



# Thick High Grade Graphite at Millennium Millennium Cu-Co-Au Project Update

## High grade graphite results from 2022 drilling re-assay program

## **Highlights**

- Thick, high grade intersections returned from graphite analysis of previous Cu-Co-Au drilling samples including:
  - 56m @ 18.29% graphite from 66m (MI22RD01)
  - 20m @ 14.05% graphite from 64m (MI22RD02)
  - 49m @ 12.97% graphite from surface, and 14m @ 18.88% graphite from 64m (MI22RD06)
- Graphite intersected in drilling over >2km of strike on granted mining leases
- Significant intersections within and adjacent to the pit model for the existing 8.4Mt @ 0.09% Co, 0.29% Cu and 0.12g/t Au for a 1.23% CuEq<sup>1</sup> JORC Resource,
- Further metallurgical and drilling work in planning, to unlock additional value on **Millenium Project**

Metal Bank Ltd (ASX: MBK) ('Metal Bank, 'MBK' or the 'Company') is pleased to announce significant and extensive graphite results at its Millennium Cu-Co-Au Project in northwest QLD Following high grade graphite results from our mid 2024 drilling campaign<sup>2</sup>, the Company initiated a program to re-assay selected 2022 Cu-Co-Au drill samples.

#### Commenting on these results, Metal Bank Executive Chair, Inés Scotland said:

"We are on record stating we are unlocking and adding value to our Australian projects and this is a fantastic demonstration of low cost work that adds a large amount of value to our Millennium project.

<sup>&</sup>lt;sup>1</sup>The Company confirms that it is not aware of any new information or data that materially affects the Millennium Mineral Resource statement as set out in the MBK ASX announcement dated 21 March 2023 "Millennium delivers substantial Resource increase", a summary of which is set out in Annexure 1. All material assumptions and technical parameters underpinning the estimates, including the Copper Equivalent calculations continue to apply and have not materially changed and the Company is of the view that all elements continue to have a reasonable potential to be recovered and sold.

<sup>&</sup>lt;sup>2</sup> MBK ASX announcement 30 July 2024: High Grade Graphite Results from Millennium Project



These intersections are near surface, over more than 2km of strike and are within or immediately adjacent to the current pit modelling and what was previously characterised as barren waste rock in our Cu-Co-Au Resource. With the median grade of graphite deposits globally around 7.7% (USGS, 2024) and the average lithium battery having 20-30x the graphite content vs lithium, there is demand for this critical mineral.

We will continue to assess graphite potential, including metallurgy and further drilling, to add further value for the Millennium Cu-Co-Au project."

#### Millennium Work Summary

Following high grade graphite results of up to 5.8m @ 17.4% TGC<sup>2</sup> being returned from diamond drilling earlier in the year, the Company undertook a review of previous drill samples from its 2022 Cu-Co-Au drill campaign. This review identified 417 previously sampled and assayed intervals which were submitted for Total Graphitic Carbon (**TGC**) analysis.

All samples assayed for TGC returned positive graphite results, with significant graphitic carbon intersected over broad intervals from surface, most notably in the south and west of the project in the hangingwall of the Millennium Cu-Co-Au mineralisation. Notable intersections are presented in Table 1, and include:

- 56m @ 18.29% TGC from 66m (MI22RD01),
- 20m @ 14.05% TGC from 64m (MI22RD02), and
- 49m @ 12.97% graphite from surface and 14m @ 18.88% TGC from 64m (MI22RD06) (Figures 1-3).

Graphite has now been demonstrated over >2km of strike and with significant widths which remain open to the west and at depth.

Importantly, all graphite intersections are within or immediately adjacent to the proposed pit model of the 2023 Mineral Resource (Figures 1-3) and on granted mining leases.

It should be noted that the majority of drill holes were not ideally located to test for graphite due to the short Cu-Co-Au resource-focussed nature of the 2022 drilling campaign, with best results occurring in the pre-collar holes to deeper resource expansion drill holes.

Drilling results also correlate with previous high grade graphite rock chip samples in the area, and other limited graphite sampling throughout the project area.



Table 1: Millennium 2022 TGC% summary results

HOLE ID	FROM	ТО	INTERVAL	TGC%	COMMENTS	
MI22DD02	1	13	12	5.83	No other TGC assays than presented	
inc	4	5	1	10.15		
MI22RC02	45	51	6	5.96	No other TGC assays than presented	
	110	113	3	5.86		
	128	143	15	5.4	5.4	
	149	150 EOH	1	5.55	Hole ended in >5% TGC	
MI22RC03	70	79 EOH	9	5.23	Hole ended in >5% TGC	
MI22RC04	40	41	1	7.65	2 TGC samples only. 0.32% Cu	
MI22RC05	33	36	3	9.1	1 TGC sample only	
MI22RC06	31	38	7	9.37	0.07% Cu	
inc	34	38	4	10.45		
MI22RC07	0	31	31	8.03	0-31m only TGC%	
inc	27	30	3	10.05		
MI22RC08	-	-	-	-	no results >5% TGC	
MI22RC09	-	-	-	-	no results >5% TGC	
MI22RC10	-	-	-	-	no results >5% TGC	
MI22RC12	25	53	28	5.49		
	77	85	8	5.48		
MI22RC14	20	36	16	5.63		
MI22RC18	-	-	-	-	no results >5% TGC	
MI22RD01	0	59	59	8.85	No TGC% assays 47-51m (zero value used), no TGC% sampling 59-66m	
inc	0	34	34	10.4		
and	10	14	4	16.25		
and	43	47	4	10.1		
and	51	59	8	12.53		
	66	122	56	18.29		
MI22RD02	0	23	23	9.47		
	30	57	27	11.22		
inc	30	39	9	18.21		
	64	84	20	14.05	80-83m not sampled (assigned undergrade 10% TGC due to geology)	
	184	189	5	9.49		
	230	231	1	5.82		
MI22RD03	115	123	8	7.71		
MI22RD04	0	9	9	12.97	Limited sampling - more TGC% samples for future assay	
	57	65	8	8.58		
	107	121	14	8.74		
MI22RD05	16	28	12	6.12	Limited sampling - more TGC% samples for future assay	
	56	64	8	7.6		
	135	156	21	9.24		
inc	143	151	8	13		
MI22RD06	0	49	49	12.97	49-58m not sampled	
	58	59	1	9.51		
	64	78	14	18.88	78-87m not sampled	
	87	93	6	13.6	93-106m not sampled	
	106	113	7	14.87	113m to EOH not sampled	

NB: All intervals downhole weighted mean, 1m minimum width, 5% TGC minimum cut-off and 5m maximum internal dilution. Composite intervals >10% TGC reported separately. See Table 2 for all results.



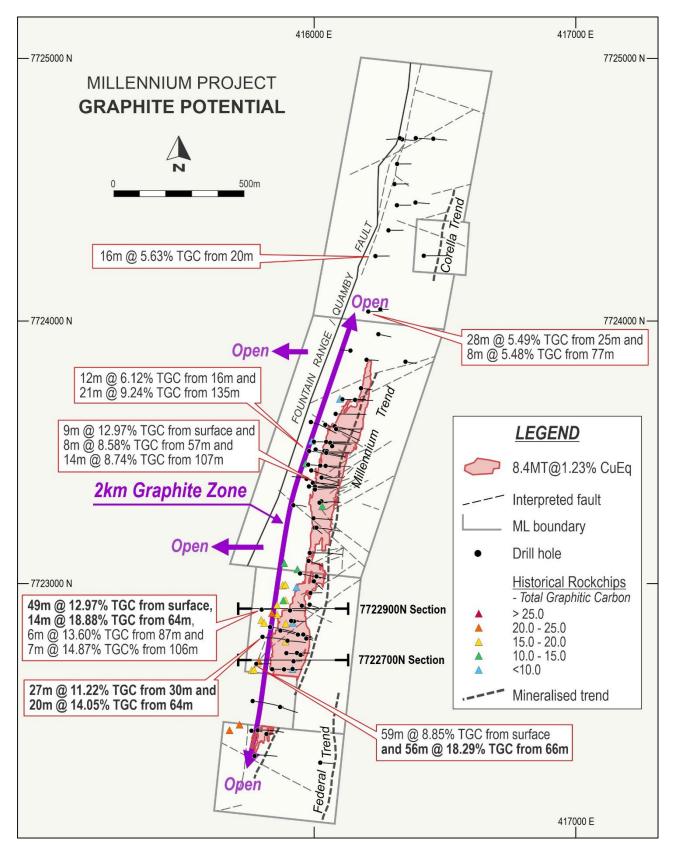


Figure 1: Millennium project overview showing graphite results, drill holes and 2023 Cu-Co-Au Mineral Resource model outline.



