SIGNIFICANT COPPER-RARE EARTH SYSTEM DISCOVERED AT HARDWAY – 30M @ 1.1% CU PLUS HEAVY RARE EARTH ELEMENTS

ASX RELEASE
6 February 2023

DIRECTORS / MANAGEMENT

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Chairman

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Managing Director

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Non-Executive Director

David Church
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Mark Whittle
Chief Operating Officer

CAPITAL STRUCTURE

ASX Code: HMX

Share Price (03/02/2023)	$0.075
Shares on Issue	821m
Market Cap	$62m
Options Unlisted	23.6m
Performance Rights	8m
Cash (31/12/2022)	$2.6m

- **Broad zone of strong copper and rare earth element (REE) mineralisation intersected in initial Reverse Circulation (RC) drilling at the Hardway prospect.** Significant results from HMHWRC001 include**:**
    - **30m at 1.1% copper from 48m (oxide)**
    - **26m at 0.14% Total Rare Earth and Yttrium Oxides (TREYO) from 34m**
- **Dominant Heavy Rare Earth Oxide (HREYO) system** with an average HREYO/TREYO ratio of 65% within the interval above.
- Maximum element grades of note include **1,075ppm yttrium, 190pmm dysprosium, 263ppm neodymium** and 117ppm samarium.
- Low levels of Uranium and Thorium associated with the mineralised intervals.
- **Compelling broad TREYO Total Rare Earth Element soil anomaly recorded** over a strike length of 1.9km.
- **Follow-up drilling at Hardway has been prioritised with drilling expected to commence in mid-late February**.

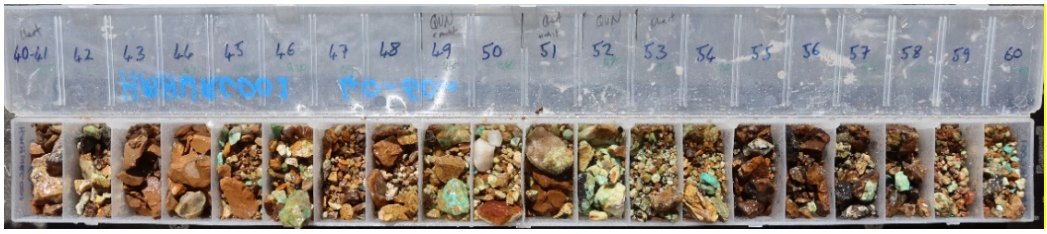

Figure 1. *Chip tray from HMHWRC001: 40-60m showing malachite (Cu oxide). Laboratory analyses of this interval averaged 0.88% Cu with maximum value of 2.11% Cu between 54m and 55m.*

- **Hardway ideally located just 1km off the Barkly Highway between Mount Isa and Cloncurry**.
- Previous drilling at Hardway has been limited. The drill core from diamond drill holes QH1, QH2 and QH3 (drilled in 1966 and located up 700m to the south-east of HMHWRC001) were located in the Queensland Department of Resources core library, with Hammer recently submitting samples for assay.
- **Drilling at high-grade copper prospects at South Hope, Mascotte, Mascotte Junction and the Stubby scheduled to commence in mid-late February**.
- **Assays from Kalman copper/molybdenum/gold extensional resource drilling imminent**.

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Hammer's Managing Director, Daniel Thomas said:

"This is a fantastic way to start the year, with the results from our first hole at Hardway exceeding the team's expectations. Seeing a wide zone of strong copper and rare earths mineralisation in the initial drilling and at shallow depths is a fabulous result which when combined with broad soil anomalism indicates that we have a significant mineralised system on our hands.

"Encouragingly, copper and heavy rare earth mineralisation has also been identified by mapping and sampling at various points along a ~2km long trend.

"Hardway adds to a growing list of prospective mineralised zones identified by Hammer's 2022 programs that will be drilled by the Company in the first quarter of this year. Results from our recent Kalman drilling are eagerly awaited and the current uplifts in both molybdenum and copper prices give added momentum to the future development of Hammer's resources in one of the world's greatest base metal provinces."

Hammer Metals Ltd (**ASX: HMX**) ("**Hammer**" or the "**Company**") is pleased to advise that it has discovered a significant zone of copper and rare earth element (REE) mineralisation in initial RC drilling at the Hardway prospect, located within its broader Mount Isa portfolio in NW Queensland.

Given the scale and potential significance of the discovery, and its location in close proximity to regional infrastructure, Hammer has elevated this prospect as a priority focus for upcoming exploration programs, with drilling set to resume in February.

Figure 2. *Hardway North Pit looking South.*

Hardway

Hardway is situated within Hammer Metals' 100% owned EPM14022, located between Mount Isa and Cloncurry just 1km north of the Barkly highway. Hardway is located along a north-west trending structure identifiable by outcrops of quartz breccia. It is hosted within the Corella formation, a geological unit which also hosts the mineralisation at Hammer's Kalman Au-Cu-Mo-Re deposit, Jubilee Cu-Au deposit, Elaine Cu-Au deposit and other Hammer prospects such as Ajax, Trafalgar, Overlander and Hammertime.

