The Mt Boppy site includes a 48-person mine camp and is fully permitted for the proposed processing plant and on-site production.



<sup>&</sup>lt;sup>2</sup> ASX Release 25 August 2023

#### The Wonawinta Silver Mine (Cobar Basin, NSW)

Previously Australia's largest primary silver producer, Wonawinta produced approximately 3 million ounces of silver during 2012-2013, and an additional 500,000oz of silver in 2022. The mine hosts a significant Resource<sup>3</sup> - including stockpiles and shallow oxide material, Wonawinta contains total Resources of 38.8 million tonnes at 42g/t silver for 52.4 million ounces. Within this there is a higher grade component of 4.5 million tonnes at 97g/t silver for 14 million ounces.

The Wonawinta processing plant has a nameplate capacity of approximately 850,000tpa. The Company is reviewing the potential of recommencing operations at Wonawinta, taking advantage of the strengthening silver price environment.

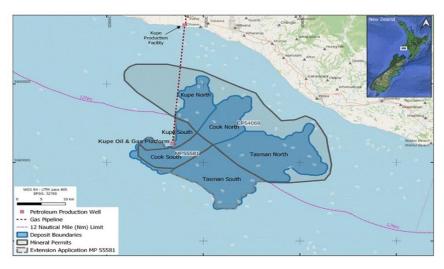


Wonawinta Silver Mine

#### The Taranaki VTM Project (South Taranaki Bight, New Zealand)

Manuka is the 100% owner of the Taranaki VTM (vanadium titanomagnetite) Iron Sands Project. The Project sits in the lowest quartile of the iron ore production cost curve.

The Taranaki VTM Project comprises a 3.2Bt Resource<sup>4</sup> at 10.17% Fe<sub>2</sub>O<sub>3</sub>, 1.03% TiO<sub>2</sub> and 0.05% V<sub>2</sub>O<sub>5</sub> (1.6Mt V<sub>2</sub>O<sub>5</sub>) ranking it as one of the largest drilled vanadium projects globally. The Project is located 22km to 36km offshore in New Zealand's EEZ, or Exclusive Economic Zone, outside the 12 nautical limit from the shoreline, in waters ranging between 20 to 50 metres depth and has a granted mining license, MP55581, permitting production of 5Mtpa. On granting of final government approvals to operate the Company will complete its Bankable Feasibility Study on the Project.



Location of Taranaki VTM Project

<sup>&</sup>lt;sup>3</sup> ASX release 1 April 2021

<sup>&</sup>lt;sup>4</sup>ASX release 1 March 2023

#### **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.

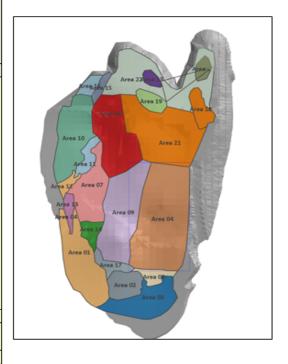
#### **Compliance Statements**

Information included in this presentation relating to Mineral Resources has been extracted from the ASX Announcements "Amended Mt Boppy Mineral Resource Estimate Update" (25 August 2023), "Maiden Vanadium Resource at Taranaki VTM Iron Sand Project" (1 March 2023) and "Manuka – Wonawinta Silver Project Mineral Resource Update" (1 April 2021) available to view at www.manukaresources.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Mineral Resource Estimates and that all material assumptions and technical parameters underpinning the estimates, continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Mineral Resource Estimates.

