

# HARDWAY DIAMOND DRILLING COMMENCES AND NEW PRIORITY TARGET DEFINED AT KALMAN EAST

#### Hardway (100% Hammer)

- **Diamond drilling has commenced at Hardway**, part-funded by a Collaboration Exploration Incentive (CEI) grant from the Queensland Department of Resources.
- Diamond drilling to target the source of copper oxide and rare earth mineralisation at depth.
- Current geological interpretation has a **southerly plunging zone of copper oxide mineralisation,** with drilling to test both the northern and southern extents of the mineralisation.

### Kalman (100% Hammer)

- New high-priority target defined at Kalman East, with soil sampling delineating a new anomalous copper and molybdenum zone of a similar scale to the Kalman system.
- This zone adds a second key target near Kalman, following the recent delineation of an end-of-hole gold anomaly at Kalman North.
- New zone to be tested with Reverse Circulation drilling in the coming months

#### Mount Isa East Joint Venture (~40% Hammer Metals)

- Results received from exploration drilling at Shadow South. No significant intersections of copper were recorded with minor gold and copper anomalism.
- Work within the MIEJV has focused on geological reconnaissance at Malbon and Jimmy Creek. Peak individual analyses of 7.38g/t Au and 10.85% Cu at Jimmy Creek and 2.19g/t Au and 5.26% Cu at Pickle (Even Steven South).



Figure 1. Diamond Drill Rig at Hardway

ASX:HMX hammermetals.com.au

# ASX RELEASE

12 June 2024

### DIRECTORS / MANAGEMENT

Russell Davis Chairman

Daniel Thomas Managing Director

James Croser Non-Executive Director

David Church Non–Executive Director

Mark Pitts Company Secretary

Mark Whittle Chief Operating Officer

### **CAPITAL STRUCTURE**

### ASX Code: HMX

Share Price (11/06/2024)	\$0.035
Shares on Issue	886m
Market Cap	\$31m
Options Unlisted	23.1m
Performance Rights	12m
Cash (31/03/2024)*	\$1.5m

\*Does not include \$6.3 million in funds received subsequent to the last quarter (See ASX Announcement 21 May 2024

#### Hammer Managing Director, Daniel Thomas, said:

"The diamond drilling currently underway at Hardway will help build our knowledge and understanding of the widespread copper oxide mineralisation now observed across a 1.2km strike length. The Hardway system remains unique in terms of the mineralisation observed, with multiple phases of fluid likely to have deposited the copper and rare earth mineralisation in separate mineralisation events.

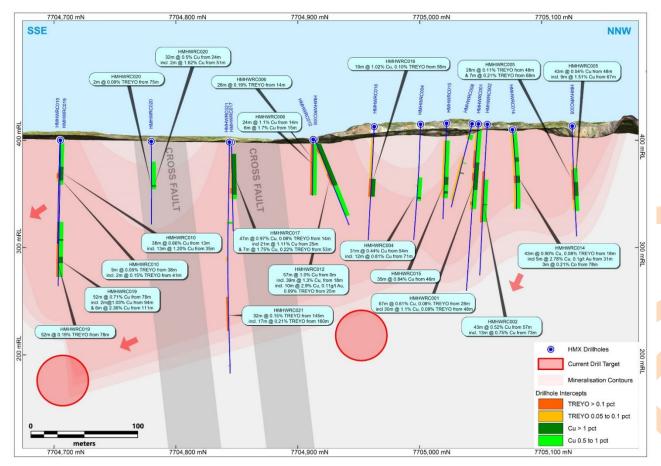
"Assays from this program will provide an important insight into the structure and controls over the mineralisation, helping us to zero in on the most prospective zones.

"We're also very excited to see new targets emerge in the Kalman area – which remains lightly explored despite being one of the more significant mineral systems in the Mount Isa Inlier and offering great prospectivity for further mineral discoveries. Basic follow-up work of historical soil anomalies has shown a significant coppermolybdenum soil anomaly located just 2km from Kalman. This zone will be tested in an upcoming Reverse Circulation drilling program."

Hammer Metals Ltd (ASX: HMX) ("Hammer" or "the Company") is pleased to provide an update on its exploration work programs in the Mt Isa region of North Queensland, with diamond drilling underway at the Hardway prospect, a new copper-gold-molybdenum target defined at Kalman East, and assay results received from recent drilling at Hardway and Shadow South (MIEJV).

#### Hardway

A diamond drilling program has commenced at Hardway, partly funded by a \$300,000 Queensland Government Collaborative Exploration Initiative (CEI) grant. The drilling aims to delineate mineralisation below the deeply weathered oxide zone and provide good sections through the target zone to facilitate alteration studies (refer to ASX announcement dated 3 April 2024).



