EM TARGET DEFINED AT HARDWAY COPPER-RARE EARTHS DISCOVERY

ASX RELEASE
7 March 2023

DIRECTORS / MANAGEMENT

Russell Davis
Chairman

Daniel Thomas
Managing Director

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Non-Executive Director

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Non–Executive Director

Mark Pitts
Company Secretary

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Chief Operating Officer

CAPITAL STRUCTURE

ASX Code: HMX

Share Price (06/03/2023)	$0.064
Shares on Issue	821m
Market Cap	$52m
Options Unlisted	23.6m
Performance Rights	8m
Cash (31/12/2022)	$2.6m

- **Fixed-Loop Electro-Magnetic (FLEM) conductor identified at Hardway – coincident with historical copper workings on the property.**
- A geochemical review of recent drilling at Hardway indicates that recently reported **copper intersections occur within depleted zones of highly weathered and altered material.**
- **High-priority targets at Hardway** have been refined, with upcoming drilling **to target a potential supergene zone** located beneath the oxide copper 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 (see ASX Announcement, 6 February 2022)
- **Shallow high-grade gold zone intersected at Kalman West** with an intercept of:
    - **1m at 65.4g/t gold from 9m in HKWRC015**
- At Lord Nelson, two holes were drilled to test a new target zone located 3.6km on-trend from the Trafalgar prospect. Significant results from the Lord Nelson drilling include:
    - **5m at 1.72% Cu and 1.18g/t Au from 14m within a mineralised envelope of 21m @ 0.59% Cu and 0.33g/t Au from surface in HMLNRC001; and**
    - 70m at 0.14% Cu from 1m in HMLNRC002.
- **Preparations for the Company's upcoming drilling program are well advanced**. Rain has delayed the start of the program, with **drilling expected to commence in a fortnight at Hardway**.
- FLEM program commenced last week with surveys to be conducted across several high-priority drilling targets **including Mascotte and Mascotte Junction in the Mount Hope region**, in addition to surveys at Pommern, Bulonga and within the Mount Isa East JV area.
- A down-hole ElectroMagnetic (DHEM) survey will also be completed at the northern end of Hammer's Kalman Resource to identify prospective targets.

Hammer Managing Director Daniel Thomas said: *"Our team is excited by the rapidly emerging potential at Hardway and our recent preparatory work has focused on a potential supergene zone below the deeply weathered profile at the prospect. With a coincident EM anomaly and copper workings stretching over a strike length of 500m, Hardway has the potential to deliver significant news-flow in the coming weeks.*

"Drilling at Hardway has been prioritised for the start of the program with the rig scheduled to progress from there to our targets in the Mount Hope region.

"Our programs at the end of 2022 delivered a number of prospects with high-grade copper intersections. Each of these prospects were drilled for the first time in 2022 and have the potential to deliver further copper inventory to the Hammer portfolio."

Hammer Metals Ltd (**ASX: HMX**) ("**Hammer**" or the "**Company**") is pleased to provide an update on significant new exploration results from across its Mount Isa portfolio in North-West Queensland, including highly encouraging preliminary results from a fixed-loop EM program at Hardway, where significant copper-rare earths mineralisation was recently intersected, as well as drilling results from Kalman West and Lord Nelson.

The Kalman West drilling was designed to test short-term continuity of a high-grade gold rock chip result of 4.48% Au (refer to ASX announcement, 28 August 2017). At Lord Nelson, initial drilling encountered encouraging copper mineralisation in a similar structural position to the Trafalgar trend.

A geophysical crew is currently on site conducting fixed-loop EM surveys at several prospects in order to identify conductors at depth. This work will be completed at key prospects prior to the commencement of the Company's next drilling program.

Hardway

In late 2022, Hammer Metals conducted an initial drill test at the Hardway prospect, located 40km to the east of Mt Isa and 1km to the north of the Barkly Highway. Significant results from Reverse Circulation drill-hole HMHWRC001 include: (see ASX Announcement, 6 February 2022)

- **30m at 1.1% copper from 48m (oxide); and**
- 26m at 0.14% Total Rare Earth and Yttrium Oxides (TREYO) from 34m.

Geochemical examination of this drilling suggests there is potential for a supergene zone to be located below the oxidised zone intersected. Preliminary modelling of a recently completed fixed-loop EM survey has defined a conductor beneath the Hardway copper workings, with additional drilling planned to target this zone in the upcoming program. See JORC Table 1 for technical specifications of the Survey.

