

## COPPER MINERALISED SYSTEM CONFIRMED AT SHADOW

### HIGHLIGHTS

- **Broad intersections of copper and associated gold** have been reported in the two holes drilled at the Shadow prospect at the Mt Isa East Joint Venture
- Drilling at Shadow outlined a **wide mineralised zone associated with the Shadow Breccia** and more significantly a silicified magnetite alteration zone on the margin of the breccia. Significant intercepts are:
  - **83m @ 0.13% Cu from 81m** including 29m @ 0.16% Cu from 135m in HMSHDD001; and
  - **106m @ 0.10% Cu from 44m** including 5m @ 0.23% Cu from 52m in HMSHDD002.
- Drilling at Toby identified significant levels of alteration in the drill core accompanied by minor levels of chalcopyrite mineralisation. **The strong Electromagnetic ("EM") conductor targeted by the drill hole remains unexplained**
- Two drill holes at Koppany **intersected visible rare earth mineralisation** with the second hole encountering **visible chalcopyrite in pyrrhotite-rich stringer sulphide zones** with ISCG affinity. Assay results for these holes are pending
- **An expanded exploration program has been agreed by the Mt Isa East Joint Venture** with detailed soil sampling and mapping programs initiated on the broader Mt Philp and Shadow trends
- **A downhole EM program has been commissioned** at all three recent drill targets and will commence immediately

**Hammer Metals Ltd (ASX:HMX)** ("Hammer" or the "Company") is pleased to provide results from its diamond drilling program undertaken on the Shadow and Toby prospects located within the Mt Isa East Joint Venture area ("**JOGMEC JV**") and on the Koppany prospect located within Hammer's 51/49% Joint Venture with Mount Isa Mines.

Two holes were drilled at the Shadow prospect, for a total of 372m and a further hole was drilled at Toby (252m). The drilling at Shadow confirms that the Shadow trend is mineralised and has the potential to host a significant Copper Deposit. With the presence of a wide zone of copper mineralisation in the first two holes the JV has committed to expanding the work program along the remainder of the 4km magnetic trend and the surrounding Mt Philp areas. This work program will consist of soil sampling and field mapping with the aim of identifying targets for follow up drilling.

Drilling at Toby failed to explain the very strong heliborne and ground EM conductors identified during previous exploration. A downhole EM program is to commence immediately and will be deployed to each of the three targets recently drilled.

The Company has also completed 507m of diamond drilling on the Koppany Copper-Rare Earth Element ("**REE**") prospect located to the southeast of the historic Mary Kathleen mine. The drilling intersected visible REE mineralisation (Allanite) and multiple zones of stringer sulphide mineralisation (of up to 9m in downhole length) composed of pyrrhotite and chalcopyrite. Hammer anticipates these results being available over the next fortnight.

### ASX RELEASE

7 September 2020

### DIRECTORS / MANAGEMENT

**Russell Davis**  
Chairman

**Daniel Thomas**  
Managing Director

**Ziggy Lubieniecki**  
Non-Executive Director

**David Church**  
Non-Executive Director

**Mark Pitts**  
Company Secretary

**Mark Whittle**  
Chief Operating Officer

### CAPITAL STRUCTURE

#### ASX Code: HMX

Share Price (4/9/2020)	\$0.044
Shares on Issue	615m
Market Cap	\$27.1m
Options Listed	135m
Options Unlisted	24m
Performance Rights	8m

**Hammer's Managing Director, Daniel Thomas said:**

*"The results from this first drilling campaign provide confidence we can deliver on the potential that we believe the extensive Mt Philp mineral system contains. The intersection of a broad system of mineralisation at Shadow is very encouraging and the Joint Venture is committed to continuing nearby exploration in the search for a large scale economic IOCG deposit. Importantly, the results have yet to explain some of our previous observations such as the high-grade copper and gold surface samples at Shadow and the strong EM anomalies at Toby. JOGMEC and Hammer have recently agreed to upscale this year's exploration program at Shadow and within the surrounding breccia units, whilst also continuing our targeting efforts within the broader Joint Venture areas. We look forward to receiving the assays from our drilling at Koppang and it has been really pleasing to observe both rare earth and copper mineralisation in the drill core".*

### **Mt Isa East Joint Venture**

#### **Shadow Prospect**

Shadow was discovered by Hammer during on-ground follow-up of soil geochemical anomalies. The prospect is located on the western margin of the Mt Philp Breccia and east of the Mt Philp Hematite deposit. Mapping and rock chip sampling outlined a mineralised multiphase breccia with marginal silica and magnetite alteration. Lithochemical examination suggests that the breccia and the silica-magnetite alteration zone share the same parent rock. The initial 2-hole program (372m) was designed to gather as much geological information as possible across the width of the alteration system. The drilling defined a broad mineralised envelope of copper and gold mineralisation indicating the potential for the system to host a large-scale deposit. Significant intercepts include:

- 83m @ 0.13% Cu from 81m including 29m @ 0.16% Cu from 135m in HMSHDD001; and
- 106m @ 0.10% Cu from 44m including 5m @ 0.23% Cu from 52m in HMSHDD002.

Maximum copper and gold values over any one metre interval include 1.1% Cu from 136m in HMSHDD001 and 0.22g/t Au from 125m in HMSHDD001

Full intercepts at 0.1% Cu cut-off form Table 1.

The plus-4km Shadow trend is currently being investigated through detailed soil sampling and mapping and a downhole EM survey has also been commissioned with the aim to define any off-hole targets of potentially higher-grade mineralisation.