**Figure 2.** Long Section at Hardway with target zones (refer ASX announcements 24 May 2023 and 31 October 2023)

Approximately 600m of drilling will be completed testing both the northern and southern sections of mineralisation as illustrated in Figure 2. Both holes aim to test below zones of oxide mineralisation delineated by recent Hammer drilling (see ASX Announcement 31 October 2023), including:

- 52m at 0.71% Cu from 78m and 52m at 0.19% TREYO from 78m in HMHWRC019; and
- 35m at 0.84% Cu from 46m in HMHWRC015.

Recent Reverse Circulation (RC) drilling at Hardway failed to encounter the mineralised zone, however interpretation from this drilling suggests that it encountered a calcite zone believed to border the mineralisation shoot. This interpretation work has enabled the team to optimise the current diamond drilling program.

Table 1. Hardway HMHWRC022. Significant intercepts derived from lab assays at a 0.1% Cu cut-off

	Hardway - Significant Cu Intercepts (from Lab Assays) utilising a 0.1% cut-off													
Prospect	Hole	E_GDA94	N_GDA94	RL	TD	Dip	Az_GDA94		From	То	Int	Cu(%)	Au(glt)	Y ppm
									93	96	3	0.26	0.01	141
									108	110	2	0.22	0.03	89
									113	114	1	0.14	0.01	151
Hardway	HMHWRC022	385238	7704894	406	211	-66	65		135	146	11	0.06	0.01	196
								incl.	137	139	2	0.14	0.02	167
									151	154	3	0.22	0.01	150
									162	164	2	0.17	0.02	105
Note	Coordinates re	lative to GDA9	4 Zone51.											

#### Kalman

Initial soil sampling has delineated a 600m long copper anomaly (at greater than 200ppm) at Kalman East (refer Figure 3). This area is coincident with a greater than 10ppm molybdenum-in-soil anomaly.

This anomaly is of a similar scale to the Kalman system, which hosts a Mineral Resource Estimate of 39.2Mt at 1.07% Recovered Copper Equivalent ("CuEq Rec") at 0.53% Cu, 0.27g/t Au, 0.10% Mo, 1.5g/t Ag and 2.1g/t Re. This equates to ~500,000t of contained copper equivalent metal<sup>\*</sup>. Refer to Appendix 1 for details pertaining to the Kalman MRE.

The host of the anomalous zone at Kalman East is the Overhang Jaspelite, a cherty iron and manganese sedimentary rock. Preliminary mapping has identified two gossan zones within the soil responses.

Historical soil sampling did not previously extend this far east, and as a consequence, historical drilling has not tested this zone. An RC program is currently being developed to test this zone along with other targets in the Hammer portfolio.

Extensional and in-fill soil sampling is being conducted to the east along the Pilgrim Fault to the south of Kalman.

<sup>\*</sup> See ASX Announcement 8 May 2023 and Appendix 1 Page 3 of 20

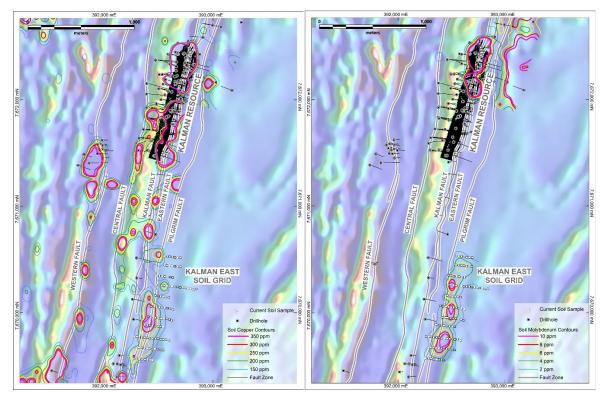


Figure 3. Copper (left) and Molybdenum (right) soil responses from the Kalman East anomaly

## Mount Isa East Joint Venture (MIEJV) with Sumitomo Metal Mining Oceania (HMX ~40%)

### Shadow South Drilling

Results have been received for Reverse Circulation drilling at Shadow South. This program was conducted in February and was designed to test a combined magnetic, gravity, induced polarisation and geochemical anomaly. The combination of geophysical, geochemical and magnetite altered metasediments was consistent with an IOCG target.

Drilling of four holes for 1,072 metres failed to delineate significant widths of economic grade copper/gold mineralisation and as a result the prospect has been downgraded.

The Shadow South anomaly is one of many IOCG targets within the Mount Isa East Joint Venture specifically and the Hammer Metals' Project portfolio in general. Systematic target testing will continue to progress through these targets.