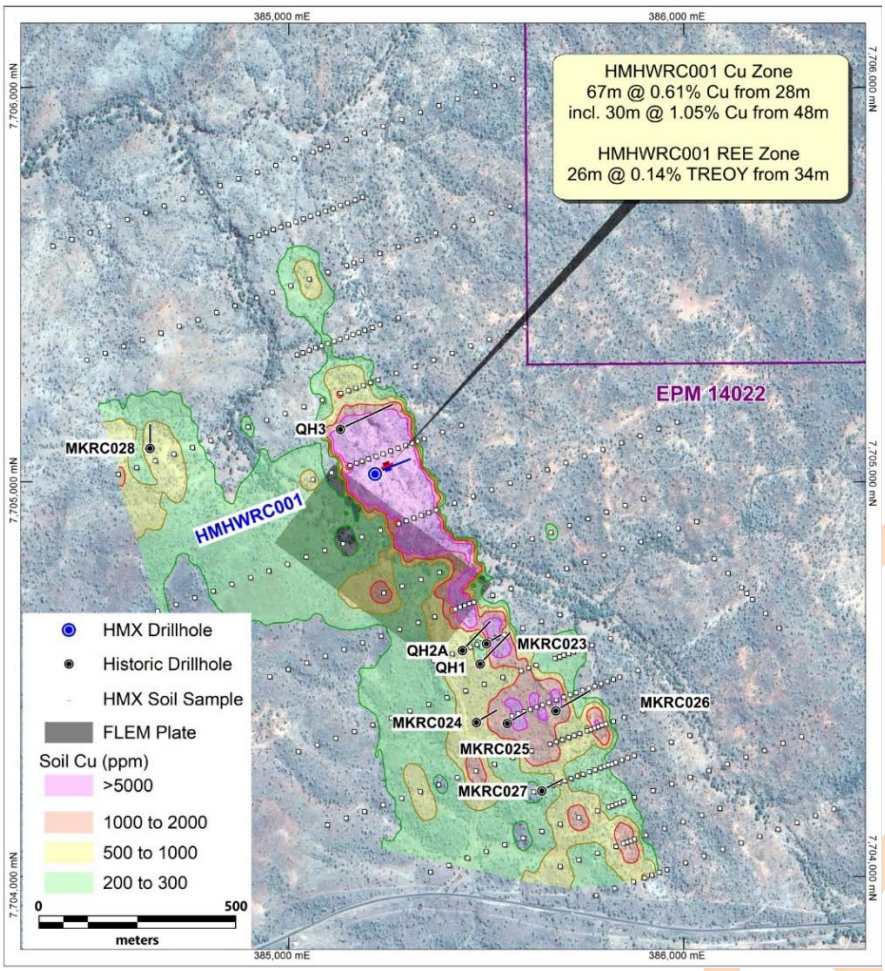

Figure 1. *Hardway Prospect showing previously reported copper soil geochemical results and the location of the modelled fixed-loop electromagnetic ("FLEM") plate.*

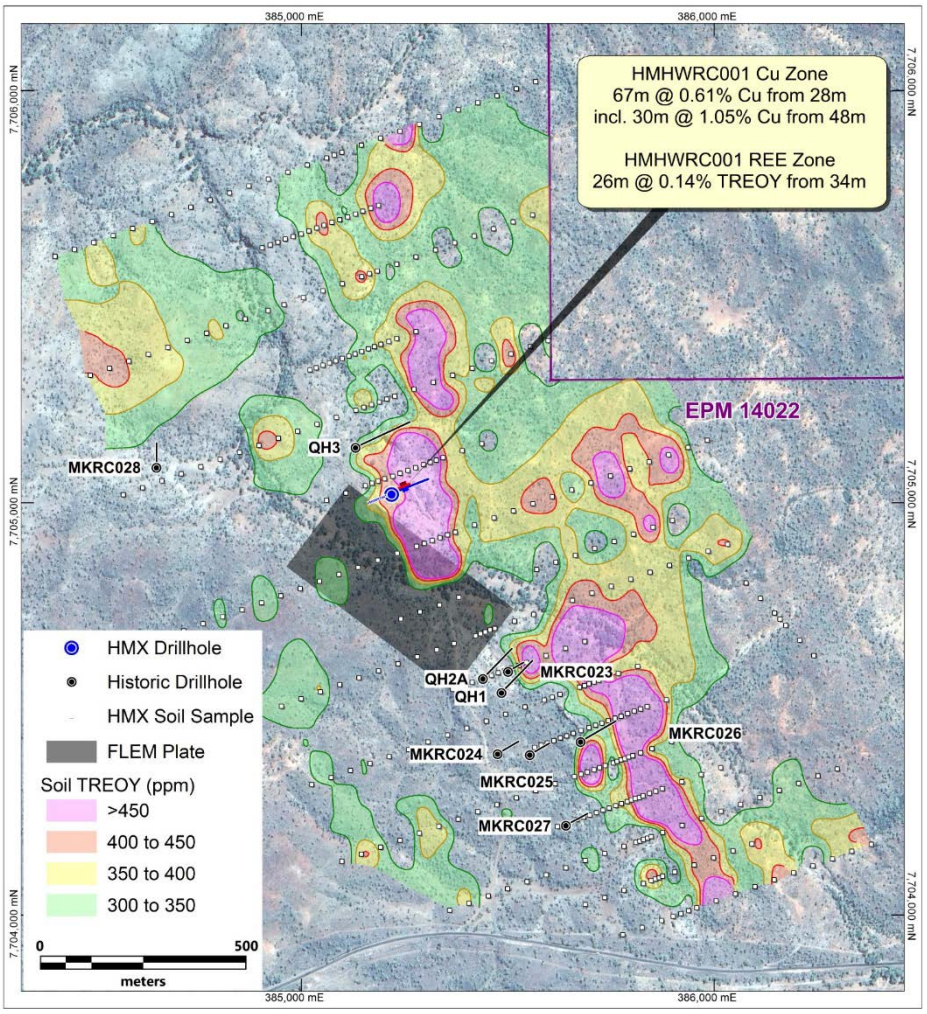

Figure 2. *Hardway Prospect showing previously reported total rare earth oxides (including Y) or ("TREOY") soil geochemical results and the location of the modelled fixed-loop electromagnetic ("FLEM") plate.*

Kalman West

The Kalman West prospect is located 1km to the west of the Kalman Cu-Au-Mo-Re deposit. The prospect is anomalous in gold, copper, lead and zinc (refer to ASX announcements dated 19 May 2017).

Initial mapping and drilling in the area showed the potential for high-grade gold mineralisation with drill intersections of 1m at 46.3g/t Au and rock chips returning assays of up to 4.48% Au (refer to ASX announcements dated 1 October 2015, 28 August 2017 and 26 July 2021).

Mapping indicated that these high-grade results are sourced from narrow and possibly discontinuous veins, however the Tick Hill Gold Deposit is hosted in the same geological terrain as Kalman West.

In order to better define the gold distribution and potential, Hammer drilled a tight five-hole, 200m program in the area surrounding the 4.48% Au sample position. Samples were analysed using Photon Assay which was utilised to deliver more accurate results in nuggety gold.

Significant intercepts from this program include:

- **1m at 65.4g/t gold from 9m in HKWRC015**

Additionally, there is significant Au-Pb geochemical anomalism in the graphitic schist hosting the gold veins.