A single hole was drilled at Hardway to test underneath a historic open pit (Figures 3, 4 and 5). Significant results from HMHWRC001 include:

- **30m at 1.1% Cu from 48m**; and
- **26m at 0.14% TREOY from 34m** including **9m at 0.20%TREOY**.

The entire mineralised zone was strongly weathered, and carbonate altered.

Recently reported laboratory analysed soil samples suggest that the Hardway trend is located within a ~1.9km long copper and rare earth-enriched corridor (Figure 6). Further drilling is warranted to test this zone in more detail.

Table 1. *Hardway - HMHWRC001 Significant intercepts derived from lab analyses. Cu intercepts calculated at a 0.1% Cu cut-off. REE intercepts calculated at a 500ppm TREOY cut-off.*

Hole	E_GDA94	N_GDA94	RL	Dip	Az_GDA	TD		Incl.	From	To	Interval	Cu(%)	Au(g/t)	TREOY (%)	HREOY/TREOY (%)	Y(ppm)
HMHWRC001	385210	7705030	415	-55.1	68	183	Cu Zone		6	10	4	0.65	0.05	0.11	58%	361
								incl.	8	9	1	1.76	0.08	0.27	58%	888
									13	14	1	0.10	0.01	0.03	54%	89
									28	95	67	0.61	0.04	0.08	68%	78
								incl.	**48**	**78**	**30**	**1.05**	**0.05**	**0.09**	**71%**	**338**
									103	104	1	0.13	0.01	0.01	47%	35
							REE Zone		**34**	**60**	**26**			**0.14**	**65%**	**510**
								incl.	**50**	**59**	**9**			**0.20**	**65%**	**769**
									90	92	2			0.17	61%	578

Note
TREOY is the sum of LREO and HREO
LREO is calculated by summing the element oxide responses of Ce, Eu, Gd, La, Nd, Pm (not analysed), Pr and Sm.
HREOY is calculated by summing the element oxide responses of Dy, Er, Ho, Lu, Tb, Tm, Yb and Y
Locations are relative to GDA94 Zone54