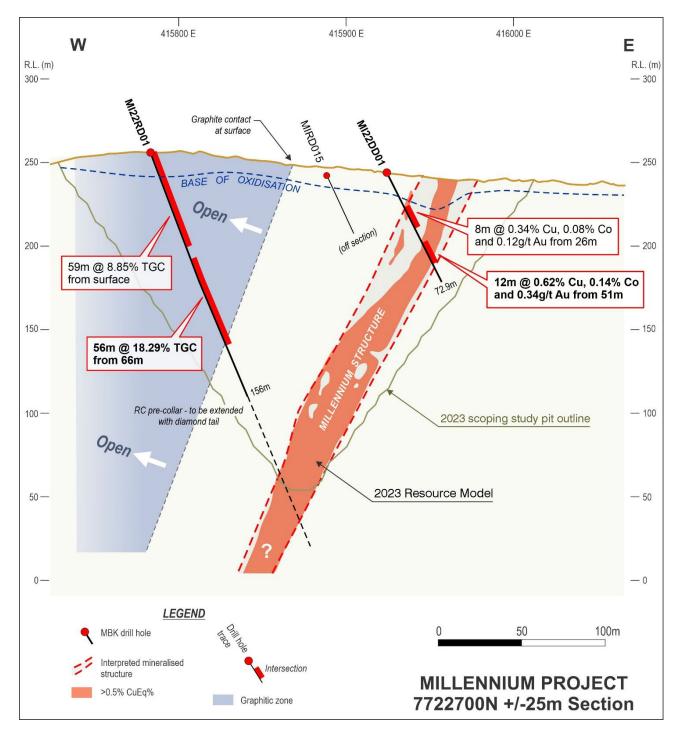


Figure 2: 7722700N cross-section showing existing Cu-Co-Au resource, previous drilling and recent graphite re-assay results from MI22RD01 pre-collar hole



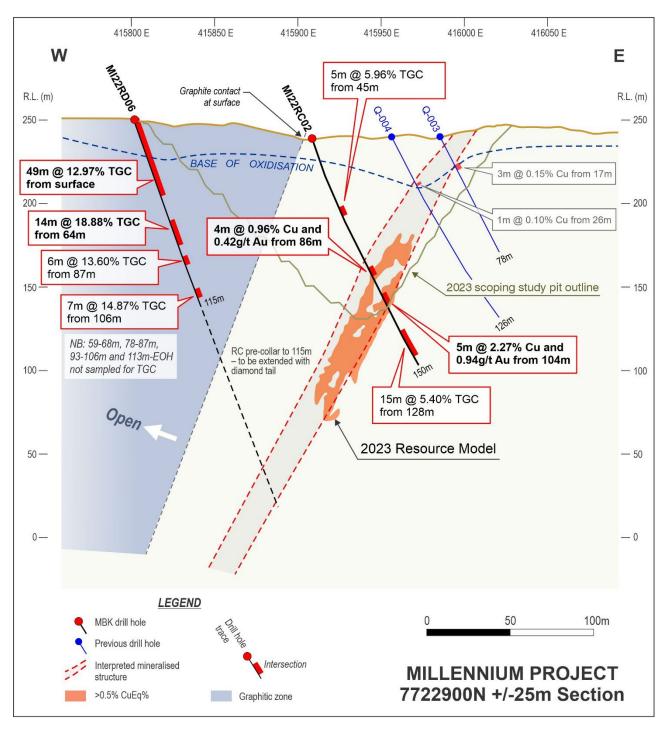


Figure 3: 7722900N cross-section showing existing Cu-Co-Au resource, previous drilling and recent graphite re-assay results from MI22RD06 pre-collar and MI22RC02 resource holes



#### **NW Queensland District Graphite Development**

Millennium is strategically located between other NW QLD graphite development projects which are currently undergoing consolidation (Figure 4). The Corella deposit is located 14km to the south (13.5Mt @ 9.5% TGC)<sup>3</sup> and the Burke deposit 107km due north (9.1Mt @ 14.4% TGC)<sup>3</sup> of Millenium, both held by Lithium Energy (ASX: 'LEL'), and the Mt Dromedary deposit (7.0Mt @ 14.5% TGC)<sup>4</sup> held by Novonix (ASX: 'NVX' and NASDAQ: 'NVX") is immediately adjacent to the Burke Deposit.

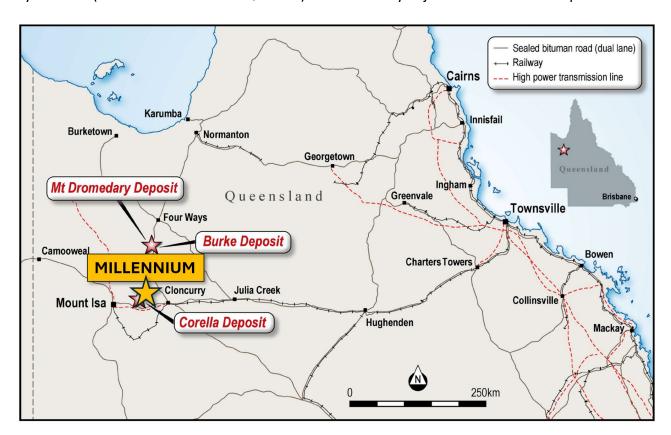


Figure 4: NW QLD graphite projects map (modified after Lithium Energy (ASX: LEL) website.

Millennium displays matching geology to the Corella deposit, with metamorphosed graphitic shales, slates and schists of the Milo Beds within the Tommy Creek Domain hosting both deposits. Both deposits are also proximal to mafic units and structural corridors which are considered key factors for the development of high quality, high-grade graphite mineralisation.

Metallurgical<sup>5</sup> and electrochemical<sup>6</sup> test work to date on these nearby deposits has returned highgrade concentrate with high graphite recoveries coincident with electrochemical test work

<sup>&</sup>lt;sup>3</sup> LEL ASX announcement 3 April 2024: Merger of Lithium Energy and NONOIX Natural Graphite Assets and Proposed Axon Graphite Limited Spin-Out and IPO

<sup>&</sup>lt;sup>4</sup> NVX ASX announcement 9 September 2024: Axon Graphite Limited Update – Mt Dromedary Graphite Mineral Resources Review

<sup>&</sup>lt;sup>5</sup> LEL ASX announcement 28 July 2023: Burke and Corella Graphite Projects Testwork Update

<sup>&</sup>lt;sup>6</sup> LEL ASX announcement 11 March 2024: Exceptional Battery Testing Results Achieved with Burke Spherical Purified Graphite



indicative of material highly suitable for downstream graphite processing and integration into modern battery manufacturing and other technologies.

#### **Forward Plan**

In addition to advancing the Company's copper and critical minerals strategy in Saudi Arabia and Jordan, MBK remains committed to extracting maximum value from its Australian asset portfolio.

Graphite demand continues to grow in line with expansion in the electric vehicle (EV) lithium-ion battery sector, where graphite is the key raw material consumed in EV battery anodes (some 20-30x the lithium content in a 'lithium' battery). Despite some recent price pressure, the long-term outlook for natural, ex-China graphite remains strong. As the industry targets diversified supply, the focus shifts to more ESG friendly, secure sources of graphite production and processing.

In line with this, MBK is assessing the potential for further value to be unlocked from the Millennium Project via developing the graphite potential over the coming months. This includes additional surface mapping and sampling, metallurgical testing to determine recovery, graphite flake size, sphericity and purity, and a further program of drilling to refine near term scope for an Exploration Target and/or Mineral Resource.

The company also continues to monitor the NW QLD battery metals space as projects and infrastructure develops.