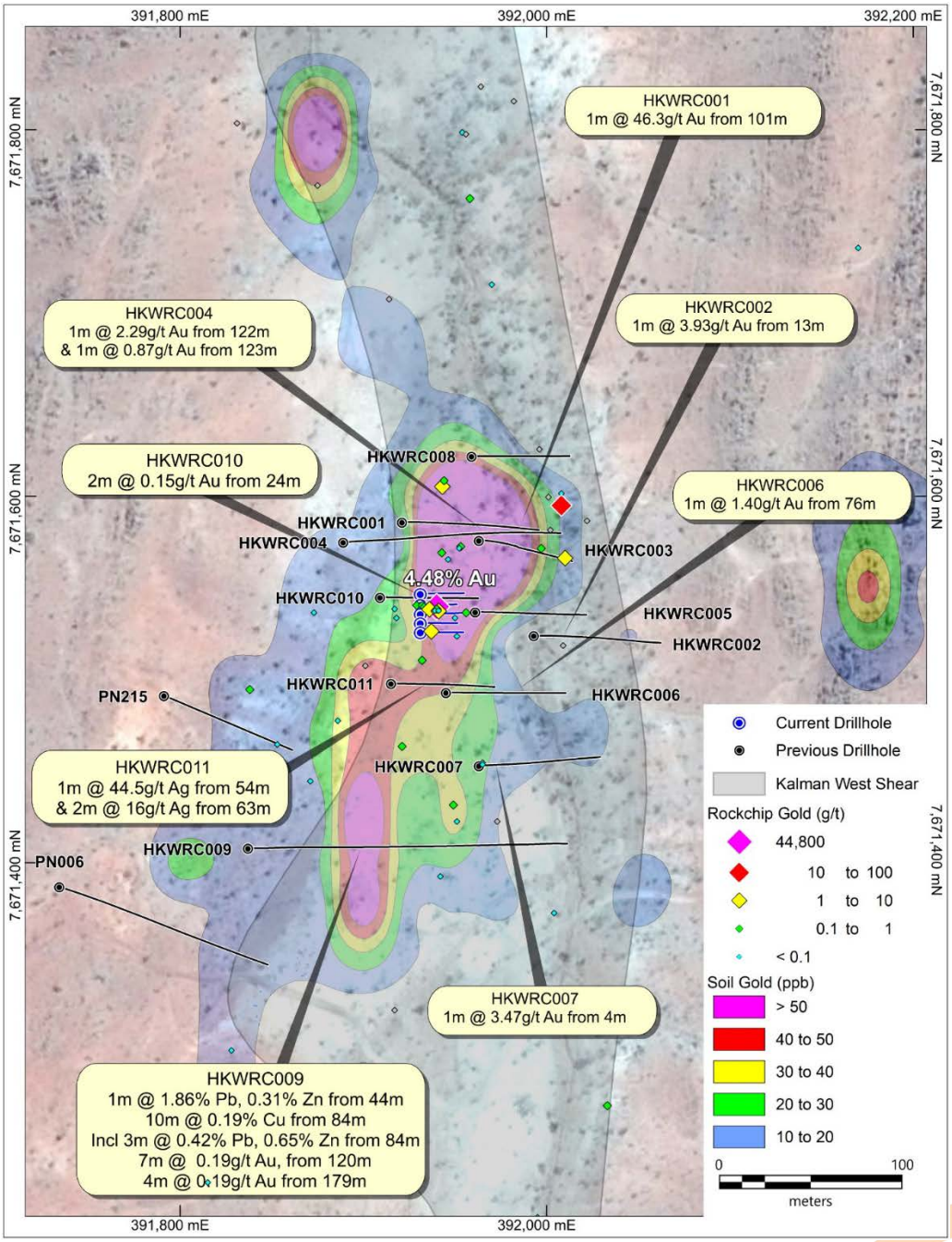

Figure 3. *Kalman West Prospect showing existing drilling, gold soil geochemical response and existing drilling.*

Table 1*. Kalman West – significant intercepts derived from Lab results utilising an 0.1g/t Au cut-off*

Target	Hole	E	N	RL	Dip	Az_GDA	TD (m)	*incl.*	From (m)	To (m)	Interval	Au (g/t)	Ag (ppm)	Cu (%)	Pb (ppm)	Comment
Kalman West	HKWRC012	391934.0	7671550.2	409.0	-55	89.7	40		0	2	2	**1.02**	0.5	0.03	553	
									19	20	1	0.25	0.0	0.01	124	
									35	36	1	0.00	1.4	0.13	**1710**	4m @1258 ppm Pb from 32m
	HKWRC013	391935.0	7671544.5	409.0	-60	89.6	40		0	2	2	**1.23**	1.0	0.02	484	3m @1057 ppm Pb from 32m
	HKWRC014	391934.8	7671539.5	409.0	-55	89.6	40		0	2	2	0.39	0.5	0.02	255	
									15	16	1	0.00	4.1	0.01	**1045**	
									28	32	4	0.00	1.5	0.08	**1390**	
	HKWRC015	391933.7	7671534.6	409.0	-60	89.6	40		1	11	10	**6.83**	2.3	0.02	207	
								incl.	9	10	1	**65.44**	19.3	0.02	311	
									28	29	1	0.00	1.3	0.03	**1050**	
	HKWRC016	391934.0	7671528.7	409.0	-55	89.64	40		0	3	3	0.27	0.0	0.01	157	
									38	40	2	0.19	0.8	0.02	541	
Note																
Hole coordinates located through DGPS																