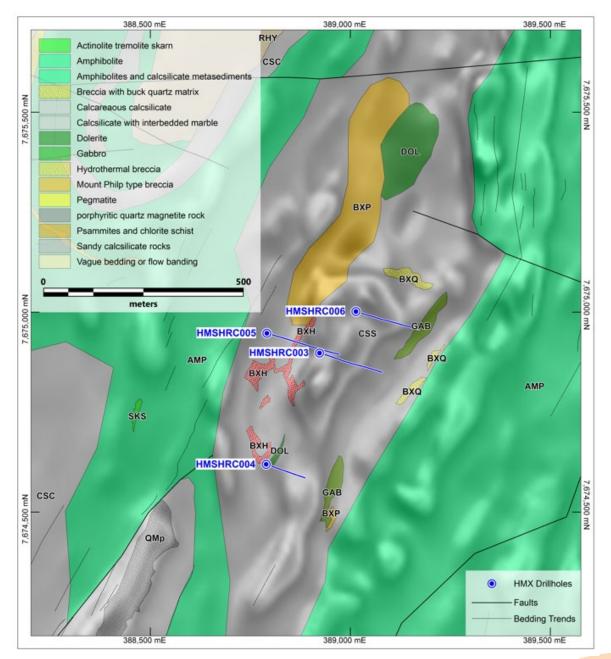


Figure 4. Shadow South Geology Map and Drill Hole Plan

			Shadow South	- Significa	nt Cu Inte	ercepts (from	Lab Assays) ut	ilising	a 0.1% cut-o	ff			
Prospect	Hole	E_GDA94	N_GDA94	RL	TD	Dip	Az_GDA94		From	То	Int	Cu(%)	Au(glt)
									1	2	1	0.16	0.02
									4	6	2	0.24	0.10
					1				14	15	1	0.17	0.02
						-57	110		25	37	12	0.18	0.06
	HMSHRC003	388920	7674900	400	398				62	63	1	0.16	0.02
									92	93	1	0.11	0.08
									105	113	8	0.00	0.21
									140	145	5	0.22	0.05
									149	150	1	0.12	0.01
									9	12	3	0.11	0.02
	HMSHRC004	388786	7674621	396	184	-55	-55 111		16	18	2	0.23	0.04
Shadow South									27	31	4	0.18	0.04
									73	77	4	0.00	0.14
Shadow South									95	97	2	0.13	0.02
									143	146	3	0.19	0.17
									158	159	1	0.12	0.01
									164	165	1	0.35	0.02
									189	190	1	0.09	0.12
	HMSHRC005	388788	7674949	398	301	-56	109		190	198	8	0.18	0.04
									242	246	4	0.19	0.02
									96	98	2	0.30	0.42
									114	118	4	0.00	0.21
	HMSHRC006	389011	7675003	401	295	-55	111		122	126	4	0.00	0.13
						-55			142	149	7	0.17	0.01
									184	191	7	0.17	0.04
									259	263	4	0.00	0.18
Note	Coordinates re	lative to GDA9	4 Zone51.										

#### Table 2. Shadow South. Significant intercepts derived from Lab assays at a 0.1% Cu cut-off

Even Steven and Jimmy Creek Geological Reconnaissance

Extensional soil sampling, geological reconnaissance and rock chip sampling was conducted over the Jimmy Creek prospect, part of the Even Steven area of interest (AOI) within the Mount Isa East Joint Venture. The Jimmy Creek Zone occurs to the immediate east of the Pilgrim Fault zone in lithologies similar to the Kalman Deposit. Little work has been conducted along this geophysically anomalous trend.

This work followed on from induced polarisation surveys conducted in 2023, which identified a broad chargeable and conductive zone in the Jimmy Creek area (see ASX release 28 November 2023). Rock chip sampling along this trend reported individual element responses of up to 10.85% Cu and 7.38g/t Au (see Table 3 for full results).

Further sampling along the Even Steven IOCG trend at a new prospect, Pickle, identified individual element responses of 5.26% Cu and 2.19g/t Au. Further work programs at these targets will be considered by the Joint Venture in the coming months.