#### Authorised by the Board.

#### For further information contact:

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#### **About Metal Bank**

MBK holds a significant portfolio of advanced copper, cobalt and gold exploration projects, with substantial growth upside, including:

- execution of our MENA strategy to including the grant of the Wadi Al Junah project and exploration license applications in Saudi Arabia and three granted copper projects in Jordan
- a 75% interest in the advanced Livingstone Gold Project in WA which holds a JORC 2012 Mineral Resource Estimate of 880Kt at 1.42g/t Au for 40,300oz Au<sup>7</sup> (83% Indicated, 17% Inferred) at the Homestead prospect, a JORC 2012 Inferred Resource of 669Kt at 1.42g/t Au for 30,500oz<sup>8</sup> Au

<sup>&</sup>lt;sup>7</sup> MBK ASX Release 21 February 2023 "Livingstone delivers updated shallow Mineral Resources at Homestead"

<sup>&</sup>lt;sup>8</sup> MBK ASX Release 18 January 2022 "Kingsley Deposit Maiden Mineral Resource Estimate and updated Exploration Target"



at Kingsley, and an Exploration Target<sup>9</sup> of 290 – 400Kt at 1.8 – 2.0 g/t Au for 16,800 – 25,700oz Au at Kingsley;

- a 51% interest and the right to earn up to 80% of the Millennium Cobalt-Copper-Gold project which holds a 2012 JORC Inferred Resource of 8.4Mt @ 0.09% Co, 0.29% Cu and 0.12g/t Au for a 1.23% CuEq<sup>10</sup> across 5 granted Mining Leases with significant potential for expansion; and
- the 8 Mile, Wild Irishman and Eidsvold Gold projects in South East Queensland.

Metal Bank's future exploration programs at these projects will continue to focus on:

- near-term growth advancing existing projects to identify and substantially increase JORC Resources;
- identifying additional mineralisation at each of its projects; and
- assessing development potential, including fast tracking projects through feasibility and development to production, particularly at the Millennium Project in Queensland, where the cobalt and copper project is contained within granted mining licenses.



MBK Projects – Australia and MENA

<sup>&</sup>lt;sup>9</sup>It should be noted that the potential quantity and grade of the Exploration Target is conceptual in nature and there is insufficient drilling information to estimate a Mineral Resource over the Exploration Target area and it is uncertain if further exploration will result in the estimation of a Mineral Resource over this area. The Exploration Target is located along strike to the East of the existing Inferred Mineral Resource at Kingsley and has been subject to limited RC drilling which provides an indication of volume and grade of mineralisation and is supported by extrapolating the Inferred Mineral Resource at Kingsley, existing interpretation of continuity of host geology, consistent strike of structural fabric supported by geophysics, significant soil geochemistry anomalism and previous drill results. For further details refer to MBK ASX Release 18 January 2022 "Kingsley Deposit Maiden Mineral Resource Estimate and updated Exploration Target"

<sup>&</sup>lt;sup>10</sup>The Company confirms that it is not aware of any new information or data that materially affects the Millennium Mineral Resource statement set out in the MBK ASX announcement dated 21 March 2023 "Millennium delivers substantial Resource increase", a summary of which is set out in Annexure 1. All material assumptions and technical parameters underpinning the estimates, including the Copper Equivalent calculations continue to apply and have not materially changed and the Company is of the view that all elements continue to have a reasonable potential to be recovered and sold



#### **Competent Person Statements**

The information in this report that relates to Mineral Resource Estimations and Ore Reserves was prepared and reported in accordance with the ASX Announcements and News Releases referenced in this report. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant ASX announcements and News Releases. In the case of Mineral Resource estimates and Ore Reserve estimates, 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 Persons' findings are presented have not been materially modified from the original ASX announcements or News Releases.

The information in this announcement, that relates to MBK Exploration Results, Mineral Resources and Exploration Target statements is based on information compiled or reviewed by Mr Trevor Wright. Mr Wright is a contractor to the Company and eligible to participate in the Company's equity incentive plan. Mr Wright is a Member of The Australasian Institute of Geoscientists 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 Wright consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. It should be noted that the MBK Exploration Targets described in this report are conceptual in nature and there is insufficient information to establish whether further exploration will result in the determination of Mineral Resources.



Table 2: All Millennium 2022 graphite assay intervals

HOLE ID	FROM	TO	INT (m)	SAMPLE ID	SAMPLE TYPE	TGC%
MI22DD01	64	65	1	4063	DD HALF	3.32
MI22DD01	65	66	1	4064	DD HALF	2.87
MI22DD01	66	67	1	4065	DD HALF	3.65
MI22DD01	67	68	1	4066	DD HALF	3
MI22DD01	68	69	1	4067	DD HALF	3.62
MI22DD01	69	70	1	4068	DD HALF	2.82
MI22DD01	70	71	1	4069	DD HALF	2.91
MI22DD01	71	72	1	4070	DD HALF	3.18
MI22DD01	72	72.9	0.9	4071	DD HALF	3.62
MI22DD02	0	1	1	4072	DD HALF	3.23
MI22DD02	1	2	1	4073	DD HALF	6.02
MI22DD02	2	4	2	4074	DD HALF	3.81
MI22DD02	4	5	1	4075	DD HALF	10.15
MI22DD02	5	6	1	4076	DD HALF	7.47
MI22DD02	6	7	1	4077	DD HALF	4.43
MI22DD02	7	8	1	4078	DD HALF	5.66
MI22DD02	8	9	1	4079	DD HALF	6.09
MI22DD02	9	10	1	4080	DD HALF	6.72
MI22DD02	10	11	1	4081	DD HALF	4.7
MI22DD02	11	12	1	4082	DD HALF	5.58
MI22DD02	12	13	1	4083	DD HALF	5.53
MI22DD02	43	44	1	4115	DD HALF	3.1
MI22DD02	44	45	1	4116	DD HALF	2.96
MI22RC02	45	47	2	2342	RC RC	6.71
MI22RC02	47	48	1	2343	RC	3.12
MI22RC02	48	51	3	2344	RC	6.41
MI22RC02	108	109	1	2393	RC	2.84
MI22RC02	109	110	1	2394	RC	4.3
MI22RC02	110	111	1	2395	RC	5.91
MI22RC02	111	112	1	2396	RC	6.39
MI22RC02	112	113	1	2397	RC	5.28
MI22RC02	113	117	4	2398	RC	4.95
MI22RC02	117	118	1	2399	RC	3.34
MI22RC02	118	119	1	2400	RC	3.53
MI22RC02	119	120	1	2401	RC	4.21
MI22RC02	120	121	1	2402	RC	4.27
MI22RC02	121	122	1	2403	RC	3.93
MI22RC02	122	123	1	2404	RC	3.75
MI22RC02	123	124	1	2405	RC	3.75
MI22RC02	124	125	1	2406	RC	3.98
MI22RC02	125	126	1	2407	RC	4.04
MI22RC02	126	127	1	2408	RC	3.5
MI22RC02	127	128	1	2409	RC	3.21
MI22RC02	128	129	1	2410	RC	5.61
MI22RC02	129	130	1	2411	RC	4.07
MI22RC02	130	131	1	2412	RC	5.65
MI22RC02	131	132	1	2413	RC	5.22
MI22RC02	133	134	1	2415	RC	6.85
MI22RC02	134	135	1	2417	RC	6.36
MI22RC02	135	136	1	2418	RC	5.6



MI22RC02	136	137	1	2419	RC	7.08
MI22RC02	137	138	1	2420	RC	6.79
MI22RC02	138	139	1	2421	RC	6.19
MI22RC02	139	140	1	2422	RC	5.69
MI22RC02	140	141	1	2423	RC	5.79
MI22RC02	141	142	1	2424	RC	4.52
MI22RC02	142	143	1	2425	RC	5.51
MI22RC02	143	144	1	2426	RC	4.7
MI22RC02	144	145	1	2427	RC	3.89
MI22RC02	145	146	1	2428	RC	4.24
MI22RC02	146	147	1	2429	RC	4.62
MI22RC02	147	148	1	2430	RC	4.12
MI22RC02	148	149	1	2431	RC	4.77
MI22RC02	149	150	1	2432	RC	5.55
MI22RC03	42	46	4	2584	RC	3.75
MI22RC03	46	50	4	2585	RC	2.01
MI22RC03	50	54	4	2586	RC	2.54
MI22RC03	54	58	4	2587	RC	2.74
MI22RC03 MI22RC03	54 58	62	4	2588	RC RC	3.31
MI22RC03	62	63	1	2589	RC	4.61
MI22RC03	63	64	1	2599	RC	4.01
MI22RC03	64	65	1	2590	RC	4.23
-			1		RC	-
MI22RC03	65	66 67	1	2592		4.02
MI22RC03	66			2593	RC	4.06
MI22RC03	67	68	1	2594	RC	4.39
MI22RC03	68	69	1	2595	RC BC	4.55
MI22RC03	69	70	1	2597	RC BC	4.41
MI22RC03	70	71	1	2598	RC	5.21
MI22RC03	71	72		2599	RC	4.98
MI22RC03	72	73	1	2600	RC	4.7
MI22RC03	73	74	1	2601	RC BC	4.86
MI22RC03	74	75	1	2602	RC BC	5.14
MI22RC03	75	76		2603	RC	4.36
MI22RC03	76	77	1	2604	RC BC	6.15
MI22RC03	77	78	1	2605	RC BC	5.77
MI22RC03	78	79		2606	RC	5.92
MI22RC04	40	41	1	2703	RC	7.65
MI22RC04	41	42		2704	RC	3.73
MI22RC05	33	36	3	2254	RC BC	9.1
MI22RC06	31	33	2	2072	RC	8.23
MI22RC06	33	34	1	2073	RC RC	7.31
MI22RC06	34	38	4	2074	RC	10.45
MI22RC06	38	40	2	2075	RC	4.78
MI22RC07	0	3	3	2160	RC	7.39
MI22RC07	<u>3</u> 7	7	4	2161	RC BC	6.22
MI22RC07		11	4	2162	RC	6.39
MI22RC07	11	15	4	2163	RC	7.86
MI22RC07	15	19	4	2164	RC	8.83
MI22RC07	19	23	4	2165	RC	8.25
MI22RC07	23	27	4	2166	RC	9.76
MI22RC07	27	30	3	2167	RC	10.05
MI22RC07	30	31	1	2168	RC	7.35
MI22RC08	0	4	4	2787	RC	2.88