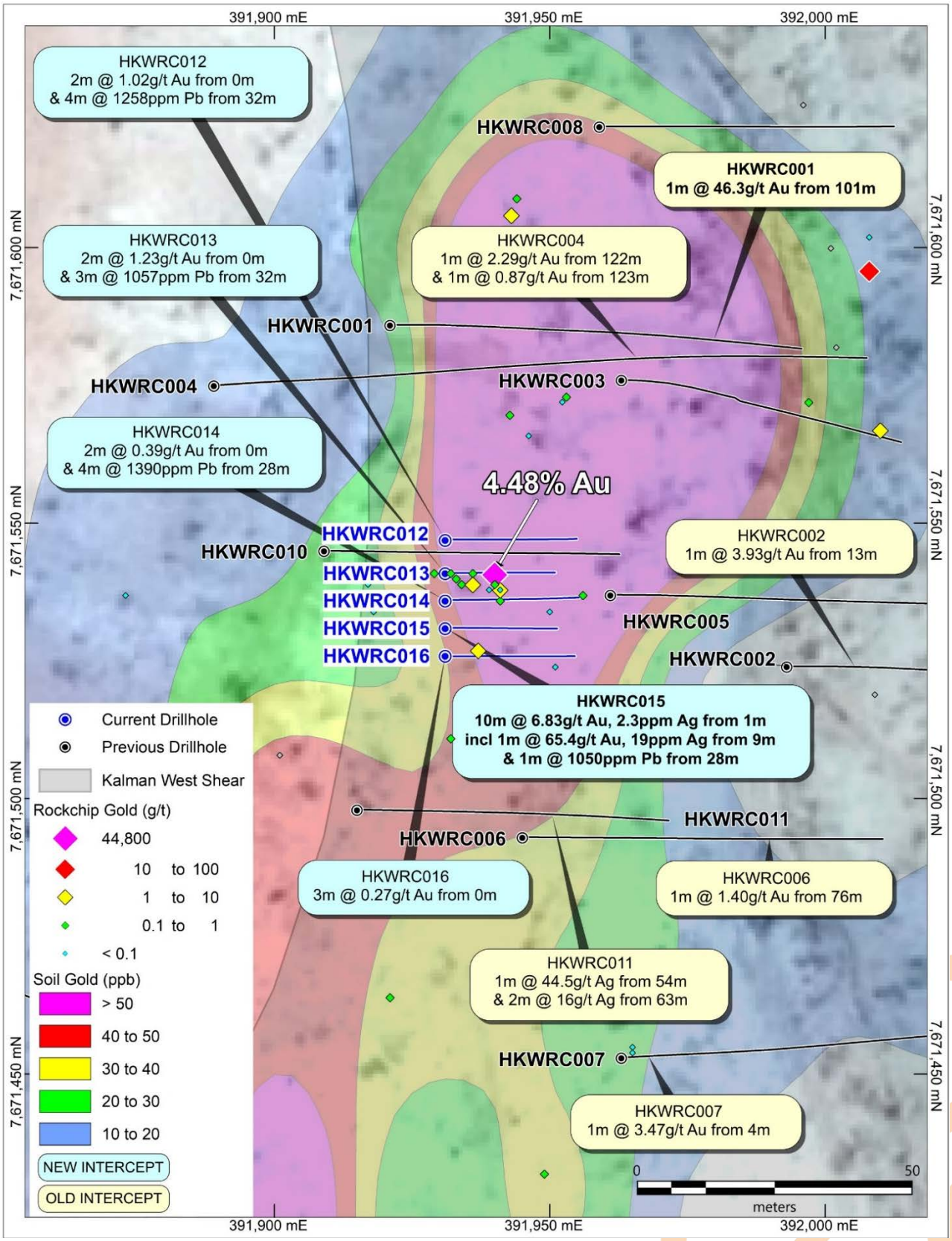

Figure 4. *Kalman West Prospect focusing on the area of recent drilling.*

Lord Nelson

Lord Nelson is a new prospect located at the southern end of the Neptune trend on the northern side of the regional-scale Fountain Range Fault Zone and 3.6km south-west on-trend from Trafalgar. Prospecting at the site in mid-2022 returned several rock chip samples with individual maximum copper and gold grades of copper grades of 8.34% Cu and 0.46g/t Au (refer to ASX announcement dated 26 July 2022).

Two holes were drilled (376m) as an initial test of the area. Significant intersections include:

- **5m at 1.72% Cu and 1.18g/t Au from 14m within a mineralised envelope of 21m @ 0.59% Cu and 0.33g/t Au from surface**; and
- 2m at 0.55% Cu and 0.22g/t Au from 22m within a mineralised envelope of 70m at 0.14% Cu and 0.04g/t Au from 1m.

The ratio of gold to copper in the area is significantly higher than other prospects in the region. Ground review is planned to prioritise zones for further investigation along strike towards Trafalgar.

Table 2. *Lord Nelson – significant intercepts derived from lab analyses. Intercepts calculated at a 0.1% Cu cut-off.*

Hole	E_GDA94	N_GDA94	RL	Dip	Az_GDA	TD	Incl.	From	To	Interval	Cu (%)	Au (g/t)	Co (ppm)	Comment
HMLNRC001	393693	7686243	372.0	-54	148	198		**0**	**21**	**21**	**0.59**	**0.33**	**95**	
							incl.	**14**	**19**	**5**	**1.72**	**1.18**	**148**	
								25	26	1	0.15	0.02	54	
								28	29	1	0.38	0.06	51	
								83	99	16	0.12	0.02	220	98-99m 0.13% Co & 0.14% Ni
HMLNRC002	393680	7686277	370.0	-55	145.1	78		**1**	**71**	**70**	**0.14**	**0.04**	**79**	
							incl.	22	24	2	0.55	0.22	78	
								43	45	2	0.29	0.39	239	
								58	59	1	0.74	0.24	108	