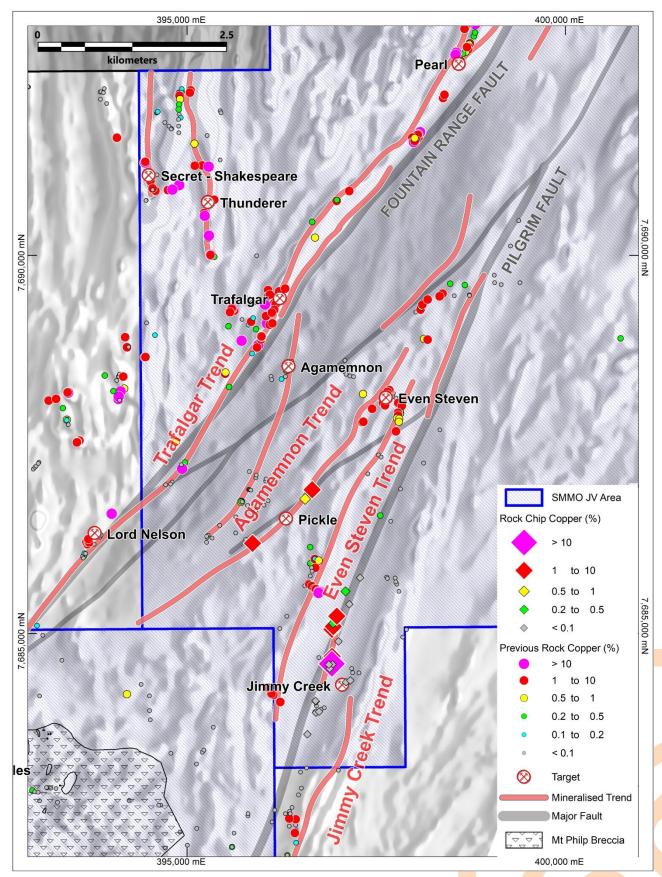
#### Malbon Geological Reconnaissance

Further work has been undertaken within the Malbon region following work completed by the MIEJV in late 2023. Exploration focused on multiple east-west striking mineralised structures where previously-reported rock chip samples returned assays of up to 8.96% Cu and 16.6g/t Au (see ASX release 28 November 2023).

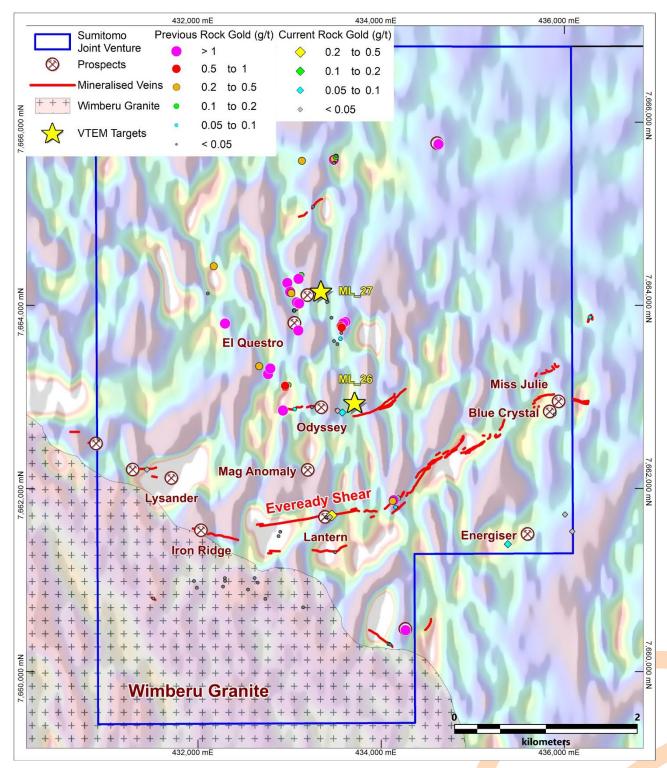
The Energiser Structure is up to 700m in length with a maximum thickness of up to 10m. The structure consists of brecciated and silicified country rock with varying degrees of hematite, which are thought to be the result of sulphide weathering. The Odyssey trend is predominantly covered in sheetwash but, where exposed, is up to 15m wide, dominated by silica. Other prospects reviewed were the Lysander prospect and two IOCG style magnetic targets. Along with other targets in the Joint Venture portfolio, these targets will be reviewed and ranked with the aim to progress to drilling in 2024.

Sample	Region	Prospect	Tenement	East	North	Au (g/t)	Ag (g/t)	Cu(%)
SE036		Lysander		431,441	7,662,213	0.01	0.04	0.01
SE037		Mag		433,460	7,661,715	0.26	5.16	0.04
SE038		Anomaly		433,440	7,661,694	0.01	0.03	0.00
SE039	Mount Isa East			436,084	7,661,537	0.01	0.06	0.04
SE040	JV - Malbon	Energiser	EPM 26130	436,006	7,661,722	0.01	0.05	0.02
SE041	AOI			435,383	7,661,399	0.07	0.05	0.41
SE042				433,575	7,662,838	0.01	0.02	0.04
SE043		Odyssey		433,576	7,662,836	0.06	0.04	0.06
SE044				433,523	7,662,856	0.03	0.04	0.03
SE045				396,588	7,683,678	0.01	0.01	0.01
SE046				397,100	7,684,367	0.01	0.01	0.00
SE047				397,156	7,684,390	0.04	0.02	0.01
SE048				396,906	7,684,589	0.67	0.33	1.79
SE049				396,910	7,684,617	7.38	3.84	6.46
SE050				396,914	7,684,616	6.3 <mark>5</mark>	1.79	7.80
SE051				396,899	7,684,542	0.02	0.03	0.03
SE052				396,935	7,684,567	0.01	0.01	0.01
SE053				396,915	7,684,719	1.73	2.54	2.61
SE054				396,913	7,684,625	1.13	0.98	10.85
SE055				396,913	7,685,077	0.17	1.56	3.09
SE056		Jimmy		396,931	7,685,114	0.63	2.23	2.41
SE057		Creek	EPM 26776	396,930	7,685,148	0.03	1.28	0.39
SE058	Mount Isa East	CIEEK		396,978	7,685,251	0.07	0.55	1.51
SE059	JV - Even			397,092	7,685,567	0.06	0.51	0.30
SE060	Steven AOI			397,285	7,685,748	0.01	0.07	0.04
SE061				397,144	7,685,397	0.01	0.01	0.02
SE062				396,698	7,684,112	0.02	0.08	0.03
SE063				396,697	7,684,119	0.01	0.05	0.01
SE064				396,702	7,683,965	0.01	0.03	0.01
SE065				396,743	7,683,977	0.01	0.01	0.03
SE066				396,921	7,684,601	0.01	0.03	0.01
SE067				396,884	7,684,547	0.01	0.02	0.01
SE068				396,873	7,684,599	0.01	0.02	0.02
SE069				396,813	7,684,321	0.01	0.01	0.01
SE070		Pickle - Even		396,557	7,686,791	0.10	0.21	0.55
SE071		Steven	EPM 26775	395,864	7,686,214	2.19	11.35	1.32
SE072		South	EPM 26776	396,652	7,686,921	0.71	31.70	5.26
SE073		Jimmy		397,000	7,684,906	<mark>0.</mark> 01	0.08	0.03
Note - C	oordinates relati	ve to GDA942	Zone 54					