MI22RC08	4	8	4	2788	RC	3.65
MI22RC08	8	12	4	2789	RC	2.24
MI22RC08	20	21	1	2795	RC	1.95
MI22RC08	21	22	1	2796	RC	2.1
MI22RC08	22	23	1	2790	RC	2.12
-	23	24	1		RC	2.12
MI22RC08			1	2798		
MI22RC08	24	25		2799	RC	2.28
MI22RC08	25	26	1	2800	RC	1.34
MI22RC08	26	27	1	2801	RC	0.42
MI22RC09	0	4	4	2863	RC	1.14
MI22RC09	4	8	4	2864	RC RC	1.3
MI22RC09	8	12	4	2865	RC RC	2.01
MI22RC09	12	16		2867	RC	3.09
MI22RC09	16	20	4	2868	RC	3.17
MI22RC09	20	21	1	2869	RC	2.5
MI22RC09	21	22	1	2870	RC	3.18
MI22RC09	22	23	1	2871	RC	4.29
MI22RC09	23	24	1	2872	RC	4.48
MI22RC09	24	25	1	2873	RC	4.09
MI22RC09	25	26	1	2874	RC	3.69
MI22RC09	26	27	1	2875	RC	3.55
MI22RC09	27	28	1	2876	RC	3.88
MI22RC09	28	29	1	2877	RC	4.16
MI22RC10	39	40	1	2954	RC	0.05
MI22RC10	40	41	1	2955	RC	1.67
MI22RC10	41	42	1	2956	RC	1.92
MI22RC12	1	5	4	2999	RC	3.83
MI22RC12	5	9	4	3001	RC	3.44
MI22RC12	9	11	2	3002	RC	2.42
MI22RC12	11	13	2	3003	RC	1.03
MI22RC12	13	17	4	3004	RC	3.03
MI22RC12	17	21	4	3005	RC	3.44
MI22RC12	21	25	4	3006	RC	4.06
MI22RC12	25	29	4	3007	RC	5.25
MI22RC12	29	33	4	3008	RC	6.21
MI22RC12	33	37		3009	RC	5.78
MI22RC12	37	41	4	3010	RC	5.56
MI22RC12 MI22RC12	41 45	45 49	4	3011 3012	RC RC	<i>4.94</i> 5.47
-		1				
MI22RC12	49	53	4	3013	RC RC	5.21
MI22RC12	53 57	57 61	4	3014	RC RC	4.06 2.97
MI22RC12		61	4	3015	RC RC	-
MI22RC12	61	65		3016	RC RC	3.31
MI22RC12	65	69	4	3017	RC RC	2.76
MI22RC12	69 73	73	4	3018	RC RC	3.72 4.71
MI22RC12 MI22RC12	<u>73</u> 77	77 81	4	3019	RC RC	
-		81 85	4	3020	RC	5.33 5.62
MI22RC12	81		5	3021		
MI22RC12	85	90	4	3022	RC RC	4.56
MI22RC12	90	94		3023	RC RC	4.67
MI22RC12	94	97	3 4	3024	RC RC	3.1
MI22RC13	0	4		3026	RC RC	3.92
MI22RC13	4	8	4	3027	RC	3.22



MI22RC13	8	12	4	3028	RC	3.62
MI22RC13	12	16	4	3029	RC	4.74
MI22RC13	16	20	4	3030	RC	4.01
MI22RC13	20	23	3	3031	RC	3.36
MI22RC14	0	3	3	3053	RC	0.75
MI22RC14	3	7	4	3054	RC	3.71
MI22RC14	7	11	4	3055	RC	2.01
MI22RC14	11	13	2	3056	RC	2.38
MI22RC14	13	17	4	3057	RC	3.16
MI22RC14	17	20	3	3058	RC	3.35
MI22RC14	20	24	4	3059	RC	5.37
MI22RC14	24	28	4	3060	RC	6.36
MI22RC14	28	32	4	3061	RC	5.05
MI22RC14	32	36	4	3062	RC	5.75
MI22RC14	36	40	4	3063	RC	4.86
MI22RC14	40	44	4	3064	RC	4.96
MI22RC14	44	48	4	3065	RC	4.66
MI22RC14	48	52	4	3066	RC	4.56
MI22RC14	52	56	4	3067	RC	4.36
MI22RC14	56	60	4	3068	RC	4.25
MI22RC14	60	64	4	3069	RC	4.98
MI22RC14	64	68	4	3071	RC	4.26
MI22RC14	68	72	4	3072	RC	3.68
MI22RC14	72	76	4	3073	RC	3.08
MI22RC14	76	80	4	3074	RC	3.57
MI22RC14	80	84	4	3075	RC	3.85
MI22RC14	84	88	4	3076	RC	3.72
MI22RC14	88	92	4	3077	RC	2.73
MI22RC14	92	94	2	3078	RC	3.66
MI22RC15	1	5	4	3079	RC	3.12
MI22RC15	5	9	4	3080	RC	3.31
MI22RC15	9	13	4	3081	RC	3.95
MI22RC15	13	17	4	3082	RC	3.63
MI22RC15	17	21	4	3083	RC	4.8
MI22RC15	21	25	4	3084	RC	4.95
MI22RC15	25	29	4	3085	RC	4.2
MI22RC15	29	33	4	3086	RC	3.26
MI22RC15	33	37	4	3087	RC	1.45
MI22RC15	37	41	4	3088	RC	2.88
MI22RC15	41	45	4	3089	RC	3.62
MI22RC15	45	49	4	3091	RC	3.67
MI22RC15	49	53	4	3092	RC	4.09
MI22RC15	53	57	4	3093	RC	3.71
MI22RC15	57 61	61	4	3094	RC PC	3.48
MI22RC15	61	65	4	3095	RC RC	2.09
MI22RC15	65	69	4	3096		3.1
MI22RC15 MI22RC15	69 73	73 77	4	3097 3098	RC RC	2.92 2.52
MI22RC15	77 77	81	4	3090	RC	2.52
MI22RC15	<u>77</u> 81	85	4	3100	RC	3.29
MI22RC15	<u>85</u>	89	4	3100	RC	3.29
MI22RC15	<u>65</u> 89	93	4	3102	RC	3.13
MI22RC15	93	97	4	3102	RC	3.11
IVIIZZITO 13	93	91	4	3103	, RC	3.11