Note
Locations are relative to GDA94 Zone54

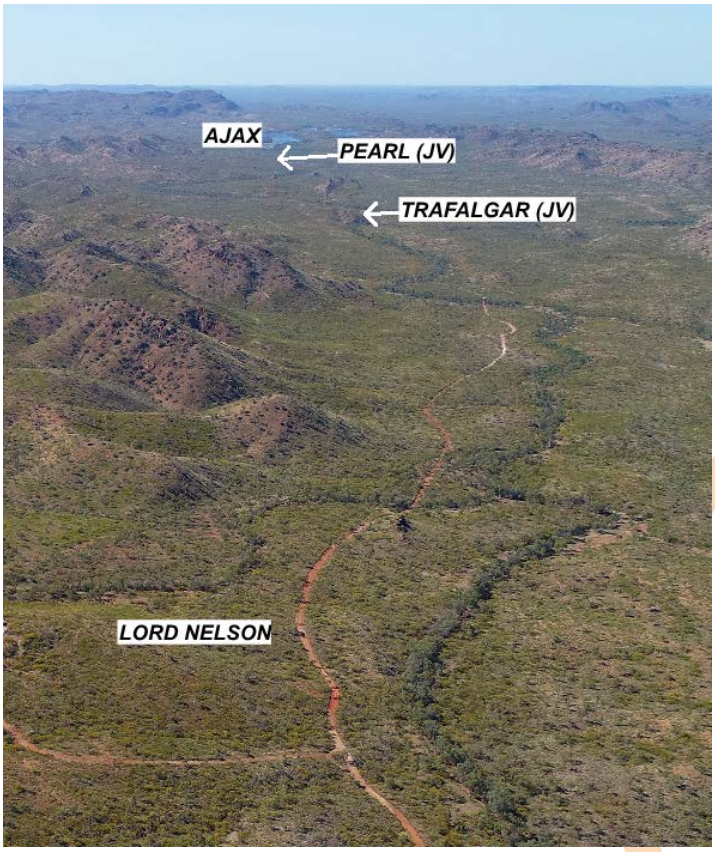

Figure 5. *Oblique view looking northeast along the Fountain Range Fault showing the location of Lord Nelson through to Ajax.*

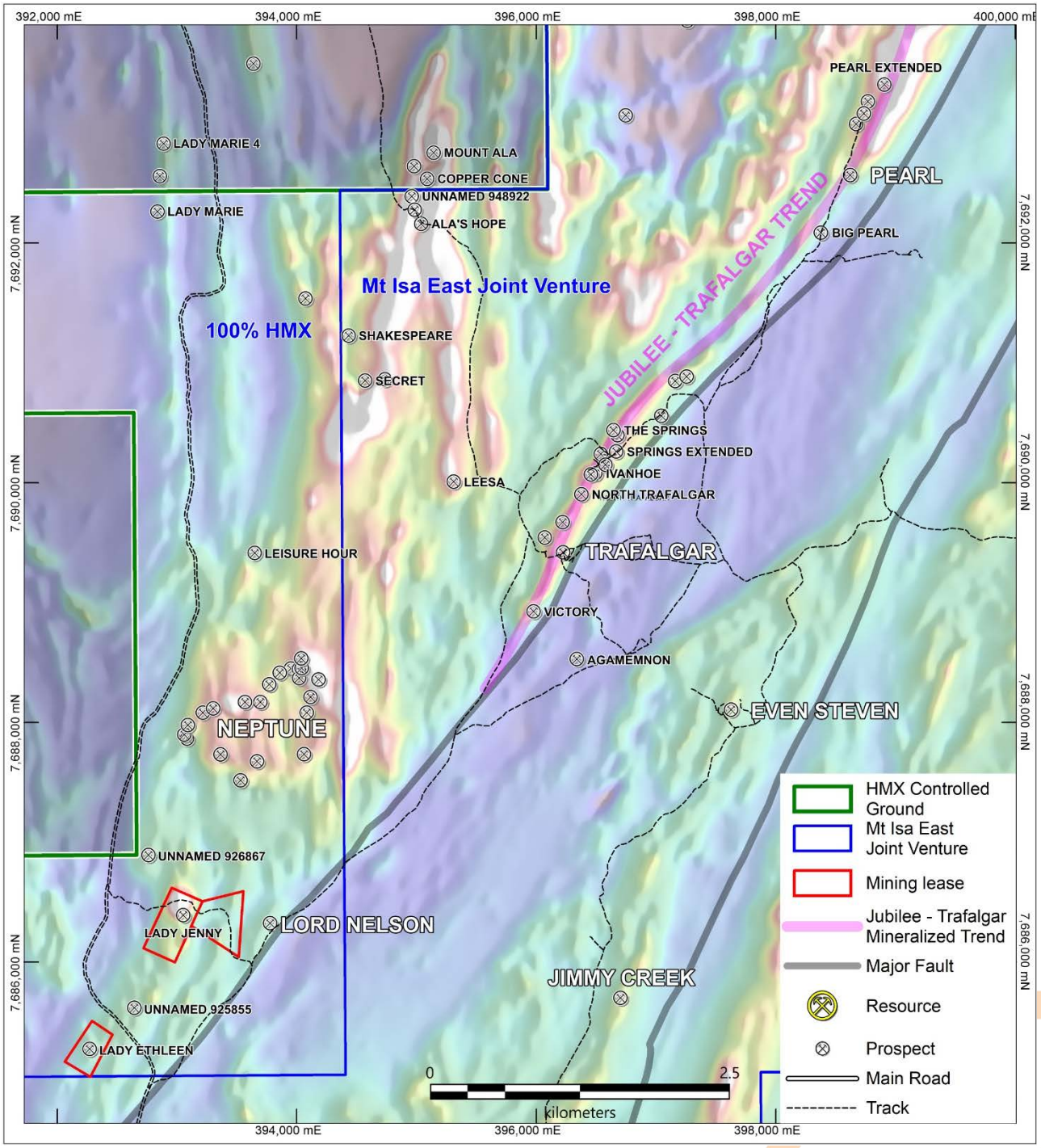

Figure 6. *Overview of the Trafalgar trend showing the location of Lord Nelson relative to the Neptune group of prospects and Trafalgar.*

Ajax

The Ajax trend was initially discovered in early 2022 with an intercept of 11m at 5% Cu and 2.5g/t Au in HMLVRC014. This drill-hole was followed up along strike with HMLVRC021 (4m at 2.4% Cu and 0.41g/t Au within 48m at 0.43% Cu and 0.12g/t Au) in October 2022 (refer to ASX announcements dated 9 March 2022 and 24 October 2022).