Table 3. Rock chip sampling results derived from Lab assays



**Figure 5.** Jimmy Creek Even Steven AOI showing the location of Pickle and rock chips reported herein. For information on the Induced Polarisation survey and previously reported rock chip results, refer to ASX announcement of 28 November 2023.



*Figure 6.* Malbon AOI showing the location of targets and rock chips reported herein. For information on the previously reported rock chip results, refer to ASX announcement of 28 November 2023.

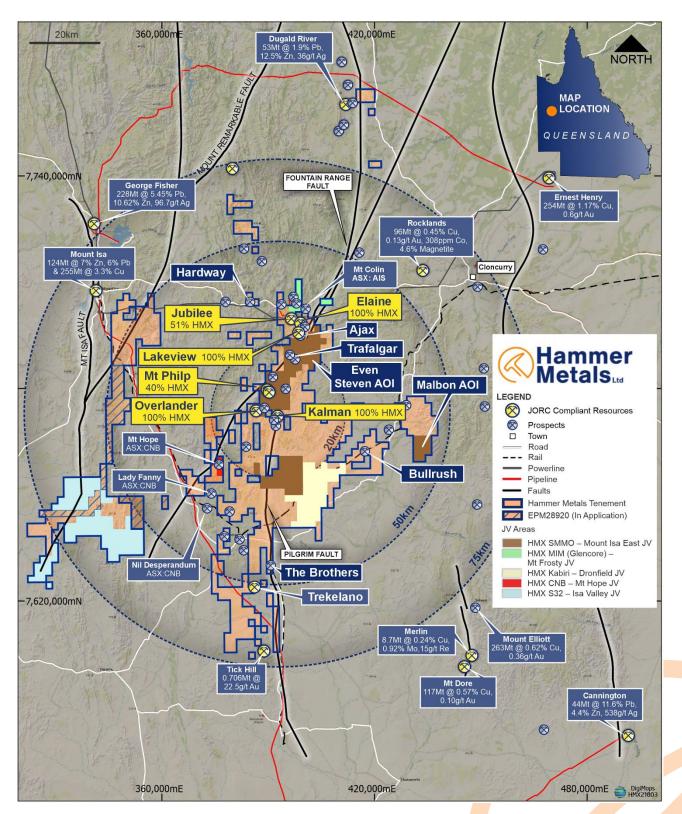


Figure 7. Hammer's Mount Isa Tenements

### Upcoming Activities and Expected Newsflow

- June/July Hardway diamond drilling program and results.
- June/July Yandal air-core program Sword and Harrier
- June/July Ionic leach soil sampling program within the Isa Valley Joint Venture
- June/July Overlander granite soil survey
- June/July Target 1 North Orelia Gold JORC Resource
- June-August Soil sampling programs continue Kalman South, Tourist Zone, Cambrian Pb/Zn
- July Hammer Metals Quarterly Report
- August RC Drilling Program Mount Isa
- August 2024 Diggers and Dealer Conference

This announcement has been authorised for issue by the Board of Hammer Metals Limited in accordance with ASX Listing Rule 15.5.