MI22RC15	97	101	4	3104	RC	3.6
MI22RC15	101	103	2	3105	RC	2.49
MI22RC16	1	5	4	3106	RC	2.92
MI22RC16	5	9	4	3107	RC	3.53
MI22RC16	9	13	4	3108	RC	2.74
MI22RC16	13	14	1	3109	RC	2.97
MI22RC16	14	18	4	3111	RC	4.71
MI22RC16	18	21	3	3112	RC	4.64
MI22RC16	21	25	4	3113	RC	4.65
MI22RC16	25	29	4	3114	RC	2.55
MI22RC16	29	33	4	3115	RC	0.71
MI22RC17	1	5	4	3138	RC	1.68
MI22RC17	5	9	4	3139	RC	2.04
MI22RC17	9	13	4	3140	RC	1.87
MI22RC17	13	17	4	3141	RC	0.69
MI22RC18	31	35	4	3213	RC	0.61
MI22RC18	35	37	2	3214	RC	1.82
MI22RC18	37	41	4	3215	RC	1.08
MI22RC18	44	47	3	3217	RC	1.22
MI22RC18	47	51	4	3218	RC	0.5
MI22RC18	51	54	3	3219	RC	1.4
MI22RC18	54	58	4	3221	RC	1.05
MI22RC18	58	62	4	3222	RC	0.77
MI22RC18	62	64	2	3223	RC	0.28
MI22RC18	64	65	1	3224	RC	0.93
MI22RC18	92	96	4	3232	RC	3
MI22RC18	96	100	4	3233	RC	1.49
MI22RC18	100	104	4	3234	RC	0.79
MI22RC18	104	109	5	3235	RC	2.7
MI22RD01	0	4	4	2433	RC	10.4
MI22RD01	4	6	2	2434	RC	11.75
MI22RD01	6	7	1	2435	RC	4.03
MI22RD01	7	8	1	2436	RC	9.81
MI22RD01	8	10	2	2437	RC	0.96
MI22RD01	10	14	4	2438	RC	16.25
MI22RD01	14	18	4	2439	RC	11.8
MI22RD01	18	22	4	2440	RC	11
MI22RD01	22	26	4	2441	RC	7.77
MI22RD01	26	30	4	2442	RC	10.9
MI22RD01	30	34	4	2443	RC	10.5
MI22RD01	34	36	2	2444	RC	5.06
MI22RD01	36	41	5	2445	RC	2.05
MI22RD01	41	43	2	2446	RC	3.57
MI22RD01	43	47	4	2447	RC	10.1
MI22RD01	51	54	3	2452	RC	14.9
MI22RD01	54	55	1	2453	RC	7.77
MI22RD01	55	59	4	2454	RC	11.95
MI22RD01	66	69	3	2462	RC	18.5
MI22RD01	69	72	3	2463	RC	7.98
MI22RD01	72	75	3	2464	RC	21.4
MI22RD01	75	76	1	2465	RC	19.15
MI22RD01	76	80	4	2466	RC	14.45
MI22RD01	80	84	4	2467	RC	16.45



MI22RD01	84	88	4	2468	RC	16.15
MI22RD01	88	90	2	2469	RC	21.2
MI22RD01	90	91	1	2470	RC	22.1
MI22RD01	91	94	3	2471	RC	12
MI22RD01	94	95	1	2472	RC	0.33
MI22RD01	95	99	4	2473	RC	21.3
MI22RD01	99	103	4	2474	RC	21.4
MI22RD01	103	107	4	2475	RC	23.2
MI22RD01	107	111	4	2476	RC	22.8
MI22RD01	111	115	4	2477	RC	21.3
MI22RD01	115	119	4	2478	RC	18.5
MI22RD01	119	122	3	2479	RC	19.5
MI22RD01	122	126	4	2481	RC	0.86
MI22RD02	0	2	2	2490	RC	12.15
MI22RD02	2	4	2	2491	RC	1.35
MI22RD02	4	8	4	2492	RC	9.2
MI22RD02	8	12	4	2493	RC	10.85
MI22RD02	12	16	4	2494	RC	6.68
MI22RD02	16	20	4	2495	RC	12.9
MI22RD02	20	23	3	2496	RC	10.8
MI22RD02	30	32	2	2499	RC	17.85
MI22RD02	32	33	1	2500	RC	16.4
MI22RD02	33	37	4	2501	RC	17.7
MI22RD02	37	39	2	2502	RC	20.5
MI22RD02	39	40	1	2503	RC	7.42
MI22RD02	43	44	1	2508	RC	5.73
MI22RD02	44	45	1	2509	RC	16.95
MI22RD02	47	51	4	2511	RC	17
MI22RD02	54	57	3	2513	RC	13.65
MI22RD02	64	65	1	2521	RC	7.44
MI22RD02	65	66	1	2522	RC	7.91
MI22RD02	66	70	4	2523	RC	16.75
MI22RD02	70	74	4	2524	RC	15.85
MI22RD02	74	75	1	2526	RC	10.45
MI22RD02	75	80	5	2527	RC	16.1
MI22RD02	83	84	1	4131	RC	14.3
MI22RD02	184	185	1	4227	DD HALF	6.64
MI22RD02	185	186	1	4228	DD HALF	6.72
MI22RD02 MI22RD02	186 187	187 188	1	4229 4231	DD HALF DD HALF	10.75 11.7
MI22RD02	188	189	1	4231	DD HALF	11.65
MI22RD02	189	190	1	4233	DD HALF	3.76
		191	1	4234	DD HALF	2.64
MI22RD02 MI22RD02	190 191	192	1	4234	DD HALF	2.64
MI22RD02	192	193	1	4236	DD HALF	3.39
MI22RD02	193	194	1	4237	DD HALF	2.27
MI22RD02	194	195	1	4238	DD HALF	1.55
MI22RD02	195	196	1	4239	DD HALF	2.28
MI22RD02	196	197	1	4240	DD HALF	1.9
MI22RD02	197	198	1	4241	DD HALF	0.88
MI22RD02	228	229	1	4274	DD HALF	4.64
MI22RD02	229	230	1	4275	DD HALF	4.59
MI22RD02	230	231	1	4276	DD HALF	5.82



MI22RD02	231	232	1	4277	DD HALF	4.87
MI22RD02	232	233	1	4278	DD HALF	4.99
MI22RD02	233	234	1	4279	DD HALF	4.94
MI22RD02	234	235	1	4280	DD HALF	3.5
MI22RD03	14	17	3	2005	RC RC	4.09
MI22RD03	115	119	4	2034	RC	8.72
MI22RD03	119	123	4	2035	RC	6.7
MI22RD03	123	127	4	2036	RC	4.77
MI22RD03	127	128	1	2037	RC	2.87
MI22RD03	128	129	1	2038	RC	2.8
MI22RD03	143	146	3	2054	RC	1.69
MI22RD03	148	150	2	2057	RC	1.4
MI22RD03	150	154	4	2058	RC	0.76
MI22RD03	154	156	2	2059	RC	1.83
MI22RD04	0	3	3	2528	RC	16.8
MI22RD04	3	5	2	2529	RC	3.86
MI22RD04	5	9	4	2530	RC	14.65
MI22RD04	57	61	4	2545	RC	7.23
MI22RD04	61	65	4	2546	RC	9.93
MI22RD04	65	69	4	2547	RC	3.64
MI22RD04	69	73	4	2548	RC	3.29
MI22RD04	73	77	4	2549	RC	1.86
MI22RD04	77	81	4	2551	RC	0.23
MI22RD04	81	85	4	2552	RC	0.14
MI22RD04	85	89	4	2553	RC	0.19
MI22RD04	89	93	4	2554	RC	0.7
MI22RD04	107	111	4	2560	RC	9.27
MI22RD04	111	115	4	2561	RC	9.86
MI22RD04	115	119	4	2562	RC	7.99
MI22RD04	119	121	2	2563	RC	6.92
MI22RD05	0	4	4	2646	RC	3.22
MI22RD05	4	8	4	2648	RC	3.54
MI22RD05	8	12	4	2649	RC RC	2.96
MI22RD05	12	16	4	2650	RC	3.63
MI22RD05 MI22RD05	16 20	20 24	4	2651 2652	RC RC	5.02 7.42
MI22RD05	24	28	4	2653	RC	5.92
MI22RD05	28	32	4	2654	RC	2.91
MI22RD05	32	36	4	2655	RC	2.34
MI22RD05	36	40	4	2656	RC	2.59
MI22RD05	40	44	4	2657	RC	3.08
MI22RD05	44	48	4	2658	RC	2.76
MI22RD05	48	52	4	2659	RC	4.48
MI22RD05	52	56	4	2660	RC	3.85
MI22RD05	56	60	4	2661	RC	7.74
MI22RD05	60	64	4	2662	RC	7.45
MI22RD05	64	68	4	2663	RC	4.15
MI22RD05	68	72	4	2664	RC	1.87
MI22RD05	72	76	4	2665	RC	2.28
MI22RD05	135	139	4	2684	RC	7.24
MI22RD05	139	143	4	2685	RC	6.6
MI22RD05	143	147	4	2686	RC	11.6
MI22RD05	147	151	4	2688	RC	14.4