In late 2022, follow-up drilling in the Ajax area tested this trend along strike with copper intercepts including:

- 35m at 0.12% Cu form 66m in HMLVRC027

The Ajax East trend remains a high priority for Hammer given the significant and broad extent of sulphide mineralisation in the region and the regular occurrence of high-grade copper mineralisation.

The broader extent of the sulphide system delineated at Ajax East remains under-explored, with strike extents of greater than 250m without any drill coverage. Hammer will look to build upon its geological knowledge of the Ajax area and further test this zone as part of the upcoming 2023 drilling program.

Table 3. *Ajax West – significant intercepts derived from lab analyses. Intercepts calculated at a 0.1% Cu cut-off.*

Target	Hole	E	N	RL	Dip	Az_GDA	TD (m)	*incl.*	From (m)	To (m)	Interval	Au (g/t)	Cu (%)	Co (ppm)	Ni (ppm)
Ajax	HMLVRC027	398935.1	7694828.7	317.0	-60	110	184		38	39	1	0.02	0.47	103	145
									66	101	35	0.02	0.12	54	97
									141	142	1	0.09	0.18	70	125
									166	175	9	0.00	0.10	15	20
Note															
Hole coordinates located through DGPS															

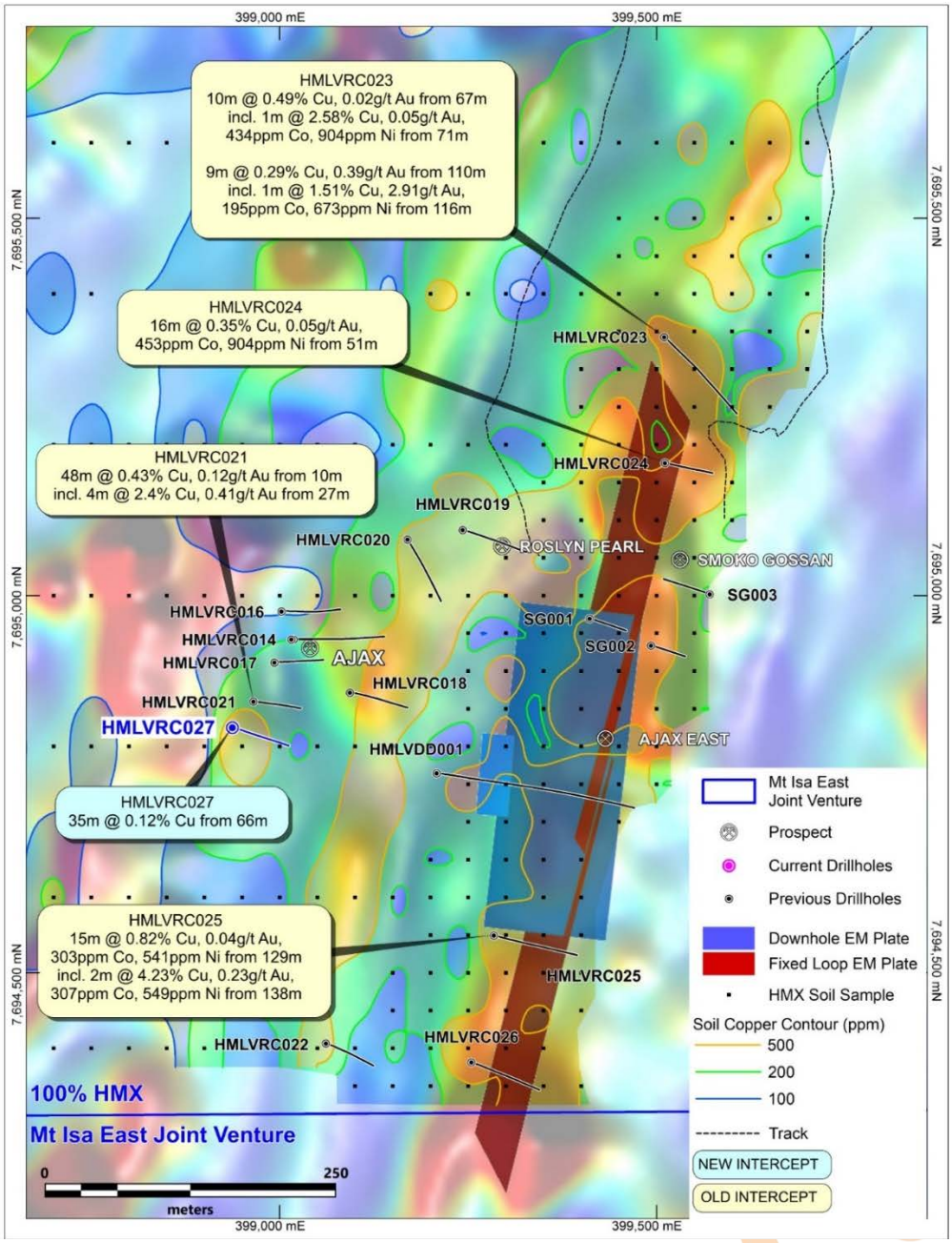

Figure 7. *Ajax Prospect showing the location of HMLVRC027 on the Ajax West trend.*

Mount Isa – Ongoing Exploration Activities

FLEM surveys are underway at the Hardway, Mascotte and Pommern drill targets prior to the commencement of drilling. Within Hammer's 100%-owned tenement areas, preparation is underway for further drilling at Hardway, Hope South, Mascotte, Tourist Zone and the new prospects, Bulonga and Pommern.

Wet weather delayed the commencement of the FLEM programs and has also resulted in a short delay in the commence of Hammer's 2023 drilling program. Drilling is now expected to commence in mid-March.

Geophysical modelling at the Bullrush prospect will enable targeting of possible IOCG-style mineralisation beneath Cambrian Georgina Basin sediments.