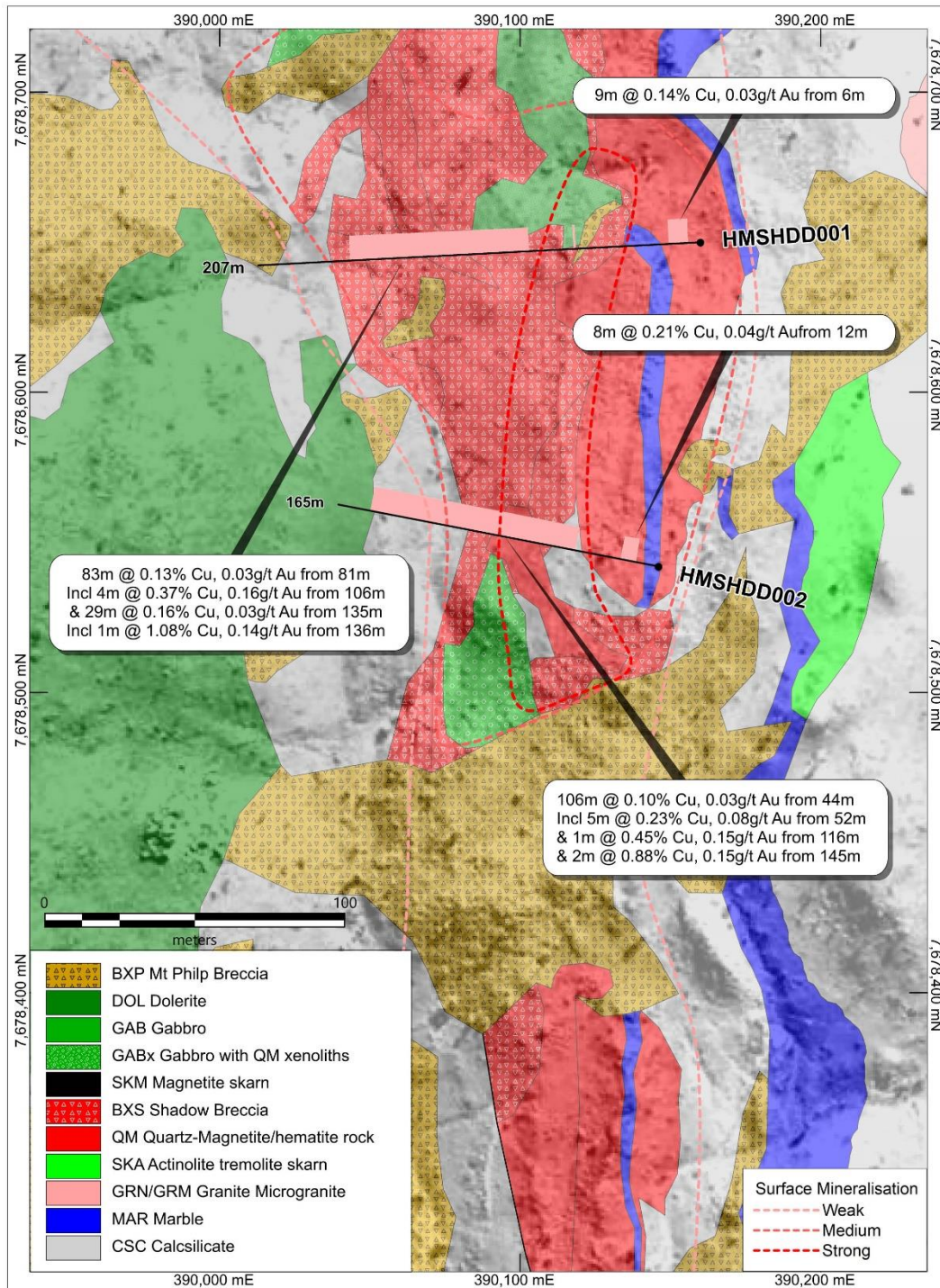


**Figure 1.** Chalcopyrite ( $\text{CuFeS}_2$ ) mineralisation within a quartz magnetite altered porphyry - HMSHDD001, 136.5m.