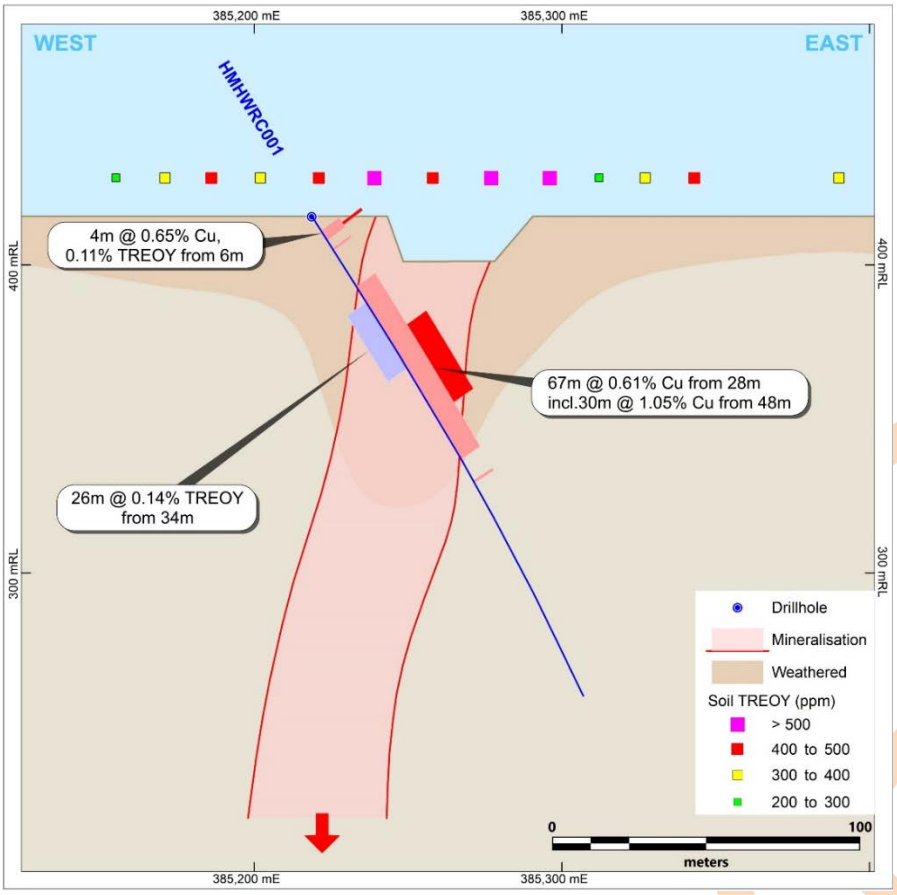

Figure 3. *Section looking north through HMHWRC001*

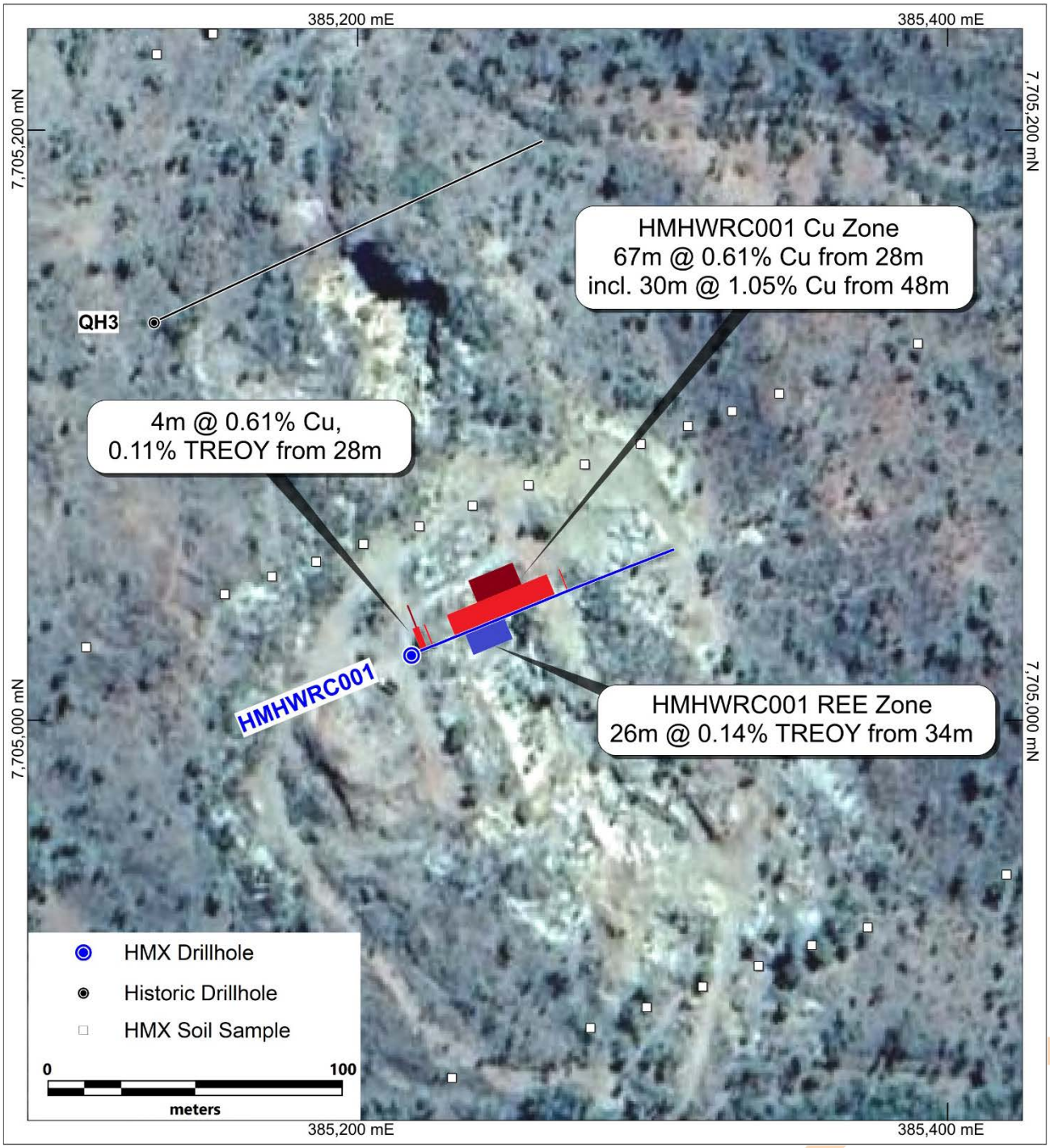

Figure 4. *Plan view of HMHWRC001.*

Hardway Copper

The Hardway prospect includes historical small-scale artisanal workings which are approximately 30m in diameter at their widest point, with secondary workings located approximately 400m and 700m to the south-east. The workings cumulatively extend over a distance of approximately 1km.

Aquitaine Australia Minerals Pty Ltd (CR5199) reported that the grade of the historic copper production at the Hardway mine approximated 5%, with an unknown tonnage. Previous exploration includes three diamond drill holes completed in 1966-1967 by Australian Selection Pty Ltd and four RC drill holes by Goldsearch in 2008,

some 700m to the south east of the main Hardway workings.* Hammer Metals has undertaken total resampling of the historic Australian Selection diamond holes with results to be reported as they become available.