## ANNEXURE 1 BOPPY MAIN WASTE DUMP AREA TONNAGE / GRADE EXTENT AND DISTRIBUTION

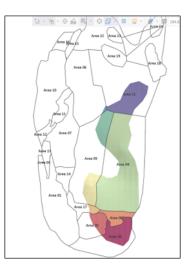
#### **OXIDES**

OXIDES										
Mining	Volume	Density	Tonnes	Tonnes	BH Support	Ind Tonnes	Av Head	Conte	ent	Class
Area	m²	t/m³	t	outside AoI			Au g/t	Au g	Au Oz	
Area 9	211,912	1.70	360,250	40,765	BH 4 5 12	319,485	0.98	313,366	10,075	IND
Area 1	100,016	1.70	170,028	41,941	BH 19 20	128,087	1.19	152,423	4,901	IND
Area 4	266,270	1.70	452,659	117,189	BH 1 2 8 9 10	335,470	0.43	145,559	4,680	IND
Area 10	51,344	1.70	87,284	45,881	BH 14	41,404	0.43	17,721	570	IND
Area 7	87,117	1.70	148,098	30,545	BH 21	117,553	0.35	41,536	1,335	IND
Area 6	125,260	1.70	212,942	20,525	BH 6 7 22 13	192,417	0.35	66,902	2,151	IND
Area 22	176,579	1.70	300,185	142,634	BH 15 17	157,551	0.35	54,693	1,758	IND
Area 21	262,918	1.70	446,961	194,201	BH 3	252,759	0.27	69,043	2,220	IND
Area 11	11,268	1.70	19,155	7,782	BH 14 11 22	11,373	0.28	3,234	104	IND
					INDICATED	1,556,099	0.56	864,477	27,794	
Area 9				40,765	BH 4 5 12	40,765	0.98	39,984	1,286	INF
Area 1				41,941	BH 19 20	41,941	1.19	49,910	1,605	INF
Area 4				117,189	BH 1 2 8 9 10	117,189	0.43	50,848	1,635	INF
Area 10				45,881	BH 14	45,881	0.43	19,637	631	INF
Area 7				30,545	BH 21	30,545	0.35	10,793	347	INF
Area 6				20,525	BH 6 7 22 13	20,525	0.35	7,136	229	INF
Area 22				142,634	BH 15 17	142,634	0.35	49,514	1,592	INF
Area 2	22,530	1.70	38,302		Area 8 17 3	38,302	0.37	14,218	457	INF
Area 18	29,477	1.70	50,111		Area 21 22	50,111	0.31	15,542	500	INF
Area 12	8,575	1.70	14,577		Area 10 & 7	14,577	0.35	5,064	163	INF
Area 17	15,730	1.70	26,741		Area 192	26,741	0.76	20,420	657	INF
Area 13	12,367	1.70	21,024		Area 1 7 12	21,024	0.63	13,268	427	INF
Area 14	18,887	1.70	32,108		Area 179	32,108	0.84	27,015	869	INF
Area 15	13,132	1.70	22,325		Area 22 6 10 1		0.37	8,242	265	INF
Area 16	15,977	1.70	27,160		Area 15 10	27,160	0.35	9,615	309	INF
Area 23	13,556	1.70	23,045		Area 22	23,045	0.35	8,000	257	INF
Area 24	14,230	1.70	24,192		Area 22	24,192	0.35	8,398	270	INF
					INFERRED	719,063	0.50	357,605	11,497	
Slopes	259,663	1.70	441,427		Total Av	441,427	0.54	237,108	7,623	
Cut Off 0.25	INDICATED					1,556,099	0.56	864,477	27,794	
	INFERRED					719,063	0.50	357,605	11,497	
	IND & INF					2,275,163	0.54	1,222,082	39,291	
	GEOLOGICAL		441,427			441,427	0.54	237,108	7,623	
	TOTAL	OWR	2,918,574			2,716,590	0.54	1,459,190	46,914	