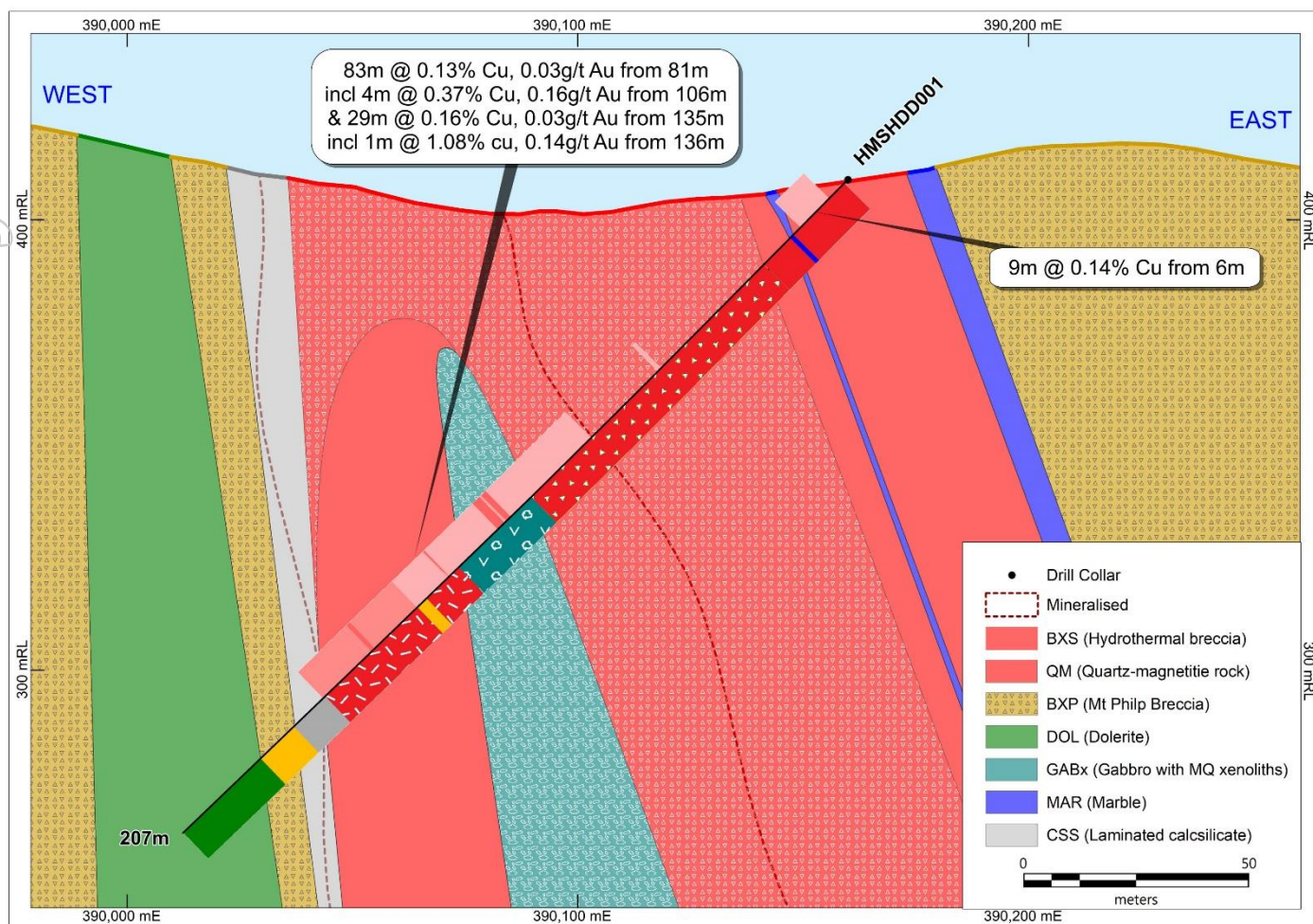


**Figure 2.** Fracture associated Chalcopyrite mineralisation within albite alteration zones – HMSHDD002, 54.9m

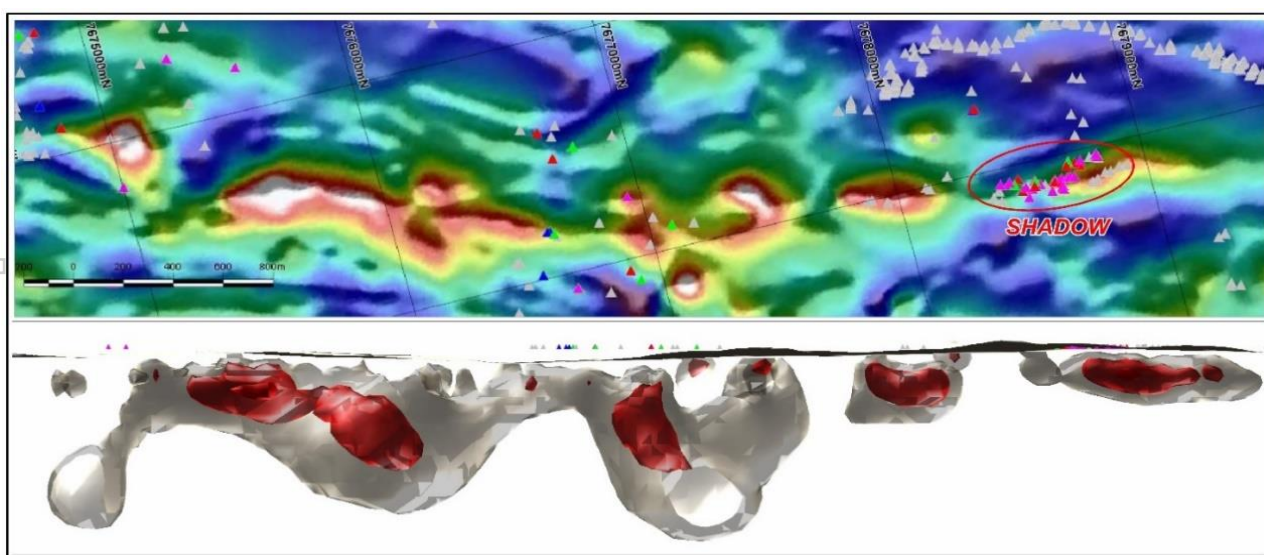


**Figure 3.** Location plan Shadow drilling.





**Figure 4.** Section through HMSHDD001.



**Figure 5.** Long section (looking west) along the plus 4km Shadow Trend showing the magnetic response in plan (top) and as a long section looking west (base) with Cu rock chip response. The Shadow prospect trend will be evaluated in detail during the JOGMEC JV Phase 2 program. Refer to Hammer ASX release dated 12 May 2020 for details on the rock chip sampling.