The recent soil sampling program by Hammer has identified the broad-scale copper anomalism over a 1.5km section of the Hardway fault system. The anomaly is open to the south.

The Company has prioritised the Hardway prospect with drilling expected to re-commence in February targeting extensions to these results as well as testing priority targets along the identified soil anomalies.

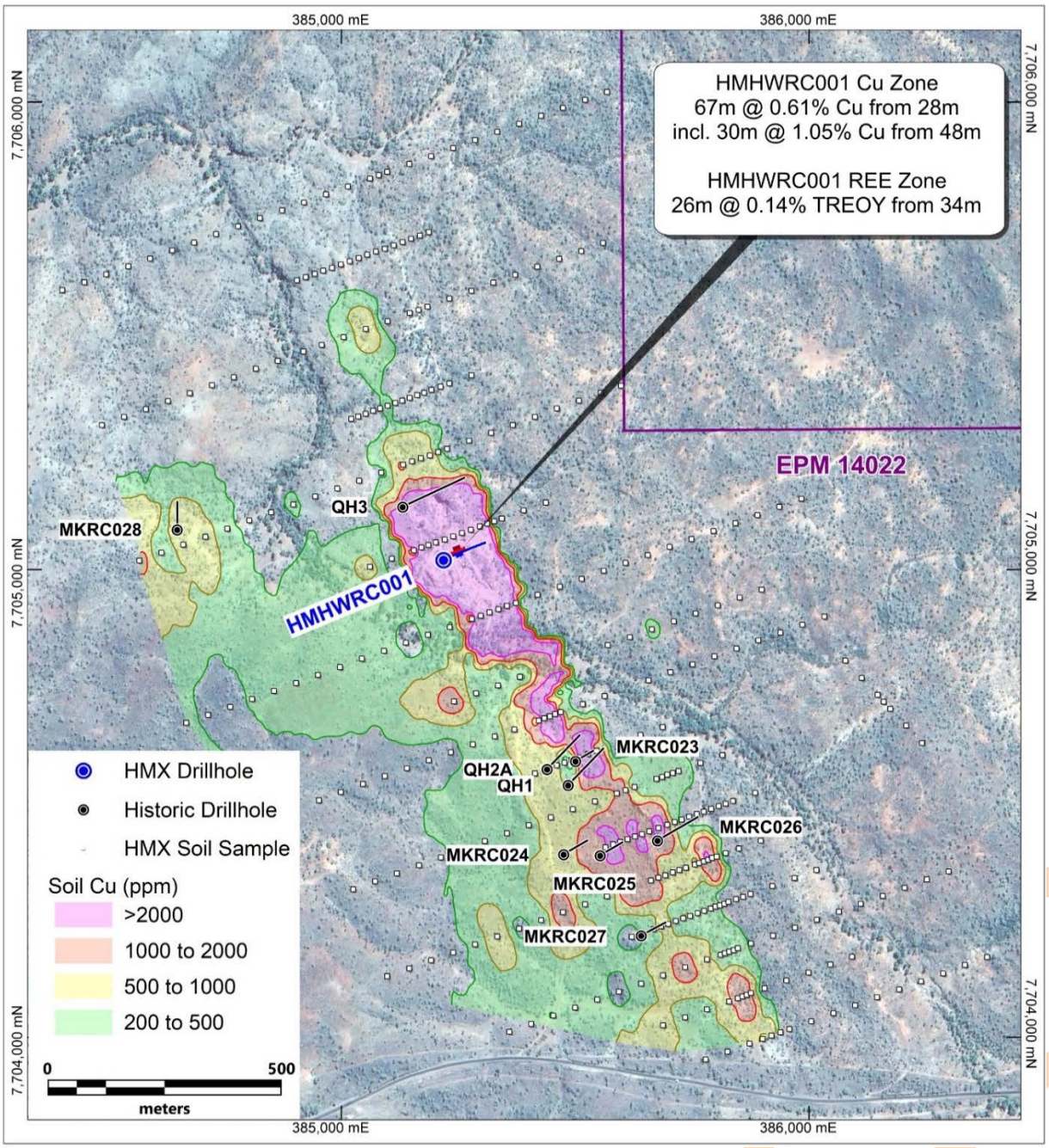

Figure 5. *Hardway soil Cu contours and current drilling*

* For details on Goldsearch drilling refer to Hammer Metals ASX announcement dated 26 July 2022. In relation to Australian Selection Pty Ltd drillholes QH1, QH2 and QH3, Information was sourced from open file exploration report CR2377. Information relating to hole locations was verified with GPS pickups and other data has been verified and validated by Hammer Metals Limited. It is the opinion of Hammer Metals Limited that the historic exploration data are reliable. Resampling of these diamond holes has been conducted with results yet to be reported.