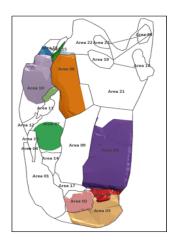
#### **TAILINGS**

TAILINGS										
Mining	Volume	Density	Tonnes	Tonnes	BH Support	Indicated t	Av Head	Conte	ent	Class
Area	m²	t/m³	t	outside AoI			Au g/t	Au g	Au Oz	
Area 21	5,888	1.20	7,065	2,173	BH 5	4,892	1.54	7,534	242	IND
Area 9 N	3,465	1.20	4,158	670	BH 12	3,488	2.70	9,406	302	IND
Area 4	54,770	1.20	65,724	7,697	BH 1 2 8 9 10	58,028	1.14	66,134	2,126	IND
Area 9S	6,142	1.20	7,370	670	BH 4	6,700	2.70	18,067	581	IND
Area 8	8,977	1.20	10,773	895	BH 18	9,878	1.03	10,140	326	IND
	•					Inferred t			·	
Area 21	5,888	1.20		2,173		2,173	1.54	3,347	108	INF
Area 9 N	3,465	1.20		670		670	2.70	1,805	58	INF
Area 4	54,770	1.20		7,697		7,697	1.14	8,772	282	INF
Area 9S	6,142	1.20		670		670	2.70	1,805	58	INF
Area 8	8,977	1.20		895		895	1.03	919	30	INF
Area 6	170	1.20	204	204	Area 21 9N	204	1.85	376	12	INF
Area 17	938	1.20	1,125	1,125	Area 9 2 8	1,125	2.04	2,293	74	INF
Area 2	3,997	1.20	4,796	2,304	Area 8 3	4,796	2.04	9,774	314	INF
Area 3	16,406	1.20	19,688	4,423	Area 8 2	19,688	1.03	20,210	650	INF
Cutoff 0.25	INDICATED					82,986	1.34	111,281	3,578	
	INFERRED					37,917	1.30	49,302	1,585	
	TOTAL		120,903			120,903	1.33	160,583	5,163	



#### **FRESH ROCK**

MT Boppy M	ain Waste du	mp								
Volume - Tor	nnage - FA Hea	ad grade	analysis							
FRESH ROCK										
Mining	Volume	Density	Tonnes	Tonnes	Informing	Indicated t	Av Head	Content	Content	Class
Area	m³	t/m³	t	outside Aol	data	indicated t	Au g/t	Aug	Au Oz	
Area 4	87,639	1.80	157,751	10,941	BH 1 2 8 9 10	146,810	1.10	160,877	5,172	IND
Area 10	62,926	1.80	113,267	48,886	BH 14	64,382	1.11	71,326	2,293	IND
Area 6	70,014	1.80	126,026	7,800	BH 6 7 22 13	118,225	1.08	128,121	4,119	IND
						Inferred t				
Area 4						10,941	1.10	11,989	385	INF
Area 10						48,886	1.11	54,159	1,741	INF
Area 6						7,800	1.08	8,453	272	INF
Area 3	27,627	1.80	49,729		Area 8	49,729	1.09	54,171	1,742	INF
Area 8	3,631	1.80	6,536		BH 18	6,536	1.09	7,119	229	INF
Area 7	4,198	1.70	10,579		BH 21	10,579	1.17	12,377	398	INF
Area 2	5,821	1.80	10,478		Areas 8 3	10,478	1.09	11,414	367	INF
Area 15	1,490	1.80	2,683		Areas 6 10	2,683	1.10	2,939	95	INF
Area 11	6,700	1.80	12,060		Area 107	12,060	1.13	13,675	440	INF
Area 16	598	1.80	1,076		Area 15 10	1,076	1.18	1,268	41	INF
Area 22	644	1.80	1,159		BH 15 17	1,159	1.08	1,256	40	INF
FRESH	INDICATED					329,417	1.09	360,325	11,585	
	INFERRED					161,925	1.10	178,822	5,749	
	TOTAL		491,342			491,342	1.10	539,147	17,334	
				Capped	Area 7	33.31	1.17			



## Appendix 1: JORC Code 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

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

_	apply to all succeeding sections.)				
Criteria	JORC Code explanation	Commentary			
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple.</li> </ul>	<ul> <li>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).</li> <li>From historic reports, PML and BOK sampling techniques all followed industry best practice.</li> <li>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.</li> <li>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.</li> <li>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</li> <li>Sonic drill core was collected in plastic tubes and transferred to drill trays. Split 50:50 samples were taken each metre unless there was alithological change.</li> <li>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.</li> </ul>			
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).	<ul> <li>PML and BOK: Diamond (HQ diameter) and RC drilling (5.5 inch face sampling bit), Open hole percussion blasthole drilling</li> <li>MAAS: RC drilling (5.5 inch face sampling bit)</li> <li>MKR: RC drilling (5.5 inch face sampling bit), open hole percussion blasthole drilling</li> <li>MKR used Sonic drilling (90mm diameter coring) for the Main Waste dump and TSF3 tailigs dump evaluation</li> </ul>			
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>No recovery information is available for pre-2011 drilling</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>			