**Table 1.** Phase 2 drill intersections.

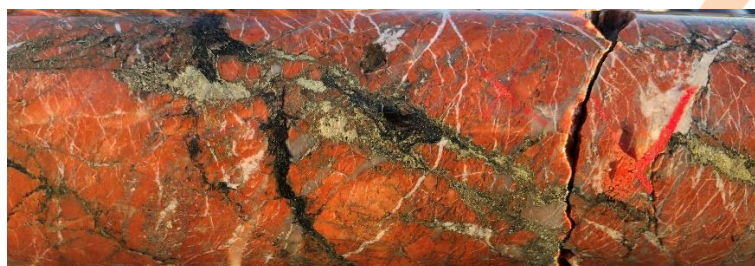
SHADOW, TOBY and KOPPANY PROSPECTS - INTERCEPTS AT 0.1% Cu and/or 0.1g/t Au Cut-offs													
Prospect	Hole	E_GDA94	N_GDA94	RL	TD	Dip	Az_GDA		From	To	Width	Cu (%)	Au (g/t)
Shadow	HMSHDD001	390160	7678650	408.9	207	-45	270		6	15	9	0.14	0.03
									59	60	1	0.15	0.05
									81	164	83	0.13	0.03
								incl.	106	110	4	0.37	0.16
								&	125	126	1	1.00	0.22
								&	135	164	29	0.16	0.03
								incl.	136	137	1	1.08	0.14
								incl.	148	149	1	0.83	0.10
Shadow	HMSHDD002	390146	7678542	411.5	165.3	-50	280		12	20	8	0.21	0.04
									44	150	106	0.10	0.03
								incl.	52	57	5	0.23	0.08
								&	116	117	1	0.45	0.15
								&	145	147	2	0.88	0.15
Toby	HMTODD001	394782	7679889	353.4	252.3	-60	310		174	175	1	0.00	1.37
									177	178	1	0.10	0.01
									212	213	1	0.30	0.25
									221	229	8	0.13	0.05
								incl.	222	223	1	0.20	0.1
Koppany	HMKPDD001	398173	7704649	456.9	255.3	-60	95	Assays Pending					
	HMKPDD002	398097	7704586	449.5	251.8	-60	90						
Note													
Coordinates and azimuth relative to GDA 94 Zone 54													

### Toby Prospect

One 252m diamond hole was drilled at Toby and was designed to test a modelled conductor derived from a ground EM survey undertaken in early 2020. The hole encountered strong alteration, structural complexity with minor sulphide. The ground EM conductor and historic heliborne VTEM anomaly are not explained by the levels of sulphide and graphite encountered in the drilling. Mineralised intercepts in the completed hole include:

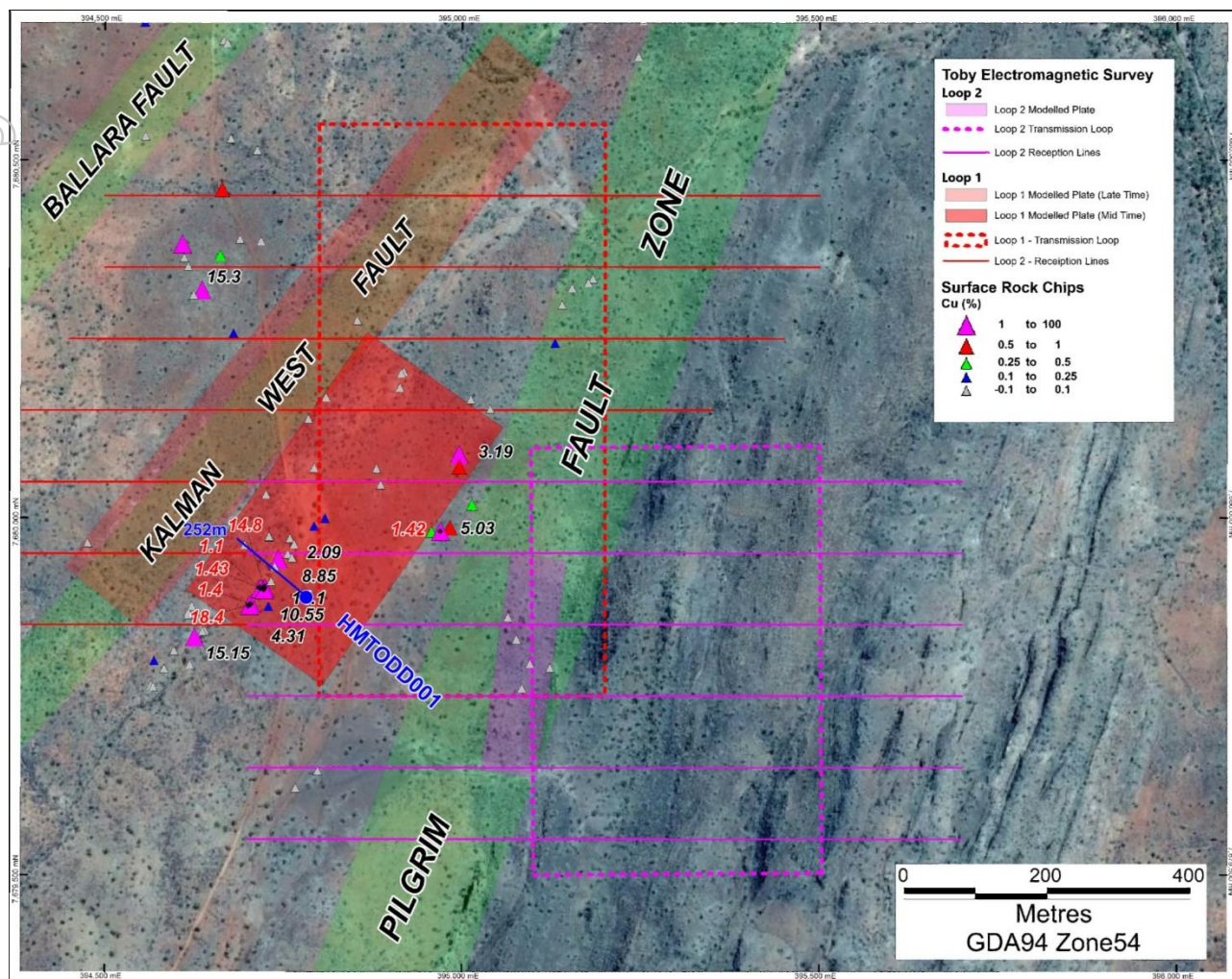
- 1m @ 1.37g/t Au from 174m
- 8m @ 0.13% Cu from 221m including 1m @ 0.20g/t Au

HMTODD001 was Hammer's first hole drilled at the Toby prospect. Further work is required to explain the significant ground and heliborne EM anomalies identified at this target. An immediate downhole EM survey has been commissioned by the Company to further examine the previously identified EM and VTEM anomalies at the Toby prospect.