MI22RD05	151	156	5	2689	RC	6.95
MI22RD05	161	162	1	4311	DD HALF	4.95
MI22RD05	162	163	1	4312	DD HALF	3.81
MI22RD05	163	164	1	4313	DD HALF	6.07
MI22RD05	164	165	1	4314	DD HALF	6.13
MI22RD05	165	166	1	4315	DD HALF	6.4
MI22RD05	166	167	1	4316	DD HALF	6.55
MI22RD05	167	168	1	4317	DD HALF	5.63
MI22RD06	0	4	4	2608	RC	14.25
MI22RD06	4	8	4	2609	RC	13.5
MI22RD06	8	12	4	2610	RC	11.9
MI22RD06	12	14	2	2611	RC	1.61
MI22RD06	14	18	4	2612	RC	8.78
MI22RD06	18	22	4	2613	RC	13.6
MI22RD06	22	26	4	2614	RC	16.6
MI22RD06	26	30	4	2615	RC	14.95
MI22RD06	30	34	4	2616	RC	20.7
MI22RD06	34	36	2	2617	RC	1.08
MI22RD06	36	39	3	2618	RC	5.84
MI22RD06	39	44	5	2619	RC	21.3
MI22RD06	44	46	2	2620	RC	7.77
MI22RD06	46	49	3	2621	RC	11.1
MI22RD06	58	59	1	2625	RC	9.51
MI22RD06	59	60	1	2626	RC	2.69
MI22RD06	64	68	4	2629	RC	18.25
MI22RD06	68	72	4	2630	RC	22.2
MI22RD06	72	76	4	2631	RC	15.9
MI22RD06	76	78	2	2632	RC	19.45
MI22RD06	87	90	3	2636	RC	16.2
MI22RD06	90	93	3	2637	RC	11
MI22RD06	106	110	4	2643	RC	17.25
MI22RD06	110	113	3	2644	RC	10.1



## 1 APPENDIX 1: JORC CODE, 2012 EDITION – TABLE 1 REPORT

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Diamond Drilling (DD)</li> <li>HQ and NQ drill core sizes were utilised (with triple tube/splits as required) to ensure maximum sample recovery</li> <li>Samples were half or quarter cored via diamond saw, apexing mineralisation where possible to ensure representivity</li> <li>Reverse Circulation (RC)</li> <li>5.5" RC drilling was used, with samples collected via a cyclone splitter splitting a nominal 1:8 split/bulk sample per metre into individually numbered bags</li> <li>Where mineralised or altered, sampling was undertaken on single metre split bags, otherwise samples were composited into intervals based on geology with a maximum 4m interval using a 1:2:4:8 riffle splitter and where the entire split sample was riffle split into an equally representative and homogeneous composite sample of 2-4kg mass and riffle splitter cleaned by brush or compressed air between use</li> <li>All samples</li> <li>Stored homogenised and split sample pulps were sent to ALS Laboratories Mt Isa.</li> <li>Total Graphitic Carbon (TGC) was assayed for by C-IR18 IR spectroscopy taking a 0.1g/t sample split, digesting the sample in 50% HCI to evolve carbonate as CO2, then filtering, washing, drying and roasting the residue to 425C prior to roasted residue analysis for carbon by oxidation, induction furnace and infrared spectroscopy</li> <li>Laboratory duplicates and internal QA/QC was applied to pulps. Certified QA/QC standards, blanks and field duplicates were not inserted as previous QA/QC analysis of Au and multi-element results of same pulps were within range.</li> <li>All sampling, assay and QA/QC procedures considered industry standard and/or best practice and appropriate for the style of mineralisation</li> <li>Previous rock chip sampling techniques and methods by Hammer Metals in 2017 is unknown, however comments would indicate composite rock chip sampling, with assay for total graphitic carbon via ALS Mt Isa, Townsville or Brisbane.</li> </ul>





Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>DD and RC</li> <li>Angled HQ and NQ core size diamond drilling including use of triple tube to ensure maximum sample recovery and core preservation to maximum depth of ~300m</li> <li>Angled RC (reverse circulation) drilling via 5.5" face-sampling percussion drill bit with boosted air compression as required</li> <li>Sample recovery was overall excellent however zones of broken ground conditions limited full recovery and orientation in some zones</li> <li>Core was oriented via Reflect/ACT core tool or equivalent where possible</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>HQ3/NQ2 core (was used, with careful drilling techniques, appropriate product use and short runs in broken ground to ensure maximum recovery and core preservation</li> <li>Recovery was carefully measured each core run at the rig, then using drillers blocks and double checking via on ground/core shed measurement through standard metre mark up and geotechnical logging (run recovery, breaks per metre, RQD etc)</li> <li>Samples were half (NQ and HQ) and quarter (PQ) split via diamond core saw on site, apexing mineralisation to ensure representative sampling where possible</li> <li>RC</li> <li>All RC sample material was collected per meter via rig-mounted cyclone into consecutively numbered matching split and bulk bags and stored in order near the rig for QAQC</li> <li>It is possible that some graphite was lost due to light weight and small grain size via cyclone fines and preferential loss – in this case the reported grades would be under-reported vs true grade.</li> <li>ALL</li> <li>All data was entered onto paper or digital spreadsheets and collated into a validated digital database including recovery % per run or for RC, per metre, if the sample was wet or if there were drilling/recovery issues</li> <li>The sample size and sampling techniques are considered appropriate and industry standard practise for the style of mineralisation</li> <li>No significant issues were noted regarding sample bias other than minor loss in some zones of drilling difficulty (typically in foliated or faulted hangingwall shale) or fines loss via cyclone, and no notable grade bias due to sample recovery issues is identified at present</li> </ul>
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.	All RC and diamond drilling was logged for geology in the field by qualified



Criteria	JORC Code explanation	Commentary
	<ul> <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>Primary and secondary lithologies are recorded in addition to texture, structure, colour, grain size, alteration type and intensity, estimates of mineral quantities, sample recovery, weathering and oxidation state, magnetic susceptibility plus geotechnical and structural logging is also conducted were possible</li> <li>Sampling details are also collected and entered</li> <li>Geological logging is qualitative in nature and considered appropriate for the level of detailed required</li> <li>All RC and DD samples are photographed wet (with many dry also) shortly after drilling and markup, labelled and filed for future record</li> <li>All holes are logged and entered into validated digital database (NB: some logging details remain to be entered)</li> <li>No details other than digital geological database records are available for Hammer Metals data</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 sub-sampling 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>DD sampling and sub-sampling</li> <li>As prior sections</li> <li>DD core (NQ and HQ) was half-cored (HQ and NQ) or quarter cored (PQ) via Almonte or diamond brick core saw with a maximum length of 1m for a representative sample of ~3-5kg weight</li> <li>Veins/mineralisation were apexed to ensure representivity where possible, retaining orientation lines</li> <li>Broken/fissile core was sampled by paint scraper where possible to avoid core</li> </ul>