Criteria	JORC Code explanation	Commentary
		<ul> <li>No relationship exists between gold grades and recoveries in either RC or diamond logging.</li> <li>MKR Sonic drilling averaged 89% recovery over 503m (26 boreholes), and given the broken/unconsolidated nature of rock dumps was accepted as a good result.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Drill holes were geologically logged to various standards over the project history. Hardcopy logs are available for historic drilling.</li> <li>For post-2011 PML diamond core drilling, core recovery and RQD data were recorded for the core run intervals, and core was routinely photographed.</li> <li>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.</li> <li>Sonic drill samples were logged including lithology, recovery, mass, and photographed</li> <li>Dump samples were logged recording date, gps locality, volume and tonnage of resultant cones. Tonnages were calculated from no of buckets and the FEL calibrated weightometer.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>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.</li> <li>PML and BOK RC samples were split at the rig by cone splitter at 1 m intervals.</li> <li>MKR RC samples were split at the rig by a 3 tier riffle splitter at 1 m intervals.</li> <li>BOK and PML blasthole grade control samples were split at the rig by a 3-tier riffle splitter.</li> <li>MKR blasthole samples were collected by quartering of the blasthole cuttings cone.</li> <li>MKR Field duplicate results for RC data showed &gt; 87% above 0.1g/t Au within ± 40%.</li> <li>Laboratory duplicate results for RC and diamond core samples for PML, BOK and MKR showed &gt;95% of data within ±15%, with no appreciable difference between drilling phases.</li> <li>Drilling muds and bit shrouds were used to improve recovery.</li> <li>Gold is finely disseminated and associated with sulphides in quartz veins and the RC subsample size is considered appropriate. Drill chips dried and pulverised to a nominal 90% passing 75 µm screen before further sub sampling at the laboratory.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>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.</li> <li>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.</li> <li>ALS laboratories undertake internal QC checks including standards, blanks and duplicates.</li> <li>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.</li> <li>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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>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.</li> <li>The Gekko Laboratory (Ballarat) has conducted fire assays on all the Sonic drilling samples, providing head grade analyses.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>Two PML RC holes were twinned with diamond core holes.</li> <li>Analyses of twinned RC and diamond holes showed a very close match between grade and length of intersected mineralization.</li> <li>No recent MKR RC drill holes have been twinned with diamond</li> <li>The bulk sampling was utilized to reduce potential nugget effects in the feed material. Duplicate 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.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>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.</li> <li>Down hole surveys were collected Reflex magnetic single system at 30 m intervals.</li> <li>Some RC grade control and other drill holes were unable to be surveyed due to hole collapse during or after drilling.</li> <li>Topographic control is via a triangulated wireframe surface derived from an aerial photogrammetry survey as well as Total station surveys of the pit.</li> <li>Topographic control is considered adequate given the relatively subdued relief in the resource area.</li> <li>All dump samples were located using a handheld GPS.</li> <li>All Sonic drilling collars were collected by a handheld GPS.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>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).</li> <li>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.</li> <li>RC and diamond core samples were composited over 2 m and grade control holes over 2.5 m to minimize sample splitting.</li> <li>Dump sampling was initially conducted on pits 40m apart, then followed up with trenches that joined the pits together. No compositing was undertaken.</li> <li>Sonic drilling was conducted on a variable 20-80m spacing dependent on access at the time.</li> </ul>
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	<ul> <li>Mineralisation is controlled by steeply west dipping vein structures.</li> <li>PML, BOK and MKR surface RC and diamond drilling is generally at high angles to the gold</li> </ul>

Criteria	JORC Code explanation	Commentary
	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.	<ul> <li>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.</li> <li>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.</li> <li>All blast hole grade control holes are vertical, however the greater density of this sampling reduces the chances of introducing bias.</li> <li>Not applicable to dump sampling</li> <li>All Sonic boreholes were vertical, with no deviation to bedrock at 15-22m</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>BOK and MKR sampling was supervised by a company representative up to the point of dispatch to ALS laboratories using a local freight company.</li> <li>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.</li> <li>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.</li> </ul>
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.)