**Figure 6.** Chalcopyrite and pyrite fracture infill hosted by a mylonitised Pegmatite – HTODD001, 212.6m.





**Figure 7.** Location plan Toby drilling (For information on rock chip sampling, refer to HMX release dated 12 May 2020.

#### **Mt Frosty Joint Venture (HMX 51% and MIM 49%)**

##### **Koppany Prospect**

Hammer Metals received a Critical Minerals Exploration Initiative (“CEI”) grant from the Queensland Government to drill test rare earth mineralisation at the Koppany prospect located 2km to the south east of the Mary Kathleen U and REE deposit. The two drill hole program (507m) was designed to test strongly anomalous Lanthanum and Cerium responses in surface soil sampling.<sup>1</sup> Assays are currently pending but core examination indicated that the rare earth bearing mineral Allanite was encountered in both holes.

The rare earth bearing skarn zone at Koppany is bounded on its western side by copper-bearing pyrrhotite (FeS<sub>2</sub>) zones that correspond to a series of strong VTEM responses occurring over a 5.6 km strike length. This area represents a significant Iron-Sulphide-Copper-Gold (“ISCG”) target. Other examples of ISCG mineralisation style in the Mount Isa region include Eloise and Osborne.

<sup>1</sup> Refer to Hammer Metals ASX release dated 3/7/2019



The second hole at Koppany intersected 7 zones up to a maximum of 9m downhole length of stringer sulphide composed of pyrrhotite with ancillary chalcopryite were intercepted by the westernmost hole (HMKPDD002). Assays are expected to be reported in the next two weeks.



**Figure 8.** Black Allanite (REE bearing mineral with formula  $(\text{Ce,Ca,Y,La})_2(\text{Al,Fe}^{+3})_3(\text{SiO}_4)_3(\text{OH})$  ) within a Pyroxene Skarn - HMKPDD001, 155.5m.