For further information please contact:

Daniel Thomas Managing Director

T +61 8 6369 1195 E <u>info@hammermetals.com.au</u>

Media Enquiries: Nicholas Read – Read Corporate

T +61 9 9388 1474 E <u>info@readcorporate.com.au</u>

### About Hammer Metals

- END –

Hammer Metals Limited (ASX: HMX) holds a strategic tenement position covering approximately 2,800km<sup>2</sup> within the Mount Isa mining district, with 100% interests in the Kalman (Cu-Au-Mo-Re) deposit, the Overlander North and Overlander South (Cu-Co) deposits, the Lakeview (Cu-Au) deposit and the Elaine (Cu-Au) deposit. Hammer also has a 51% interest in the Jubilee (Cu-Au) deposit. Hammer is an active mineral explorer, focused on discovering large copper-gold deposits of Ernest Henry style and has a range of prospective targets at various stages of testing. Hammer also holds a 100% interest in the Bronzewing South Gold Project located adjacent to the 2.3 million-ounce Bronzewing gold deposit in the highly endowed Yandal Belt of Western Australia.

### **Competent Person Statement**

The information in this report as it relates to exploration results and geology was compiled by Mr. Mark Whittle, who is a Fellow of the AusIMM and an employee of the Company. Mr. Whittle, who is a shareholder and optionholder, has sufficient experience which is relevant to the styles of mineralisation and types of deposit under consideration and to the activities 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. Whittle consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Where the Company references Mineral Resource Estimates and exploration results previously announced, it confirms that it is not aware of any new information or data that materially affects the information included in those announcements and all material assumptions and technical parameters underpinning the resource estimates and exploration results in the relevant market announcements continue to apply and have not materially changed.

# Appendix 1 – Kalman JORC (2012) Mineral Resource Estimate (May 2023)

	Kalman Deposit - JORC 2012 Mineral Resource Estimate											
	(May 2023)											
Classification	Mining CuEq Tonnes CuEq Cont. CuEq Rec. Cu Au Ag Mo Re Contained Cu Eq Recovered CuEq											
Classification	Method	Cut-off	Kt <sup>(1)</sup>	% <sup>(3)</sup>	% <sup>(2, 3, 4)</sup>	%	g/t	g/t	%	g/t	Metal (Kt) <sup>(1)</sup>	Metal (Kt) <sup>(1)</sup>
Indicated	Open Pit	0.4%	17,120	1.04	0.87	0.43	0.22	1.2	0.08	1.7	180	150
Inferred	Open Pit	0.4%	10,540	1.11	0.93	0.40	0.21	1.3	0.10	2.2	120	100
Inferred	Underground	1.0%	11,530	1.78	1.48	0.80	0.41	2.2	0.12	2.7	200	170
	Total 39,190 1.27 1.07 0.53 0.27 1.5 0.10 2.1 500 420							420				
Note (1)	Rounded to near	est 10kt										
Note (2)	The recovered copper equivalent equation is: CuEq Recovered = 0.86*Cu + (0.74*0.771051*Au) + (0.74*0.008336*Ag) + (0.86*4.857143*Mo) + (0.77*0.023334*Re)											
Note (3)	e (3) Copper Equivalent Price assumptions are: Cu: US\$7,714/t (US\$3.50/lb); Au: US\$1,850/oz; Ag: US\$20/oz; Mo: US\$37,468/t (or US\$17/lb); and Re: US\$1,800/kg											
Note (4)	Recovery assumptions are: Cu 86%; Au 74%; Ag 74%; Mo 86%; and Re 77%.											
Note (5)	Transition from C	Open to Und	erground Mini	ng based on prior o	ptimsiation studies	set at 75	mRL. Sur	face RL is a	approx 425	mRL.		

# (refer to ASX release dated 8 May 2023)

# JORC Table 1 report – Mount Isa Project Exploration Update

This table is to accompany an ASX release updating the market with:

- Drill results from the Hardway and Shadow South Prospects;
- Soil results from the Kalman East prospect; and
- Reconnaissance rock chip sampling results from the Malbon and Even Steven Regions of the Mount Isa East Joint Venture.

Historic exploration data noted in this, and previous releases has been compiled and validated. It is the opinion of Hammer Metals that the exploration data are reliable.

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement	The drilling was conducted using the reverse circulation method.
	tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc).	<b>Drilling</b> Drill chip samples were taken at dominantly 1m intervals. When multiple metre intervals
	These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	were sampled, a riffle split of each metre interval was conducted with the split portions then being combined to produce a composite sample. Where mineralisation was anticipated or encountered, the sample length was reduced to 1m with lab submission of the 1m samples.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has	The samples reported in this release relate to HMSHRC003, HMSHRC004, HMSHRC005, HMSHRC006 (Shadow South) and HMHWRC022 (Hardway) (5 holes, 1283m). For these samples, the average interval was
	been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was	2.76m and the average sample weight submitted to the lab was 3.00kg.
	pulverised to produce a 30 g charge for fire	
	assay'). In other cases, more explanation	Drilling Analysis
	may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or	All samples reported underwent fine crush with 1kg riffle split off for pulverising to 75 microns.
	, mineralisation types (e.g. submarine	All samples were submitted to ALS for:
	nodules) may warrant disclosure of detailed	• Fire assay with AAS finish for gold.
	information.	<ul> <li>4 acid digest followed by ICP-OES &amp; MS for a comprehensive element suite.</li> </ul>
		Portable XRF analysis was conducted in the field on each 1m interval to provide guidance
		on sampling. Re-analyses will be conducted as required to investigate element repeatability.