Contents instead in the preceding section also apply to this section.)		
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>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)</li> <li>The property on which the Mount Boppy mine situated is Crown Land.</li> <li>A Native Title Agreement is in place with the traditional owners.</li> <li>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.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The deposit was first discovered in 1896 and mined by underground methods up to 1923.</li> <li>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.</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>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.</li> <li>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.</li> <li>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.</li> <li>The Main Lode strikes approximately north-south and dips at approximately 70-80° west.</li> <li>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.</li> <li>Mineralisation is predominantly gold, associated with grey quartz veins and minor pyrite.</li> </ul>
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:  a 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.	<ul> <li>Resources are the penultimate result of an exploration work programme.</li> <li>All drill holes were considered in the definition of the resources.</li> <li>Drill hole data is stored in the Manuka Drillhole Database off site (EarthSQL), Data is managed by Manuka staff.</li> <li>Not applicable to Dump evaluation.</li> </ul>
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Samples are generally taken over one metre lengths, all samples are composited to two metre lengths for estimation.</li> <li>Grade capping is assessed on a domain basis and applied to individual composites</li> <li>No minimum sample cuts were applied to drill hole data</li> <li>Dump grade assays were top cut at 95% confidence.</li> <li>Dump grades were weighted against mass and averaged</li> <li>Sonic drill intercepts were aggregated by weighted average against width of intersection. Very high grade Intersections were capped at 95% confidence</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be</li> </ul>	<ul> <li>Shoots have long been recognised within the Mt Boppy ore body. There is a no correlation between thickness (true or downhole) and gold grades.</li> <li>Generally true thickness is approximately 70% to 80% of the down hole drill intercept widths.</li> <li>3D wireframes used to define mineralisation mitigate the difference between drill hole intercepts and true widths.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Not applicable to dump evaluation, including Sonic drilling
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.	<ul> <li>All drill holes were used in the interpretate the location and thickness of the mineralised halo.</li> <li>Reasonable prospects for economic extraction are considered when reporting resources</li> </ul>
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.	<ul> <li>Geological Mapping (lithology and structure), historic workings and drill holes were used to aid the interpretation of mineralisation at Mt Boppy.</li> <li>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%.</li> <li>Dump sampling has been described above, and was based on systematic multiple approximate 5-10t FEL samples derived from mechanically excavated material.</li> <li>Densities for dump material were derived from a FEL weightometer.</li> <li>Same densities utilized for dump drilling.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>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.</li> <li>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.</li> <li>Sonic drilling has proved a reliable method for evaluating unconsolidated dump material.</li> </ul>

## 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	MA was provided with an export of the current MKR drill hole database
	corrupted by, for example, transcription or keying	The database contained tables for Collar details and metadata, downhole surveys, assays,