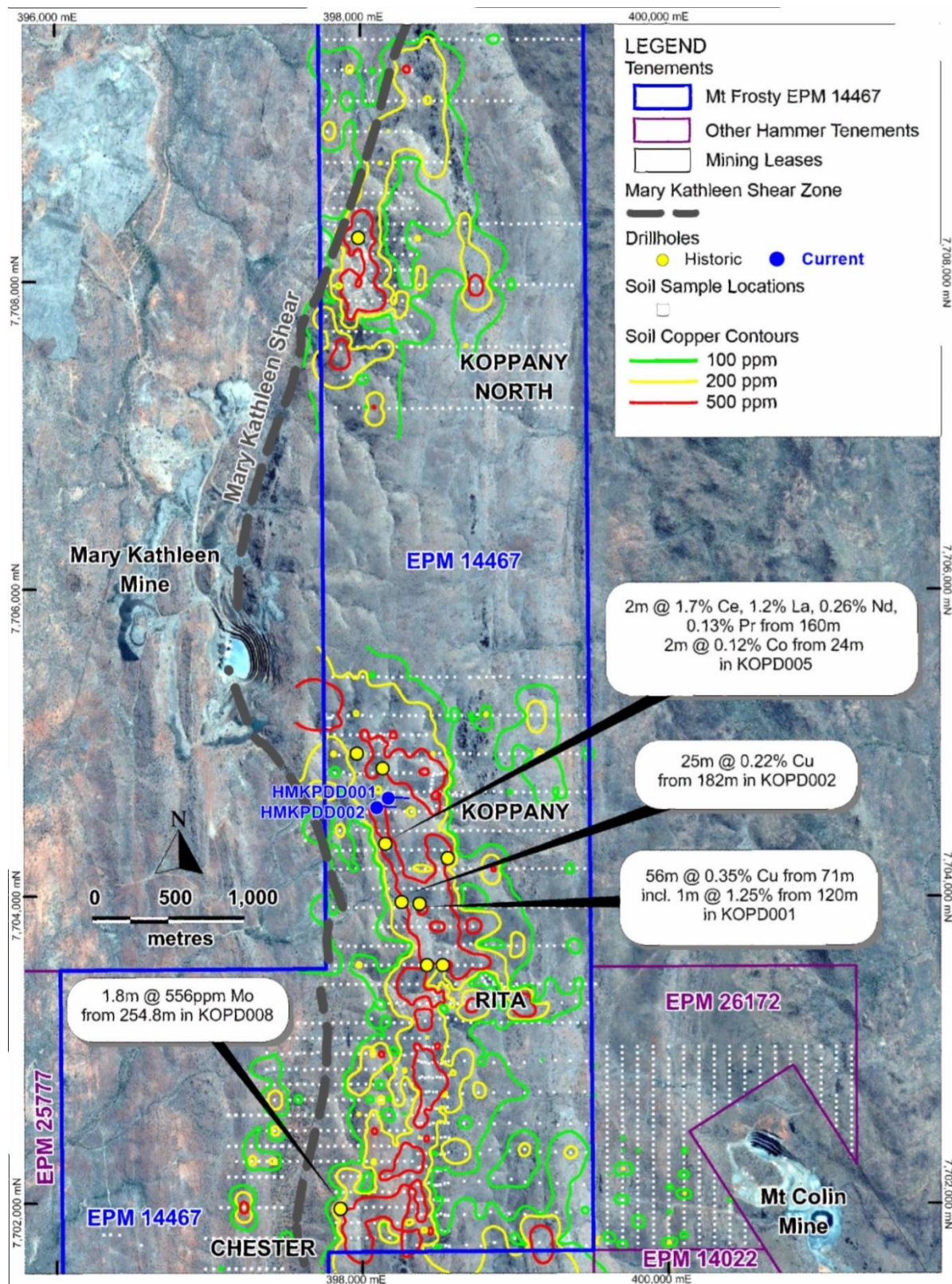


**Figure 9.** Pyrrhotite massive sulphide zone – HMKPDD002, 109.2m.



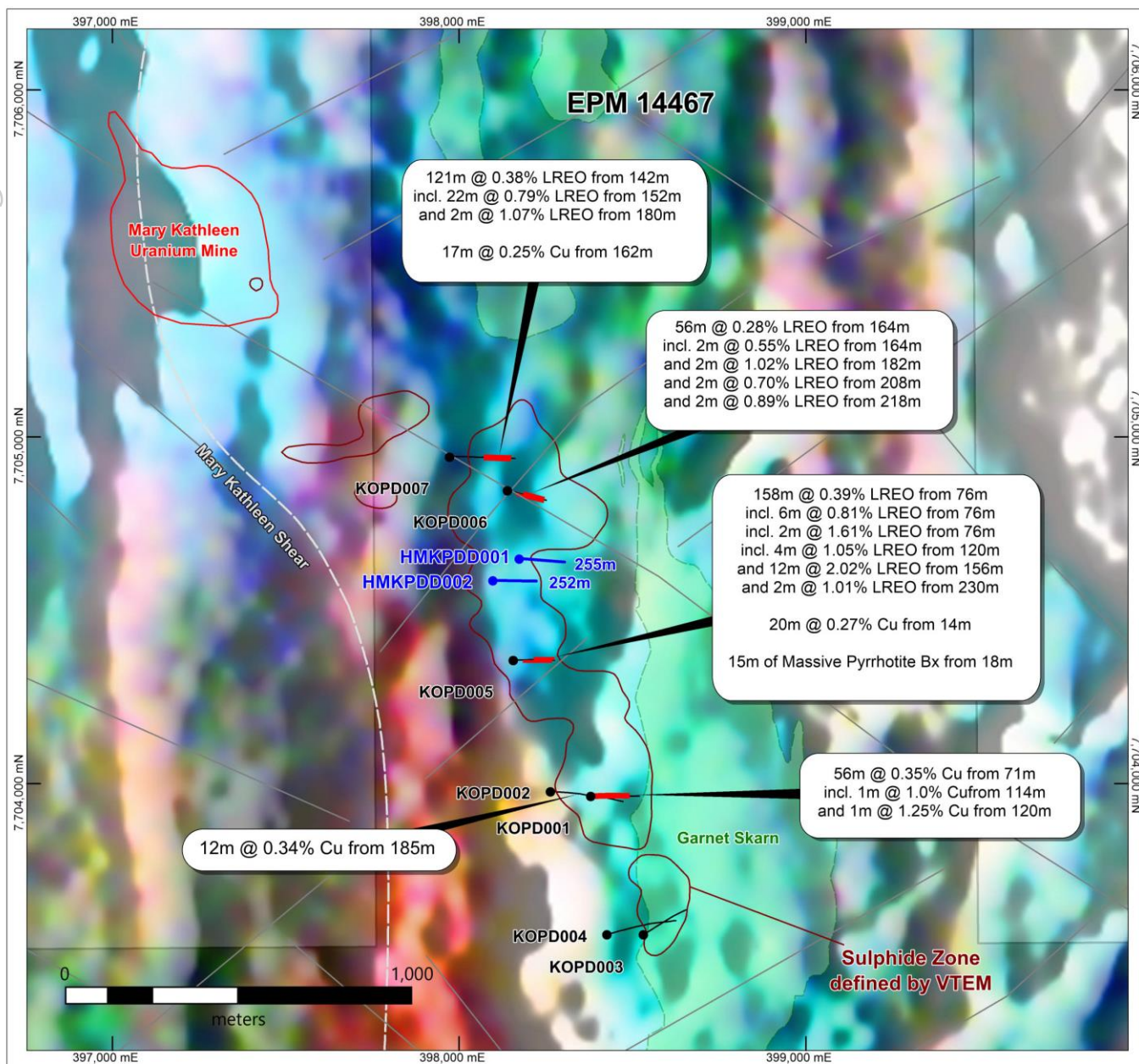
**Figure 10.** Pyrrhotite-Chalcopryite mineralisation – HMKPDD002, 128.3m.





**Figure 11.** Location plan Koppany drilling showing significant intercepts encountered in previous drilling and Cu soil geochemistry. Refer to HMX ASX release dated 3 July 2019.





**Figure 12.** Location plan Koppany drilling showing significant intercepts encountered in previous drilling. Background image is ternary radiometrics. Refer to HMX ASX release dated 3 July 2019.