Hardway REE's

Hardway is exceptionally well located, being less than 1km from the Barkly Highway in an established world class mining district. Drilling has confirmed a unique rare earth system with a high proportion of high-value heavy rare earth elements. Within the reported mineralised intervals, the ratio of high value HREOY to TREYO is an average of 65%. The mix of rare earth elements is similar to the results from Hammer's previous rock chip sampling. Uranium and thorium values are low.

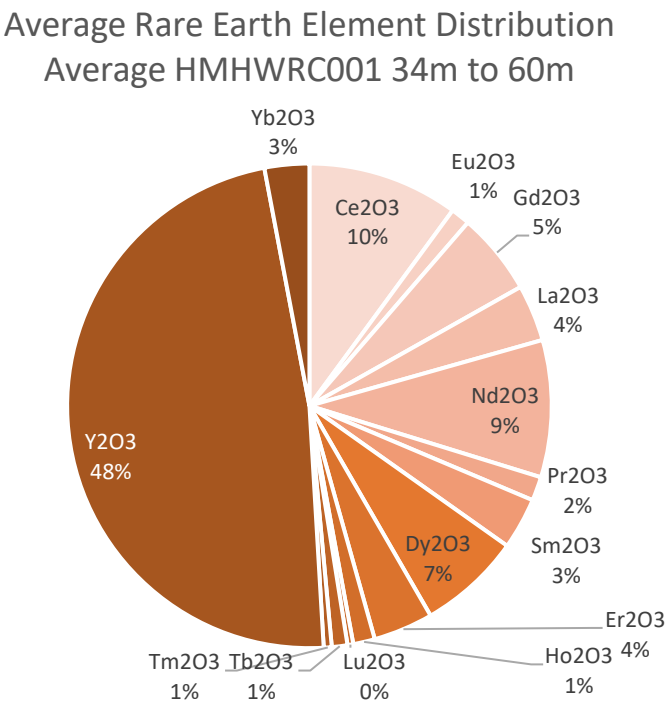

Figure 6. *Average Rare Earth Element Distribution in HMHWRC001. See Table 2 for average analyses utilised in this figure.*

Maximum element grades are as follows: 1,075ppm Yttrium, 190pmm Dysprosium, 263ppm Neodymium and 117ppm Samarium.

Previous analysis of rock chips by Scanning Electron Microscope indicated the Yttrium-bearing mineral within the sample was Xenotime (ASX announcement 26 July 2022). Further mineral identification work will be conducted to advance Hammer's understanding of this system and aid in refining the rare earth element potential at this prospect.

Soil sampling has confirmed that the previously identified Yttrium anomaly extends for approximately 1.9km and is open to the south.

Table 2. *Hardway – Intercept average rare earth element lab analyses utilised in Figure 6.*

HMHW001 (34-60m) - Average and Individual Maximum individual REE component Element Oxides								
LREO	**Ce2O3**	**Eu2O3**	**Gd2O3**	**La2O3**	**Nd2O3**	**Pr2O3**	**Pm2O3**	**Sm2O3**
Maximum	350	43	158	129	307	54	N/A	114
Average	136	17	74	51	124	22	N/A	46
HREOY	**Dy2O3**	**Er2O3**	**Ho2O3**	**Lu2O3**	**Tb2O3**	**Tm2O3**	**Y2O3**	**Yb2O3**
Maximum	204	113	42	10	29	15	1,365	80
Average	93	54	20	5	14	7	648	40
Note								
N/A - Not analysed in analytical suite								
TREOY is the sum of LREO and HREOY								
LREO is calculated by summing the element oxide responses of Ce, Eu, Gd, La, Nd, Pm (not analysed), Pr and Sm.								
HREOY is calculated by summing the element oxide responses of Dy, Er, Ho, Lu, Tb, Tm, Yb and Y								