Criteria	JORC Code explanation	Commentary
Quality of	• The nature quality and appropriateness of the assaying and laboratory	<ul> <li>The sample and sub-sample size and sampling techniques are considered appropriate and industry standard practise for the style of mineralisation DD and RC sample preparation</li> <li>Samples were previously prepared and analysed at ALS Mt Isa, Townsville and/or Brisbane</li> <li>Samples were dried at approximately 120°C with the sample then crushed using a Boyd crusher which crushes the samples to -2mm</li> <li>The resulting material (typically 1-3kg) is then passed to a series LM5 pulverisers and ground to pulp of a nominal 85% passing of 75µm</li> <li>The milled pulps were weighed out (30-50g depending on company) and underwent analysis for Au by fire assay (method Au-AA26) and broad suite multi-element via either aqua regia (CYU) ME-ICP AES or 4 acid ME-ICP AES or OES (HMX) or ME-ICP61 (MBK)</li> <li>For TGC%, the milled pulps were then analysed for TGC% via C-IR18 using a 0.1g sample split then digesting the sample in 50% HCl to evolve carbonate as CO2, then filtering, washing, drying and roasting the residue to 425C prior to roasted residue analysis for carbon by oxidation, induction furnace and infrared spectroscopy</li> <li>Additional check, metallurgical and petrographic sampling on previous RC chips and core was also undertaken (HMX/GEMC) including umpire lab work at Intertek, coarse reject fusion XRF work and other repeat/duplicate sampling identified no significant issues, with only minor Au variation or 'nugget effect' in two samples</li> <li>Field sample and laboratory sample and preparation techniques are considered appropriate and industry standard practise for the style of mineralisation</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>Laboratory-prepared sample pulps were weighed out (30-50g depending on company) and underwent analysis for Au by fire assay (method Au-AA26) and broad suite multi-element via either aqua regia (partial to near total) (CYU) ME-ICP AES or 4 acid (near total) ME-ICP AES or OES (HMX) or ME-ICP61 (MBK)</li> <li>Where samples were assayed for Total Graphitic Carbon (TGC), method C-IR18 being graphitic carbon testing via IR spectroscopy was implemented with the analytical technique being considered total</li> <li>Assaying techniques and laboratory procedures used are appropriate for the material tested and the style of mineralisation</li> <li>Certified QA/QC standards, blanks, field and lab duplicates were inserted at nominal 1:20 or better intervals with samples in conjunction with laboratory duplicates and internal QA/QC (HMX and MBK)</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Certified Reference Materials (CRMs) were sourced through Geostats Pty Ltd and OREAS Pty Ltd, with samples of a similar nature to the Millennium mineralisation and/or similar grade ranges to ensure representivity</li> <li>Laboratory analytical techniques are considered appropriate and industry standard practise for the style of mineralisation</li> <li>Additional check, metallurgical and petrographic sampling on previous RC chips and core was also undertaken (HMX/GEMC) including umpire lab work at Intertek, coarse reject fusion XRF work and other repeat/duplicate sampling identified no significant issues, with only minor Au variation or 'nugget effect' in two samples</li> <li>Acceptable levels of accuracy and precision were obtained</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> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Field data is entered manually onto paper and/or directly into digital spreadsheets per hole before review, validation and compilation prior to implementation into company databases and external storage</li> <li>Physical copies are retained and filed, and digital document control procedures are in place</li> <li>Regular reviews and auditing of the databases occur to ensure clean, tidy and correct information</li> <li>Significant intersections are reviewed and checked via project geologist and exploration manager after both manual and automated (Micromine) interval calculations</li> <li>No twinned holes have been completed to date</li> <li>No adjustment to assay data has been or is required, however several intervals were not assayed for and required minor interpolation for weighted mean calculations – where minor/non-material sample intervals were missing and the geology of the interval the same as adjacent intervals, a standardized value lower than the lowest grade interval within the weighted mean calculation was used, and where the geology is different, a 0.01% TGC value was used for the interval calculation</li> <li>No assay reports, photos or other details are available for Hammer Metals data</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole 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>CYU data was surveyed by to high accuracy via RTK-DGPS by Diverse Surveyors Mt Isa</li> <li>HMX locations were surveyed via Leica Viva RTK-DGPS and ground-based LiDAR (accuracy ~0.01m X-Y and 0.026m Z) via Diverse Surveyors Mt Isa</li> <li>MBK drill hole data was collected via RTK-DGPS via Diverse Surveyors Mt Isa with an accuracy of &lt;10cm (2-3cm X-Y, 5-10cm Z)</li> <li>2024 drilling was positioned via handheld GPS with estimated accuracy of +/-4m XYZ</li> <li>Grid system used is GDA94 Zone 54</li> </ul>



Criteria	JORC Code explanation	Commentary
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>Downhole surveys were completed for all holes with a nominal 30m or better downhole spacing using Reflex Ezi-Track or Ezi-Shot single shot or multi-shot camera tool (HMX and MBK), Eastman (MBK backup) or downhole gyro (CYU)</li> <li>A high-resolution ground-based LiDAR survey via Leica Viva was undertaken over the resource area in 2016</li> <li>No location details are available for Hammer Metals rock chip sampling data, however handheld GPS is reasonably interpreted</li> <li>Drill pierce point spacing varies throughout the deposit, however in key areas a nominal 50 x 50-100m pierce point separation has been achieved (spacing decreasing at depth)</li> <li>There are sections with &lt;25m pierce point spacing throughout and sections with only 1 hole per 25-50m spaced section</li> <li>Geological interpretation and mineralisation continuity analysis indicates data spacing is sufficient for definition of a Mineral Resource</li> <li>No graphite Mineral Resource has yet been established, and current data quantity and spacing is not suitable for a Mineral Resource calculation</li> <li>Mineralisation compositing for reporting of TGC% used a 1m minimum width,</li> </ul>
		<ul> <li>5% TGC cut-off with maximum 5m internal dilution</li> <li>All intervals are downhole weighted means and are considered &gt;70% true width due to drilling as perpendicular to stratigraphy as possible</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Mineralisation at Millennium is interpreted on dominantly NNE-trending steeply WNW-dipping linear to anastomosing structures</li> <li>All RC and DD drilling included in the MRE is optimally oriented (dominantly shallow to moderately E-ESE) to ensure the most appropriate and most perpendicular intersection angle to mineralisation and/or stratigraphy as possible with respect to available drilling locations</li> <li>Bias is also reduced via apexing of mineralisation in drill core where possible</li> <li>Limited bias is interpreted</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>MBK chain of custody and sample security was ensured by staff preparation of samples into checked and zip-tied polyweave bags transported by staff personnel direct to ALS Mt Isa (MBK)</li> <li>No issues were reported or identified</li> <li>No details are available for Hammer sample security, however all reasonable precautions to ensure sample security are reasonably interpreted</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>External third party QA/QC review via Haren Consulting (2016), Kangari Consulting (2019), Haren Consulting (2023), Cube Consulting (2023) and SampleData (2023) identified no notable issues in the drilling database or QA/QC datasets</li> </ul>



## 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	<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>Metal Bank Ltd (MBK) owns a 51% interest in the Millennium project consisting of 5 granted and contiguous Mining Leases (MLs 2512, 2761, 2762, 7506 and 7507) for 132.22 Ha</li> <li>These leases are in JV partnership with GEMC (TSX: GEMC) as part of an earn-in agreement, with MBK having right to 80% of the project by meeting an additional \$2m expenditure</li> <li>Tenements are in excellent standing</li> <li>Existing cultural heritage and environmental surveys conducted to date have not identified any impediments to the project</li> <li>There is a small excised gap portion (200m x 200m) forming a non-linear mining lease boundary MBK held by another party under an Exploration Permit for Minerals which MBK are currently in discussions regarding right to explore and/or provide scope for operations planning</li> <li>An application for the addition of graphite to the current MLs is in progress</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The project has been subject to exploration by a number of companies including historic operations in the early 1900s (Federal mine production 3 977t @ 24% Cu plus Co), previous drilling and exploration by Carpentaria Exploration Company (1964) and several other companies throughout the 1970s and 1980s. Modern exploration has consisted of soil, rock chip and drilling work between 2013-2014 by Chinalco Yunnan Copper Resources (ASX: CYU), drilling, metallurgical and geophysical work by Hammer Resources (ASX: HMX) and more recently HMX and Global Energy Metals Corporation (TSX: GEMC) prior to 2021-22 drilling, mapping, geochemical and geophysical work by Metal Bank Limited (ASX: MBK)</li> <li>In 2017, Hammer Metals conducted rock chip sampling of the southern and central areas of the Millennium project with assaying for total graphitic carbon (n:37)</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Millennium Co-Cu-Au-C project is a Co-dominant linear to anastomosing sulphide-quartz-carbonate vein/shear deposit dipping steeply WNW and largely coincident with regional foliation trending NNE following the regional Quamby-Fountain Range Fault system trend.</li> <li>It is hosted in metasedimentary to metavolcanic host rocks of the Milo Beds of the Tommy Creek Domain and Corella Formations within the Quamby-Malbon sub-province of the Eastern Succession of the Mt Isa Inlier. The NNE-trending Quamby-Fountain Range Fault system separates the Milo Beds in the east</li> </ul>