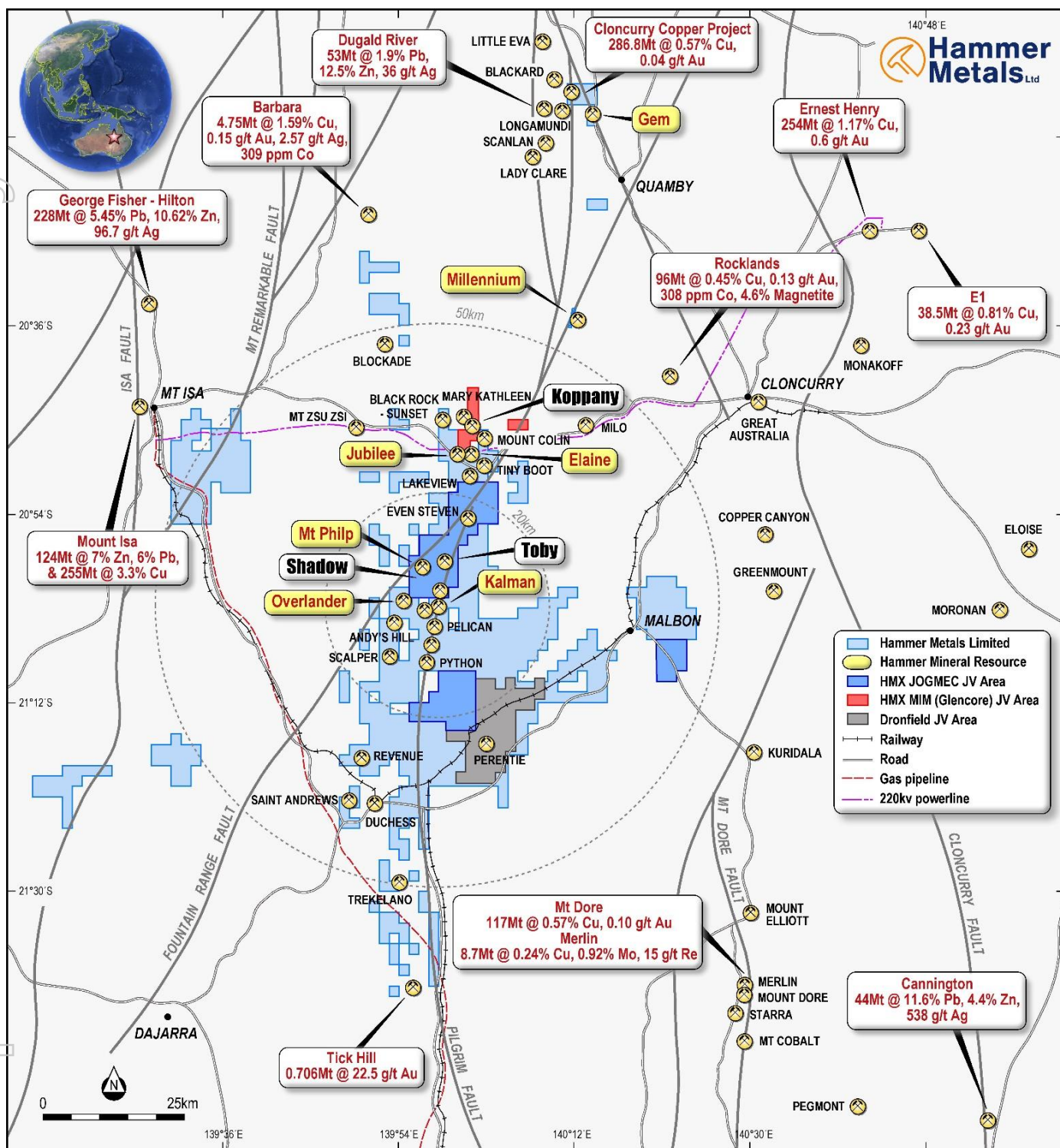


Figure 13. Mt Isa Project tenements



*This announcement has been authorised for issue by Mr Daniel Thomas, Managing Director, Hammer Metals Limited.*

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### **About Hammer Metals**

Hammer Metals Limited (ASX: HMX) holds a strategic tenement position covering approximately 2,200km<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 and the Elaine (Cu-Au) deposit. Hammer also has a 51% interest in the emerging 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 has recently acquired 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 style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Whittle consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

## Table 1 report – Bronzewing South Project Exploration Update

This table is to accompany an ASX release updating the market with results of drilling from areas within the Mt Isa Project at Shadow, Toby and Koppany Prospects.

As of the reporting date approximately 5 holes have been drilled for 1,131m – Shadow: HMSHDD001 & HMSHDD002, Toby: HMTODD001, Koppany: HMKPDD001 & HMKPDD002.

Assays are yet to be reported for Koppany.

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>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).</i></p> <p><i>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.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<p>5 diamond holes are reported for a total meterage of 1,131m.</p> <p>Samples were taken at 1m intervals and were composed of half cut core. The resulting composite sample was between 3 and 3kg in weight.</p> <p>All samples submitted for assay underwent fine crush with 1kg riffled off for pulverising to 75 microns.</p> <p>Samples were submitted to SGS in Townsville for:</p> <p>Fire Assay with AAS finish for gold.</p> <p>Multielement analysis via ICP MS and OES</p> <p>Reanalyses will be conducted as required to investigate gold and copper assay repeatability.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Drilling techniques</b>	<p><i>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).</i></p>	<p>Holes were drilled by Drill North Pty Ltd utilising an in house designed small-footprint diamond drill rig.</p> <p>Holes were drilling using HQ diameter until competent rock was reached then transitioning to NQ diameter for the remainder of the hole.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>



Criteria	JORC Code explanation	Commentary
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<p>With the exception of the first 3-5 metres sample recoveries were in excess of 95%. For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Logging</b>	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>All core was geologically logged by Hammer Metals Limited Geologists.</p> <p>Core was photographed for each hole.</p> <p>Each drillhole was qualitatively logged in its entirety for geology.</p> <p>Selected intervals from each drillhole were quantitatively logged on-site using an Olympus Vanta portable XRF instrument. The aim of these limited analysis was for rock type identification.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>Samples consist of half cut drill core.</p> <p>Samples were composed of 1m intervals.</p> <p>Sample collection methodology and sample size is considered appropriate to the target-style and drill method, and appropriate laboratory analytical methods were employed.</p> <p>Standard reference samples and blanks were each inserted into the laboratory submissions at a rate of 1 per 25 samples.</p> <p>The average sample weight submitted to the lab was 2.6kg. This sample sizes submitted for analysis were appropriate for the style of mineralisation sought.</p>