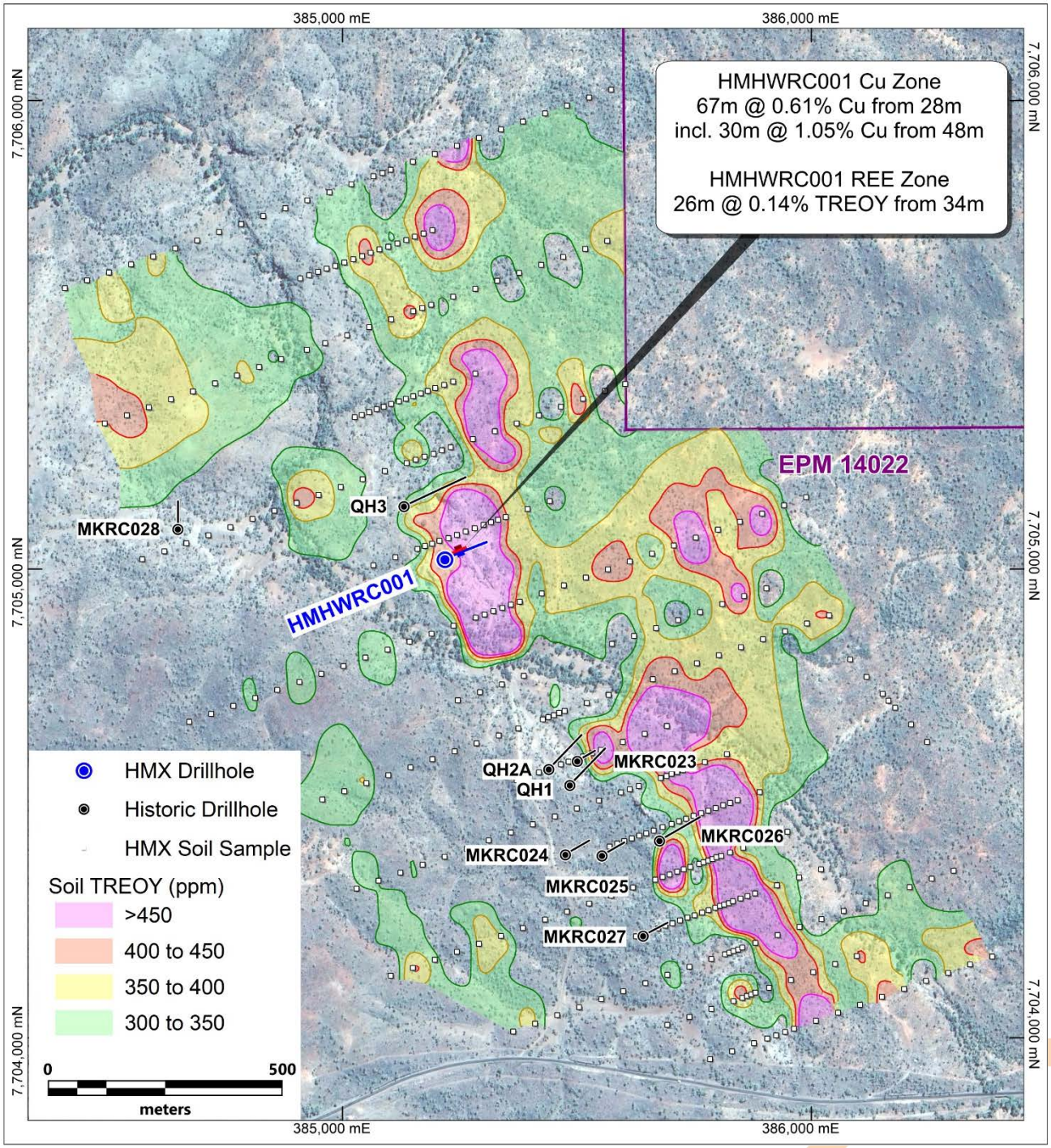

Figure 7. *Hardway soil TREOY contours and current drilling*[†]

[†] TREOY is the sum of LREO and HREOY. LREO is calculated by summing the element oxide responses of Ce, Eu, Gd, La, Nd, Pm (not analysed), Pr and Sm. HREOY is calculated by summing the element oxide responses of Dy, Er, Ho, Lu, Tb, Tm, Yb and Y

Expected Newsflow

- **February: Kalman extension drilling results,**
- **February: Kalman West, Lord Nelson and Ajax drilling results**
- **February 2023: Follow up drilling programs to commence: Hardway, South Hope, Mascotte, Mascotte Junction and Stubby.**
- **Q1/Q2 2023: Yandal Lithium air core drilling program**
- **Q1/Q2 2023: Kalman Resource Upgrade**