Criteria	JORC Code explanation	Commentary
	errors, between its initial collection and its use for Mineral Resource estimation purposes.  • Data validation procedures used.	<ul> <li>lithology, alteration, core recoveries, veins, minerals and oriented structures.</li> <li>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.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	Phil Bentley is the Chief Geologist for Manuka Resources and visits the site 2 weeks per month.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>Geological and mineralisation interpretation was carried out on approximately 10 m spaced sections, oriented perpendicular to the strike of mineralization.</li> <li>Mineralisation was modelled as a single domain above 1 g/t Au, which represents a clear natural break in grade statistics.</li> <li>Intercepts of lesser grade were included where necessary to aid continuity.</li> <li>The mineralised domain surrounds the 3D shapes modelled to represent historic underground workings.</li> <li>Historic workings outlines were derived from old mine plans and drill hole logging.</li> <li>Historic underground workings are generally filled with tailings material and timber supports.</li> <li>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.</li> <li>Mineralisation displayed very good continuity between sections.</li> <li>Not applicable to dump evaluation</li> <li>Sonic drilling dump intersections were logged as either Waste oxide, Waste fresh or Tailings.</li> </ul>
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.	<ul> <li>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.</li> <li>Mineralisation dips 85° to the west.</li> <li>Rock and tailings dumps have been surveyed using Drone imagery and GPS coordination, and then modelled in Micromine.</li> <li>Sonic drilling intersections to bedrock have further constrained the volume estimation of the dumps.</li> </ul>
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.	<ul> <li>Estimation of hard rock resources was carried out in Surpac 7.5.</li> <li>Statistical analyses was carried out on composite samples from mineralization within the domains to establish declustered means, top cuts and spatial variability (Variography).</li> <li>Directional variography indicated differences in spatial anisotropy between the northern and southern parts of the deposit, divided by an interpreted cross-structure striking northwest.</li> <li>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</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of byproducts.</li> <li>Estimation of deleterious elements or other nongrade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>m (vertical).</li> <li>The parent block size is approximately equal to the sample separation distance within the pit and 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.</li> <li>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.</li> <li>Search ellipse directions and anisotropy were aligned with variography results.</li> <li>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.</li> <li>The estimates were validated by visual inspection of block grades and drill hole data, comparison of alternate estimation methods</li> <li>Estimation for rock and tailings dumps was effected on a polygonal basis using weighted averages for grade estimation</li> <li>Estimation for rock and tailings dumps was effected on a polygonal basis using weighted averages for grade estimation</li> </ul>
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.	<ul> <li>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.</li> <li>A cutoff grade of 0.25g/t was statistically generated and applied to dumps based on a reasonable chance of the material being economically viable through preconcentration and flotation processing.</li> </ul>
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	The current mineral resource does not include any dilution or ore loss associated with practical mining constraints.

Criteria	JORC Code explanation	Commentary
	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.	
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.	<ul> <li>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%.</li> <li>Similar recoveries as above are forecast to being achieved on screened rock and tailings material</li> <li>The economic viability of the Boppy Main waste dump and tailings deposits will partly depend on appropriate and successful gravity preconcentration and flotation testwork.</li> </ul>
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.	<ul> <li>The project is located within existing mining leases</li> <li>The Annual Rehabilitation Reports (to July 2023) for Mt Boppy have been finalised and submitted to the regulator.</li> <li>No specific issues beyond normal requirements for open pit mining in NSW</li> <li>The open cut is currently flooded and inaccessible for mining. Dewatering and a sidewall pushback are necessary to access and recover these Resources</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used</li> </ul>	<ul> <li>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.</li> <li>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.</li> <li>Weathering domains were defined by drill hole logging for the oxide/transitional boundary and an RL of 175 m for the transitional/fresh boundary.</li> <li>Stope fill was assigned a density value 1.5 t/m3 based on a density of 1.8 t/m3 and 1/6th 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.</li> <li>No correlation was observed between grade and density.</li> </ul>

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	in the evaluation process of the different materials.	Rock and tailings dump densities are based on calibrated FEL weightometer
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>Resources were classified according to the number of samples used, distance to samples and estimation confidence statistics:</li> <li>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.</li> <li>The understanding and confidence in the geology model is robust and has been tested with drilling.</li> <li>Resource categories Measured, Indicated and Inferred were assigned to the resource reflecting the Competent Persons view of the deposit</li> <li>Dump classifications were assigned on the quantum of bulk sampling and statistical normalization of the sampling.</li> <li>Dump classifications informed by Sonic drilling were assigned based on lithologic areas, and on a 40m area of influence ("AoI") for Indicated, the number of boreholes within that AoI. Anything outside 40m was classified as Inferred within a given area.</li> </ul>
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	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>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.</li> <li>The interpretations of geology and mineralisation are well constrained and support high confidence in the estimate. Measured resources are considered 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</li> <li>The deposit was mined by MKR between June 2020 and November 2021. Reconciliation to mill production is provided in the body of the report.</li> <li>Dump resources are considered representative of the tonnes and grade contained within the area of the deposit tested by bulk sampling.</li> <li>The recent commencement of gold production from screened products of these resources has provided ongoing accuracy through reconciliations of gold produced vs material processed.</li> <li>Dump resources informed by Sonic drilling have been upgraded using only Gekko head grade fire assays for evaluation, superceding Wonawinta Aqua regia.</li> </ul>