Criteria	JORC Code explanation	Commentary
		<ul> <li>Soil Analyses</li> <li>After pulverising samples were analysed by for Au via ICP-MS and for multielements via ICP OES.</li> <li>Rock Chip Analyses</li> <li>All samples reported underwent fine crush with 1kg riffled off for pulverising to 75 microns.</li> <li>All samples were submitted to ALS for: <ul> <li>Fire assay with AAS finish for gold.</li> <li>4 acid digest followed by ICP-MS for a comprehensive element suite.</li> </ul> </li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	<b>Drilling</b> Holes were drilled by DDH1 using a DE840 drilling rig using the reverse circulation drilling method.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	<ul> <li>Drilling</li> <li>Sample recoveries were generally in excess of 80%. Recoveries are typically low in the first 5m of each hole and in areas of strong water inflow.</li> <li>In holes where recovery issues, excessive water, or significant sampling bias occurred, the hole was terminated.</li> <li>No sample recovery bias has been noted.</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>Drilling</li> <li>All drilling was geologically logged by Hammer Metals Limited Geologists.</li> <li>Quantitative portable XRF analyses were conducted on metre intervals on site.</li> <li>All metres drilled were analysed by the lab methods listed above and lab assays are reported herein.</li> </ul>
Sub- sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<ul> <li>Drilling Samples consist of RC drill chips.</li> <li>Samples from the hole were collected by a three-way splitter with A and B duplicates taken for every sample.</li> <li>Samples were taken at dominantly one metre intervals however where 2 or 4 metre composites were created, samples were composited by riffle splitting material from each one metre sample bag.</li> </ul>

Criteria	JORC Code explanation	Commentary
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Where evidence of mineralisation was encountered or anticipated, the sample length was reduced to 1m.
	Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	<b>Drilling QA/QC</b> Standard reference samples and blanks were each inserted into the laboratory submissions at a rate of 1 per 25 samples. Duplicate samples were taken at an interval of approximately 1 in 50 samples.
		Soil Sampling
		Soil samples were taken from below the organic layer (typically ~10cm below surface) and consisted of the -80 mesh fraction.
		Samples were conveyed to ALS Mount Isa and analysed for level gold (Au ST43) and 4 acid multielement ICP OES (ME-ICP61).
		<b>Reconnaissance Rock Chip sampling</b> The sampling method employed is grab sampling where sample material is collected from disparate portions of an outcrop with the aim being to geochemically characterise the small, sampled area.
		All samples reported underwent fine crush with 1kg riffled off for pulverising to 75 microns.
		<ul> <li>All samples were submitted to ALS for:</li> <li>Fire assay with AAS finish for gold.</li> <li>4 acid digest followed by ICP-MS for a comprehensive element suite.</li> </ul>
		Sampling Comment
		The sample styles reported herein have been collected using appropriate methodologies. Sample size is appropriate for the target-style. Appropriate laboratory analytical methods were employed.
Quality of assay data and laboratory tests	the assaying and laboratory procedures used and whether the technique is considered partial or total.	<b>Drilling Analysis</b> All samples were analysed for gold by flame AAS using a 50gm charge in addition to 4-acid multielement ICP OES and MS.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	In addition to the Hammer in-house certified reference materials, the assay laboratory maintains a comprehensive QAQC regime, including check samples, duplicates, standard reference samples, blanks, and calibration standards.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable	

Criteria	JORC Code explanation	Commentary
	levels of accuracy (i.e. lack of bias) and precision have been established.	
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	Sampling metadata and results All lab analyses were verified by alternate company personnel. Assay files were received electronically from the laboratory.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	<b>Data Points</b> Datum used is GDA 94 Zone 54. Drillholes were located by a licenced surveyor. Soil and rock chip samples were located by GPS with RL information from a LIDAR DTM.
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	<ul> <li>Drilling The drillhole spacing at both Hardway and Shadow South is insufficient to establish mineralisation continuity. Sample compositing has been applied to calculate intercepts. </li> <li>Soil Sampling Soil sampling spacing is considered appropriate to delineate dispersions. Rock Chip Sampling  Grab sampling is not undertaken at an orderly spacing and cannot be used to assign a grade to a rock mass with any degree of confidence.</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 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>Drilling Drill holes and sample sites are generally oriented as close to perpendicular as possible to the orientation of the targets based on interpretation of previous exploration. </li> <li>Soil Sampling Soil traverses were taken at an orientation dominantly perpendicular to structure. </li> <li>Rock Sampling Samples are usually oriented across structures at an outcrop scale, but the sampling method cannot be considered unbiased.</li></ul>
Sample security	The measures taken to ensure sample security.	Samples Pre-numbered bags were used, and samples were transported to ALS by company

Criteria	JORC Code explanation	Commentary
		personnel. Samples were packed within sealed polywoven sacks.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The dataset associated with this reported exploration has been subject to data import validation. All assay data has been reviewed by two company personnel. No external audits have been conducted.

# Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Criteria Mineral tenement and land tenure status	JORC Code explanation 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. 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.	Commentary The Mt Isa Project consists of 35 tenements. Shadow South is located on EPM26775. Jimmy Creek and the Even-Steven Trend spans portions of EPM26776 and EPM26775. The Malbon region is located on EPM26130. Portions of EPM26775, EPM26776 and EPM26130 are within the Mount Isa East Joint Venture between Hammer Metals Limited and Sumitomo Metal Mining Oceania ("SMMO"). See ASX announcement dated 25 November 2019, for details of the Joint Venture. Hardway is located on EPM14022. The tenement is 100% held by Mulga Minerals Pty Ltd, a subsidiary of Hammer Metals Limited. Kalman East is located on EPM13870. The
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	tenement is 100% held by Mt Dockerell Mining Pty Ltd, a subsidiary of Hammer Metals Limited. Previous holders held title either covering the tenement in part or entirely and previous results are contained in Mines Department
Geology	Deposit type, geological setting, and style of	records. Hardway (EPM14022)
	mineralisation.	The Hardway Prospects are located on EPM14022. Mineralisation is structurally emplaced in a foliation sub parallel shear zone and appears to consist of two events dominated by Cu and Rare Earths respectively. Shadow South (EPM26775)
		The Shadow trend is over 5km in length and typified by a zone of strong magnetite

Criteria	JORC Code explanation	Commentary
		alteration, elevated copper and gold in soil anomalism and common breccia formation. At its northern end, Hammer Metals delineated a sulphidic breccia which was drill tested in 2020 (refer to ASX announcement 7 September 2020). Mineralisation is hosted within strongly magnetite altered zones or within calc- silicates proximal to these zones. The style of mineralisation sought is IOCG Cu-Au.
		Kalman East Kalman Southeast is an early-stage soil geochemical anomaly approximately 600m in length (at the 200ppm response level). The anomaly is located on the Pilgrim fault and at surface presents as a series of elongate gossans of up to 1m in width sandwiched between the east and west faults. The anomaly is underlain by the Overhand Jaspelite.
		Malbon
		The Malbon region spans the contact between the Wimberu Granite, and the proterozoic units Cone Creek metabasalt, Timberu Member and the Mitakoodi Quartzite. These units have also been intruded by Gabbro bodies associated with the Wimberu Granite.
		Structures transgress these units hosting Cu-Au ( <u>+</u> Co and Bi) mineralisation.
		Jimmy Creek
		Jimmy Creek is located abutting the Pilgrim Fault, close to the contact between the Corella Formation and the Overhang Jaspelite. Mineralisation identified by reconnaissance conducted to date consists of a series of gossan zones of up to 2m in thickness.
		Induced Polarization conducted in 2023 highlighted that the area is both conductive and chargeable.
		Geological and Geophysical characteristics of this prospects are superficially similar to the Kalman Cu-Au-Mo-Re deposit located approximately 15km to the south.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth	See the attached tables.

Criteria	JORC Code explanation	Commentary
	hole length.	
Data	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. In reporting Exploration Results, weighting	Drilling
aggregation methods	averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	<b>Drilling</b> Drillhole intercepts with a Cu focus are quoted at a 0.1% Cu cut-off with included intercepts quoted to highlight zones of increased width or grade.
	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	The reader should assume that there are no other significant grades encountered in the hole apart from those quoted in the body of this report. <b>Soil Sampling</b>
	shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	Soil results are presented as contours. These contours have been derived from the original data files.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its	<b>Drilling</b> The drill hole separation is such that true width determinations are not possible.
	nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	
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.	See attached figures.
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 avoiding misleading reporting of Exploration Results.	<ul> <li>Drilling</li> <li>Drillhole intercepts with a Cu focus are quoted at a 0.1% Cu cut-off with included intercepts quoted to highlight zones of increased width or grade.</li> <li>The reader should assume that there are no other grades encountered in the hole apart from those quoted in the body of this report.</li> </ul>
Other	Other exploration data, if meaningful and	Rock Chip sampling All rock chip samples taken at the prospects tabulated herein have been reported. All relevant information is disclosed in the
substantive	material, should be reported including (but not limited to): geological observations;	attached release and/or is set out in this JORC Table 1.

Criteria	JORC Code explanation	Commentary
exploration data	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.	
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Drilling is currently underway at Hardway. At Kalman East drill planning is underway. The Shadow South prospect has been significantly downgraded as a result of the drilling conducted to date.