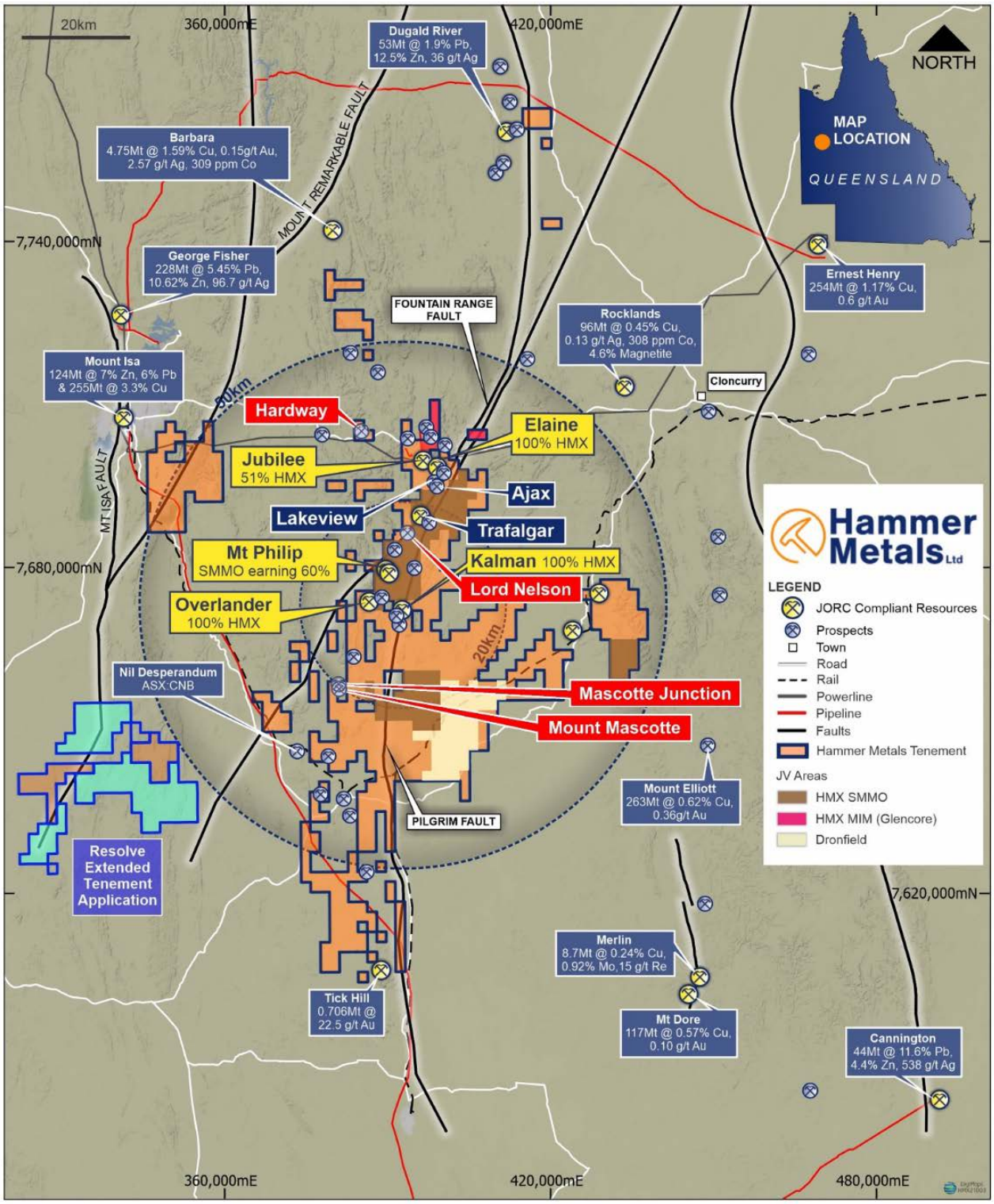

Figure 8. *Mt Isa Project Area*

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

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About Hammer Metals

Hammer Metals Limited (ASX: HMX) holds a strategic tenement position covering approximately 2,600km^2 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 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 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 Statements

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 option-holder, 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.

The information in this report that relates to previous exploration results was prepared and first disclosed under a pre-2012 edition of the JORC code. The data has been compiled and validated. It is the opinion of Hammer Metals that the exploration data is reliable. Nothing has come to the attention of Hammer Metals that causes it to question the accuracy or reliability of the historic exploration results. In the case of the pre-2012 JORC Code exploration results, they have not been updated to comply with 2012 JORC Code on the basis that the information has not materially changed since it was last reported.

Where the Company references Mineral Resource Estimates 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 with those announcements continue to apply and have not materially changed.

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JORC Table 1 report – Mount Isa Project Exploration Update

This table is to accompany an ASX release updating the market with drill and soil results from the Hardway Prospect. Hardway is located within 100% Hammer Metals controlled tenements EPM14022 and EPM26904 respectively.

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 (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc).* *These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (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.*	The drilling was conducted using reverse circulation. **Drilling** Drill chip samples were taken at dominantly 1m intervals. When multiple metre intervals 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. **Drilling Analysis** All samples submitted for assay underwent fine crush with 1kg riffled off for pulverising to 75 microns. Samples were submitted to ALS for: • Fire Assay with AAS finish for gold. • 4 acid digest followed by ICP-MS for a comprehensive element suite. 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. **Soil Sampling** Soil sampling consisted of taking 100-150grams of -2mm sieve fraction taken from below the organic layer. Samples were taken at a 50m sample spacing on 200m spaced lines. Sample spacing was closed up to 25m sample spacing and 100m line spacing closer to the mineralised trend interpreted position.

Criteria	JORC Code explanation	Commentary
		Soil Sampling Analysis Samples were initially analysed by portable XRF and the Y and Cu response has previously been reported to the market. Subsequently the samples were analysed by ALS labs for Au by low level fire assay (Au-ST43) and for multiple elements by ICP MS after a four-acid digest. The lab analyses are reported herein.
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	**Drilling** The hole at Hardway were drilled by Remote drilling using a Hydco 70 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.*	**Drilling** Sample recoveries were generally in excess of 80%. Recoveries are typically low in the first 5m of each hole. In holes where recovery or significant sampling bias was observed, the hole was terminated. No sample recovery bias has been noted.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	**Drilling** All drilling was geologically logged by Hammer Metals Limited Geologists. Quantitative portable XRF analyses were conducted on metre intervals on site. . All metres drilled were analysed by the lab methods listed above and lab assays are reported herein.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	**Drilling** Samples consist of RC drill chips. Samples from the hole were collected by a three-way splitter with A and B duplicates taken for every sample. 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.