Upcoming Events and Newsflow

- **Mid-March – Drilling commences at Hardway**
- **22-23 March – Brisbane Mining Investor Conference**
- **22-23 March – Ord Minnett East Coast Mining Conference**
- **March – FLEM, DHEM Results**
- **April – Kalman Resource Update**
- **April – MIE JV Drilling Program to Commence**
- **April – Mount Hope Region Drilling**
- **Q2 – Hardway, South Hope, Mascotte, Mascotte Junction and Stubby drilling results**
- **Q2 2023 – Yandal Lithium/Nickel/Gold air-core drilling program**

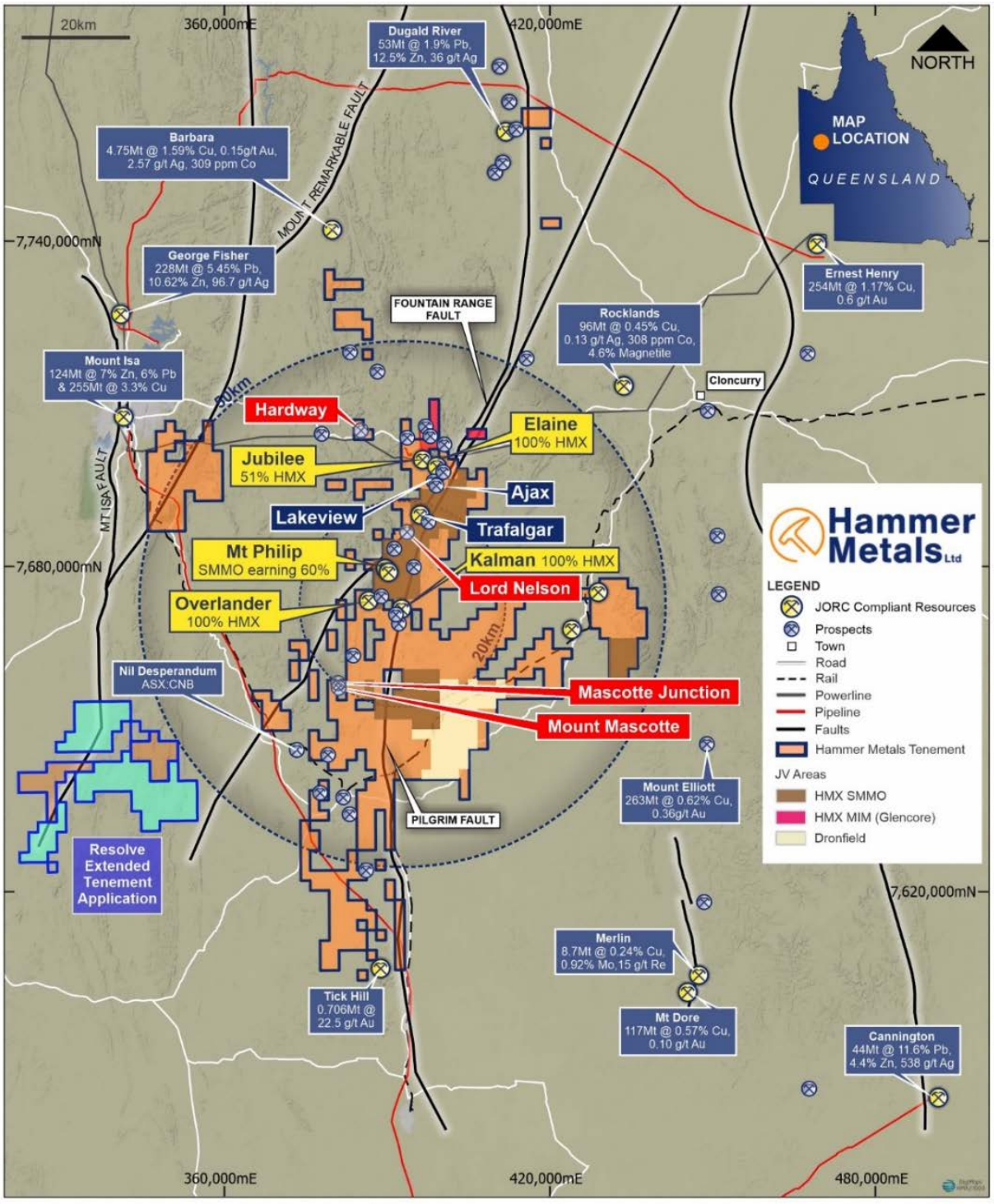

Figure 8. *Mt Isa Project Area*

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 historic 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 exploration results and 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.

JORC Table 1 report – Mount Isa Project Exploration Update

- This table is to accompany an ASX release updating the market with drilling results at Kalman West, Lord Nelson and Ajax West. This drilling was conducted in late 2022 and due to long turnaround times, it has only recently been reported. Hammer is also reporting preliminary results from a FLEM survey recently conducted over the Hardway prospect.
- The drilling reported herein was conducted on EPM13870 (Kalman West), EPM26904 (Lord Nelson) & 26775 (Ajax West). The Hardway FLEM survey was conducted on EPM14022.
- All ancillary information presented in figures herein has previously been reported to the ASX.
- 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.*	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. The average sample length and weight for the assays reported herein is 1.6m and 3.91kg respectively. All samples submitted for assay underwent fine crush with 1kg riffled off for pulverising to 75 microns. With the exception of Kalman West, samples were submitted to ALS for: • Fire Assay with AAS finish for gold. • 4 acid digest followed by ICP-MS and ICP-OES for a variable element suite. Portable XRF analysis was conducted in the field on each 1m interval. With Kalman West, samples were submitted to ALS for: • Photon Assay for Au • 4 acid digest followed by ICP-MS and ICP-OES for a variable element suite. Photon assay was utilised to enable a higher quality determination in zones which were interpreted to contain nuggety gold. Re-analyses will be conducted as required to investigate element repeatability.