Criteria	JORC Code explanation	Commentary
		from a fault-bound block of younger Quamby Conglomerate to the west, and forms a topographic high on the western side of the leases which has shed conglomeratic colluvium widely across the project area, covering large portions of the underlying geology  • Two main lithologies host the majority of Co-Cu-Au mineralisation: graphitic schists (dominantly in the Southern Area) and ferruginous quartzite and metasediments (Central Area). Both lithologies are micro-fractured, altered and quartz-carbonate-sulphide veined. Mineralisation is noted in all lithologies including into the footwall conglomerates and best developed to date in zones adjacent and within contrasting units, particularly high competency quartzite and margins.  • Mineralisation varies from replacement/disseminated, fracture, vein, network, shear/fault to zones of open space breccia fill style. Primary sulphide minerals hosting Co-Cu-Au-Ag mineralisation include cobaltite, chalcopyrite, bornite, chalcocite and cattierite. Oxidation is fairly limited, with minor upper chalcocite, malachite, trace chrysocolla and limited erythrite development restricted to shallow near surface levels, with minor deeper zones of partial oxidation down dip of main shear structures.  • Recently, graphite has become a material of interest, and is noted in diamond and RC drilling plus historic rock chip sampling. It is currently interpreted that this graphite development is a result of metamorphic upgrading of the carbonaceous shales and slates of the Milo Beds in proximity to mafic units and large scale regional structures, and preferably located in the hangingwall to the Millennium Cu-CO-Au mineralisation (especially west, and south)
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	All MRE-relevant drill hole information including locations and assays have previously been provided via respective ASX announcement by CYU, HMX and MBK from 2013-2024
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</li> </ul>	<ul> <li>Sampling was conducted at 1m or nominal 1 to 4m (where RC composited sampling) prior to sample preparation as dictated by geology and/or drilling intervals, with reported intervals using previous drill sample laboratory pulps suitable for further analysis</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>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>All results reported are downhole weighted means using a 1m minimum width, 5% TGC cut-off, 5m maximum internal dilution. Internal intervals &gt;10% TGC are also reported.</li> <li>Data from each individual samples are presented in Table 2</li> <li>No metal equivalents are calculated</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 reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Graphite mineralisation is interpreted to be on NNE-trending steeply WNW-dipping linear bedding/foliation in conjunction with sub-parallel structures</li> <li>RC and DD drilling is optimally oriented (dominantly shallow to moderately E-ESE) to ensure the most appropriate and most perpendicular intersection angle to mineralisation as possible with respect to available drilling locations</li> <li>All reported results are down-hole lengths, with the majority of intersections being between 65-95% of estimated true widths</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	See body of announcement
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>Drillhole and assay data from Millennium drilling and graphite re-assays have been reported to the ASX via CYU, HMX and MBK announcements including complete graphite assay sampling results</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.	All additional work including IP/resistivity, soil and pXRF work by MBK has previously been disclosed
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>Additional resource, geotechnical and metallurgical drilling is proposed</li> <li>Further metallurgical test work, engineering and economic scoping to prefeasibility studies including environmental, heritage and compliance requirements are also in preparation</li> <li>Additional sampling of graphitic intersections in previous drilling and mapping with rock chip and/or soil sampling with analysis for total graphitic carbon is proposed</li> </ul>



## Annexure 1 - Millennium Mineral Resource Estimate Material Factors

CLASSIFICATION	JORC 2012 Inferred Resource	
PROJECT	Millennium Co-Cu-Au Project, NW QLD	
GLOBAL TONNES	8.4Mt @ 0.09% Co, 0.29% Cu, 0.12 g/t Au and 0.72g/t Ag for 1.23% CuEq%	
AND GRADE	3, 3, ,	
CUT-OFF GRADE	0.4% CuEq O/C, 1.00% CuEq U/G)	
CuEq%	$CuEq = Cu\% + (Co\% \times 9.16) + (Au g/t \times 0.678)$ using long term metal prices of Cu: US\$3.50/lb (\$7716/t); Co: US\$32.00/lb (\$70.678)	
CALCULATION	547.84/t); Au: US\$1900/oz; Cu recovery=95.1%; Co recovery=95.3%; Au recovery=81.4%; Cu payability=80%; Co	
	payability=80%; Au payability=80%	
OVERVIEW	Co-dominant (reported in CuEq%) anastomosing sulphide-quartz-carbonate vein-shear mineralisation in metasedimentary	
	to metavolcanic host. Mineral Resource extends NNE over >1550m and >240m depth in the Southern and Central Areas	
	within a mineralised system of >2500m strike and open depth extents	
DATA AND	67 (42 RC, 25 DD) drill holes for 9 400.1m within resource extents completed between 2013-2022. RTK-DGPS survey pickup,	
SPACING	downhole surveys at nominal 30m or better spacing. Drilling at a nominal 50m $\times$ 50-100m pierce points over 1550m strike	
	and to ~240m depth below surface. Ground-based LiDAR topographic control.	
DRILLING	4.5" (CYU, 2016) to 5.25-5.5" RC hammer (HMX/GEMC/MBK, 2018-2022), HQ and NQ DD core (HMX/GEMC, 2018), PQ and	
TECHNIQUES	HQ DD core (MBK, 2021-22). Excellent recovery overall with exception of several minor cavities and fault zones in RC drilling.	
SAMPLING	RC samples collected via rig cyclone to bulk bag and a ~1:8 split. 1m split sampling by CYU and HMX, 1m sampling in zones	
<b>TECHNIQUES</b>	of alteration, structure or mineralisation by HMX and MBK and up to 5m riffle-composite splits in unmineralised intervals.	
	DD core 1/2 core split via diamond saw, PQ 1/4 core split. Mineralisation apexed where possible for representative sampling.	
	Sampling considered industry standard for mineralisation style.	
ANALYSIS	Au by 30g or 50g fire assay Au-AA26 and multi-element work by aqua regia or 4 acid digest ICP-AES or ICP-MS (ME-OG as	
TECHNIQUES	required) after bulk sample crushing for a nominal 3kg or 1kg material pulverisation. Industry standard sampling and	
	analysis techniques considered appropriate and effective for mineralisation style.	
QA/QC	Certified QA/QC material at nominal 1:20 or better using known blanks, standards, field and lab split duplicates. No notable	
	issues identified, no notable issues identified in internal laboratory QA/QC. Check assays via Intertek conducted with only	
	minor Au nugget effect noted in two samples. Additional QA/QC and test work via lab XRF and pXRF conducted. Field visits	
	undertaken by Kangari Consulting in 2019 and MBK 2021-2022 confirming geology, structure, mineralisation and other	
DECOURCE	features consistent with descriptions. No twin holes conducted to date.	
RESOURCE ESTIMATION	In-house data compilation and validation with review and wireframe update of 2016 Mineral Resource. Four mineralisation wireframes created/edited in Micromine then revised in Datamine. Third party QA/QC review. Initial 2023 MRE modelling	
TECHNIQUES	and estimation work by Haren Consulting WA (after 2016 MRE), and formal 2023 MRE by Cube Consulting WA with	
TECHNIQUES	consideration for RPEEE. Estimates were completed for Co, Cu, Au and Ag using Vulcan software into 1m composites using	
	best fit method, outlier analysis, capping, subdomaining data by estimation of categorical indicators of high grade and low	
	grade domains within mineralisation with spatial continuity analysis via Snowden Supervisor then grade estimation process	
	completed using Vulcan via Ordinary Kriging (OK) for all variables. Interpolation parameters selected based on kriging	
	neighbourhood analysis with composite minimum n=6, maximum n=16. Octant-based search using maximum of four	
	samples. Blocks were estimated in a two-pass strategy with the second pass search set to approximately 1.5 times first pass	
	search and removed the octant restriction, with all other parameters remaining the same. Resultant block model cell sizes	
	of 5 m (X) $\times$ 25 m (Y) $\times$ 10 m (Z) with sub-celling of 2.5 m (X) $\times$ 2.5 m (Y) $\times$ 2.5 m (Z). Grades were estimated into the parent	
	cells.Hard boundary techniques were employed between domains and block model validated using a combination of visual	
	and statistical techniques including global statistics comparisons and trend plots.	
BULK DENSITY	60 RC samples (44 in resource) submitted to ALS in 2016 returned average SG values of 2.53 (oxide), 2.63 (transitional) and	
	2.68 (fresh). 470 subsequent DD core samples returned an average SG of 2.62. A nominal 20m oxide depth and 20-40m	
AACTA!!!DO!O:	transitional zone depth has been applied.	
METALLURGICAL	Preliminary metallurgical testing by ALS Adelaide in 2018 on two composite ¼ core samples (a high grade and low grade)	
PARAMETERS	for concentrate production via rougher flotation returned recoveries of 95.1% Cu, 95.4% Co and 81.4% Au and 91.3% Cu,	
	91.7% Co and 77.9% Au respectively. Cobalt Blue testwork in 2019 for gravity and Knelson concentrate upgrades and	
MINING	treatment via proprietary process commenced but not completed.  Open cut mining is envisaged with ~86% of the 2023 Resource deemed within open cut parameters via application of RPEEE.	
PARAMETERS	Underground mining potential is defined by RPEEE parameters using a 1.00% CuEq cut-off to the Resource at depth and for	
ANAMILILIA	high grade Co and Cu zones below reasonable open cut pit design.	
MODIFYING	No modifying factors were applied.	
FACTORS		
FACIUNS		