Criteria	JORC Code explanation	Commentary
	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.*	Where evidence of mineralisation was encountered or anticipated, the sample length was reduced to 1m. **Soil Sampling** Soil sampling consisted of taking 100-150grams of -2mm sieve fraction taken from below the organic layer. Samples were taken at a 50m sample spacing on 200m spaced lines. Sample spacing was closed up to 25m sample spacing and 100m line spacing closer to the mineralised trend interpreted position. Samples were initially analysed by portable XRF and the Y and Cu response has previously been reported to the market. Subsequently the samples were analysed by ALS labs for Au by low level fire assay (Au-ST43) and for multiple elements by ICP MS after a four-acid digest. The lab analyses are reported herein. **Drilling and Soil sampling QA/QC** 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. **Sampling Comment** The sample collection methodology and sample size are considered appropriate to the target-style and drill method, and appropriate laboratory analytical methods were employed.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	**Drilling Analysis** All samples were analysed for gold by flame AAS using a 50gm charge in addition to 4-acid multielement ICP OES and MS. 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. **Soil Sampling Analysis** Samples were initially analysed by portable XRF and the Y and Cu response has previously been reported to the market. Subsequently the samples were analysed by ALS labs for Au by low level fire assay (Au-ST43) and for multiple elements by ICP MS after a four-acid digest. The lab analyses are reported herein.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	**Drilling and Soil Sampling** All lab analyses were verified by alternate company personnel. Assay files were received electronically from the laboratory.
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.*	**Drilling and Soil Sampling** Datum used is GDA 94 Zone 54. RL information will be merged later utilising the most accurately available elevation data. Drillholes will be surveyed by DGPS prior to rehabilitation.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	**Drilling** This release documents results from the Hardway Prospect. The drill density is not sufficient to establish mineralisation continuity. Sample compositing has been applied to calculate intercepts. **Soil Sampling** See line spacing noted above.
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.*	**Drilling and Soil Sampling** 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.
Sample security	*The measures taken to ensure sample security.*	**Samples** Pre-numbered bags were used, and samples were transported to ALS by company personnel. Samples were packed within sealed polywoven sacks.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	**Drilling and Soil Sample reporting** 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
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Mt Isa Project consists of 34 tenements. The Hardway drilling and soil sampling reported herein was conducted on EPM14022. This tenement is held by Mulga Minerals Pty Ltd, a 100% owned subsidiary of Hammer Metals Limited. The areas reported herein are **not** part of the Mt Isa East Joint Venture with Sumitomo Metal Mining Oceania ("SMMO"). SMMO has the right to earn a 60% interest by expending $6,000,000 by 31 March 2024 with a minimum expenditure commitment of $1,000,000 by 31 March 2020. No proportional ownership change occurs until such time as the $6,000,000 is expended and the current SMMO interest is 0%. See ASX announcement dated 25 November 2019, for details of the Joint Venture.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Previous holders held title either covering the tenement in part or entirely and previous results are contained in Mines Department records.
Geology	*Deposit type, geological setting, and style of 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.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *easting and northing of the drill hole collar* *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole* *down hole length and interception depth hole length.* *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*	See the attached tables.

Criteria	JORC Code explanation	Commentary
	Competent Person should clearly explain why this is the case.	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	**Drilling** 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. At Hardway rare earth intercepts are also quoted at a 500ppm TREOY cut-off. The reader should assume that there are no other grades encountered in the hole apart from those quoted in the body of this report. Soil Sampling Sample responses for Cu and TREOY are presented as hand contoured figures. TREOY is the sum of LREO and HREOY LREO is calculated by summing the element oxide responses of Ce, Eu, Gd, La, Nd, Pm (not analysed), Pr and Sm. HREOY is calculated by summing the element oxide responses of Dy, Er, Ho, Lu, Tb, Tm, Yb and Y
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	**Drilling** The relationship between intersected and true thicknesses is difficult to interpret with any certainty along both trends due to the drilling density and the presence of cross cutting structures.
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.*	**Drilling** 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. At Hardway rare earth intercepts are also quoted at a 500ppm TREOY cut-off. The reader should assume that there are no other grades encountered in the hole apart from those quoted in the body of this report.
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*	All relevant information is disclosed in the attached release and/or is set out in this JORC Table 1.

Criteria	JORC Code explanation	Commentary
	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 (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Hardway will be subject to further drilling in late February 2023.