Criteria	JORC Code explanation	Commentary
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).*	Holes were drilled by remote drilling using a Hydco 70 drilling rig using the reverse circulation drilling method. The holes were drilled by the reverse circulation method. The reverse circulation technique which uses a face sampling hammer to reduce contamination.
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.*	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. Kalman West was drilled utilising a collaring RC hammer and bit (~7.5" diameter) whereas the other holes were drilled using a standard bit of approximately ~5.5" in diameter.
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.*	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.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the 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.*	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. Where evidence of mineralisation was encountered or anticipated, the sample length was reduced to 1m. Sample collection methodology and sample size is considered appropriate to the target-style and drill method, and appropriate laboratory analytical methods were employed. Standard reference samples and blanks were each inserted into the laboratory submissions at a rate of 1 per 25 samples.

Criteria	JORC Code explanation	Commentary
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.*	Each metre drilled was subject to site portable XRF analysis. With the exception of Kalman West, all samples were analysed for gold by flame AAS using a 50gm charge. Each sample was also analysed by 4-acid multielement ICP OES and MS. Photon Assay was utilised at Kalman west to determine gold concentrations. Standard reference samples and blanks were inserted at 25 sample intervals. ALS also maintained a comprehensive QAQC regime, including check samples, duplicates, standard reference samples, blanks and calibration standards. In relation to the fixed loop EM reported herein at the Hardway Prospect. The survey consisted of two loops which covered both the north and south portions of the Hardway trend. The results reported herein are preliminary and subject to further modelling and interpretation. Information conveyed digitally to Newexco Exploration each day. Power Supply – 27KVA Disel Generator Transmitter – GeoRESULTS DRTX 4 Receiver – Emit SMARTem 24, 16 channel receiver with 3 component smart fluxgate Base Frequency - 1Hz Stacks – Minimum 64 Window Timing – SMARTem standard Station spacing – 50m Loop Dimensions – 200x200m Loop Turns - 1
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.*	All assays have been verified by alternate company personnel. Assay files were received electronically from the laboratory. All geophysical data is conveyed digitally between the site survey crew and Newexco Exploration daily.
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.*	Datum used is GDA 94 Zone 54. Location was determined by DGPS Survey

Criteria	JORC Code explanation	Commentary
	Specification of the grid system used. *Quality and adequacy of topographic control.*	
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.*	The drill density is sufficient to establish broad trends of mineralisation and the holes are located on the margins of an established JORC resource. See ASX release dated 27 September, 2016. The average grade has been utilised where multiple repeat analyses have been conducted on a single sample.
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.*	Drill holes were 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.*	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.*	The dataset associated with this reported exploration has been subject to data import validation. All assay data has been reviewed by two company personnel. All geophysical data is reviewed by geophysical consultants Newexco Exploration Pty Ltd. 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 29 tenements. The drilling reported herein was conducted on EPM26775, EPM26904 and EPM13870. These tenements are held by Mt Dockerell Mining Pty Ltd, a 100% owned subsidiary of Hammer Metals Limited. The Hardway Fixed Loop EM was conducted on EPM14022. This tenement is held by Mulga Minerals Pty Ltd, a 1005 owned subsidiary of Hammer Metals Limited.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Exploration at Kalman West was conducted since 2005 by Kings Minerals NL (now Santana Minerals Ltd) Syndicated Metals Ltd (now Discoverex Resources Ltd) and Hammer Metals Ltd. Prior to this period work was also undertaken by Texins (1970's), PIMEX (1980's) and MIM (early 1990's). At Hardway, previous holders held title either covering the tenement in part or entirely and previous results are contained in Mines Department records. At Ajax West and Lord Nelson no historic work by other parties is noted in historic records.
Geology	*Deposit type, geological setting and style of mineralisation.*	Kalman West The Kalman West Prospect is located approximately 50m to the west of the Kalman Cu-Au-Mo-Re Deposit. The Kalman West Prospect is located in a west dipping shear zone which has formed as a splay structure to the Pilgrim Fault. The shear contains abundant graphitic metasediments which are anomalous in Pb-Zn. This zone is also the site of abundant quartz-dominant veining which can be gold-bearing. Hardway 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. Lord Nelson At Lord Nelson, Mineralisation is hosted within calc silicate and dolerite lithologies and is associated with carbonate alteration and cut by epithermal silica veining associated with the nearby Fountain Range Fault Zone. Ajax The Ajax Prospect located on EPM26775 is located on the Trafalgar to Jubilee magnetic trend. Mineralisation at Ajax is little understood but associated with quartz vein zones with a higher pyrrhotite content. EM undertaken at the prospect has defined multiple conductive bodies which are progressively being drill tested.
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*	See the attached tables.

Criteria	JORC Code explanation	Commentary
	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 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.*	Intercepts are quoted at a 0.1% Cu cut-off for Hardway and Lord Nelson. For Kalman West intersections are quoted at a 0.1g/t cut-off grade. For Hardway the TREOY% intersection is quoted at a 0.1% TREOY cut-off grade. Included intercepts are shown to highlight grade variations. The reader should assume that there are no grades above the cut-off that are not tabulated herein.
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').*	The drilling reported herein was conducted on prospects with little or no other drilling. As such true thicknesses are not quoted in the intercept table presented in this report.
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.*	Intercepts are quoted at a 0.1% Cu cut-off for Hardway and Lord Nelson. For Kalman West intersections are quoted at a 0.1g/t cut-off grade. For Hardway the TREOY% intersection is quoted at a 0.1% TREOY cut-off grade. Included intercepts are shown to highlight grade variations.

Criteria	JORC Code explanation	Commentary
		The reader should assume that there are no grades above the cut-off that are not tabulated herein.
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 relevant information is disclosed in the attached release and/or is set out in this JORC Table 1. In relation to the fixed loop EM reported at the Hardway Prospect. The survey consisted of two loops which covered both the north and south portions of the Hardway trend. Power Supply – 27KVA Disel Generator Transmitter – GeoRESULTS DRTX 4 Receiver – Emit SMARTem 24, 16 channel receiver with 3 component smart fluxgate Base Frequency - 1Hz Stacks – Minimum 64 Window Timing – SMARTem standard Station spacing – 50m Loop Dimensions – 200x200m Loop Turns - 1
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.*	Follow up drilling is planned at Hardway and Ajax in addition to other prospects within the Mt Isa Project.