Criteria	JORC Code explanation	Commentary
		<p>The method of sample collection, use of compositing where appropriate and lab methods are appropriate for this style of mineralisation.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>	<p>All samples were analysed for gold by flame AAS using a 30gm charge and for multi elements by ICP MS and OES</p> <p>Standard reference samples and blanks were inserted at 50 sample intervals. SGS also maintained a comprehensive QAQC regime, including check samples, duplicates, standard reference samples, blanks and calibration standards.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.</i></p>	<p>All assays have been verified by alternate company personnel.</p> <p>Assay files were received electronically from the laboratory.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Location of data points</b>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Datum used is UTM GDA 94 Zone 54.</p> <p>RL information was generated by the most accurate DEM data held by the company.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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</i></p>	<p>The drill density is not sufficient to establish grade continuity.</p> <p>Assays were taken on 1m sample lengths.</p>



Criteria	JORC Code explanation	Commentary
	<p>estimation procedure(s) and classifications applied.</p> <p>Whether sample compositing has been applied.</p>	<p>The average grade has been utilised where multiple repeat analyses have been conducted on a single sample.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Orientation of data in relation to geological structure</b>	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	<p>Drill holes were oriented as close to perpendicular as possible to the orientation of the targets based on interpretation of previous exploration.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Sample security</b>	The measures taken to ensure sample security.	Numbered bags were used, and samples were transported to SGS in Townsville by a commercial carrier.
<b>Audits or reviews</b>	The results of any audits or reviews of sampling techniques and data.	<p>The dataset associated with this reported exploration has been subject to data import validation.</p> <p>All assay data has been reviewed by two company personnel.</p> <p>No external audits have been conducted.</p>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<p>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.</p> <p>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.</p>	<p>The Mt Isa Project is composed of multiple granted tenements. See the last HMX quarterly report for a tenement listing.</p> <p>Both Shadow and Toby are located on Mt Dockerell Mining Pty Ltd tenement EPM26775. Portions of EPM26775 are within the JOGMEC JV.</p> <p>Koppany is located within EPM14467. This tenement is part of the Mt Frosty JV which is 51% Hammer Metals Limited and 49% Mount Isa Mines Limited (a Glencore company).</p> <p>Both EPM26775 and EPM14467 are granted tenements.</p>
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	No previous work has been conducted at the Shadow and Toby Prospects by other parties.

Criteria	JORC Code explanation	Commentary
		<p>At Shadow, Hammer Metals and the Mt Isa East JV has conducted soil sampling, rock chip sampling and geological mapping over the area immediately surrounding the Shadow Prospect.</p> <p>At Toby, Hammer Metals and the Mt Isa East JV has conducted soil sampling, geological mapping, rock chip sampling and ground electromagnetics over the Toby Prospect.</p> <p>At Koppany, Mount Isa mines has previously conducted soil sampling, geological mapping, Heli-borne VTEM and diamond drilling. The reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Shadow Prospect is composed of a linear alteration system, 4km in length located on the western margin of the Mt Philp Breccia. The alteration system comprises a central breccia zone with a marginal quartz-magnetite alteration zone. This is expressed on regional aeromagnetic datasets as a linear magnetic anomaly.</p> <p>The Toby Prospect is located in the intersection zone of the Kalman West Shear and the First order Pilgrim Fault. Soil sampling at surface has outlined a discrete copper and gold anomaly and rock chip sampling has identified anomalous Copper, Gold and Silver.</p> <p>The Koppany prospect is located immediately to the east and southeast of the Mary Kathleen Uranium Deposit. Koppany is hosted within calc silicate rocks of the Corella Formation. These rocks have been subject to skarn alteration which has associated rare earth element enrichment. To the west of the rare earth zone there are a series of VTEM anomalies over a 5km strike length. These anomalies have been partly tested by Mount Isa Mines and found to contain copper bearing pyrrhotite rich zones. This style of base metal mineralisation is ISCG in type and similar to deposits such as Eloise and Osborne.</p>
<b>Drill hole Information</b>	<i>A summary of all information material to the understanding of the exploration results</i>	<p>See the attached tables.</p>



Criteria	JORC Code explanation	Commentary
	<p>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.</p> <p>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.</p>	<p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Data aggregation methods</b>	<p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>Intercepts are quoted at a 0.1% Cu cut-off with included intercepts highlighting zones of increased Cu grades.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	<p>The relationship between intersected and true widths for HMX drilling is currently not known with any certainty.</p>
<b>Diagrams</b>	<p>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.</p>	<p>See attached figures</p>
<b>Balanced reporting</b>	<p>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.</p>	<p>Intercepts are quoted at a 0.1% Cu cut-off with included intercepts highlighting zones of increased Cu grades.</p> <p>The reader can therefore assume that any portions of a drillhole that are not</p>

Criteria	JORC Code explanation	Commentary
		<p>quoted in the intercept tables contain grades less than the quoted cut-off.</p> <p>For information pertaining to historical drill intersections at Koppany the reader is referred to a HMX ASX release dated 3/7/2019.</p>
<b>Other substantive exploration data</b>	<p><i>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.</i></p>	<p><b>HISTORIC DRILLING</b></p> <p>The reader is referred to HMX ASX releases dated 12 May 2020 and 3 July 2019 for further information on the areas discussed in this release.</p> <p>Rock chip sampling is shown on figures depicting the shadow and toby prospects. The reader is specifically referred to an ASX release dated 12 May 2020 for details of this sampling.</p>
<b>Further work</b>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>Planning is underway for follow up drilling at Shadow after further soil sampling and geological mapping.</p> <p>The Toby EM anomaly remains unexplained and this may necessitate further drilling.</p>