MOUNT ISA COPPER AND GOLD EXPLORATION UPDATE

ASX RELEASE
9 December 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 (08/12/2020)	$0.037
Shares on Issue	749m
Market Cap	$27.7m
Options Unlisted	28m
Performance Rights	6.5m

HIGHLIGHTS

- **Copper-gold RC drilling program to commence this week** testing IOCG targets in the JOGMEC JV
- **2,200m planned across 10 holes at seven individual target zones** including;
  - **Follow up drilling at Shadow and Toby** testing zones of strong magnetic and electromagnetic anomalism; and
  - Initial drilling of previously **untested zones at Even Steven South**, **Trafalgar, Charlie, Alpha and Juliette**.
- The **Even Steven South** prospect is characterised **by strong copper and gold surface anomalism and coincident gravity and magnetic features** and represents a **significant Iron Oxide Copper Gold ("IOCG") target**
- Drill site preparations are largely completed with drilling contractor due on site by 10 December
- **Infill and extensional soil sampling along the Shadow trend** has identified further areas of **copper and gold anomalism** with these areas to be evaluated in early 2021
- **Prospective copper and gold** target zones identified by soil sampling completed along the Fountain Range fault in proximity to the Prince of Wales IOCG target
- First pass soil sampling completed at **Dronfield and Malbon** with an infill program planned for early next quarter
- Soil sampling program within Hammer's Tick Hill region tenements returned several **broad zones of gold anomalism with several anomalies extending over 1km in length**
- On-ground review of the anomalous gold zones to continue with the aim of developing **drill ready prospects in the Tick Hill region towards the end of the first quarter of next year**

Hammer Metals Ltd (**ASX:HMX**) ("**Hammer**" or the "**Company**") is pleased to provide an update on its Mount Isa exploration activities and to announce the impending Reverse Circulation ("**RC**") drilling program for the JOGMEC Joint Venture.

After the first joint venture drilling program was completed in July, several follow up activities have continued across the four project areas, focussing on the refinement of drill targets and identifying new prospective targets. Detailed mapping and soil geochemical surveys have been completed as well as a downhole electromagnetic ("EM") program. The Joint Venture also completed its interpretation of the first set of drilling results at the Shadow and Toby prospects

The Joint Venture has now finalised its second phase drilling program with five new target areas; Even Steven, Trafalgar, Alpha, Charlie and Juliett to be drill tested by Hammer for the first time. These prospects complete a program which also includes follow up drilling at the Shadow and Toby prospects.

Hammer's recently completed soil survey on its 100% owned exploration properties surrounding the historic high-grade Tick Hill gold deposit has identified a number of discrete gold geochemical anomalies. A follow up field program to further examine these prospects is expected early in 2021 with the aim of identifying drill ready prospects by the end of the first quarter of next year.

Hammer's Managing Director, Daniel Thomas said:

"Hammer's extensive programs in Mount Isa have continued to deliver high quality geological information to aid our targeting for the upcoming drilling program. The result of the JV's diligent detailed geological information gathering over the first year of the Joint Venture has helped to delineate an initial seven high quality copper/gold targets along the highly prospective Fountain Range and Pilgrim fault zones. We are pleased to be returning to the Shadow prospect where our drilling earlier this year outlined broad zones of copper and gold mineralisation.

This program will close out what has been a significant six-month period for Hammer, whereby we have tested over 10 separate targets across our properties. The sustained level of exploring high-quality targets in two of the world's great mineral provinces provides our shareholders with a steady stream of exploration news and potential economic discoveries".

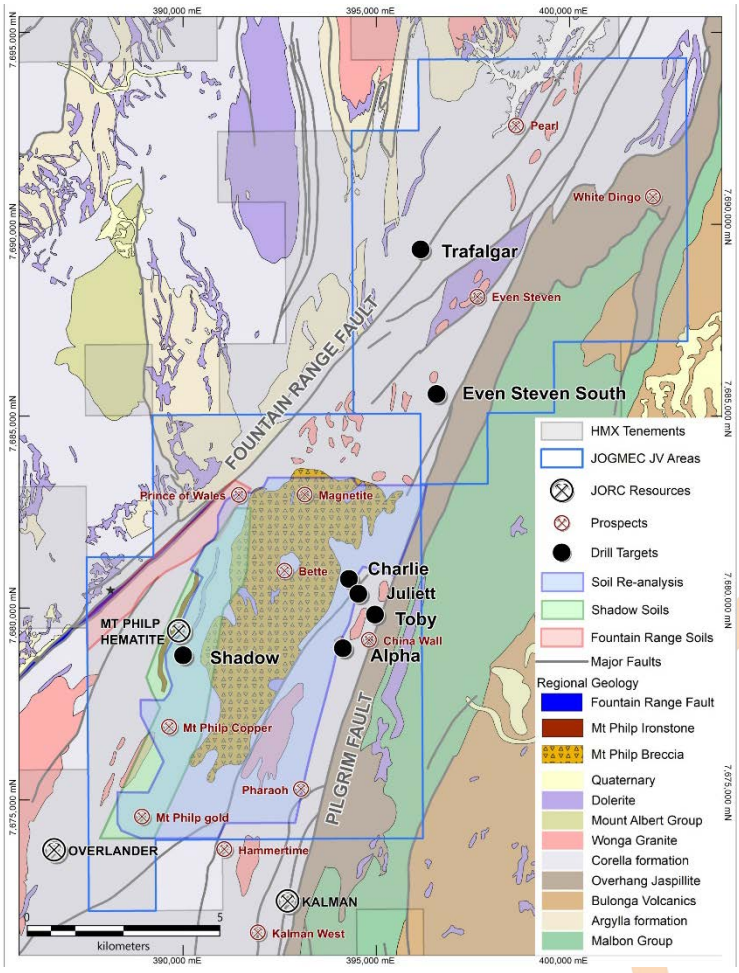

Figure 1. *Location of proposed drilling and surface geochemical sampling within the JOGMEC JV area*

JOGMEC Joint Venture (JOGMEC earning a 60% interest)

Shadow

The Shadow 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. An initial 2-hole diamond drilling 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 (See ASX announcement 7 September 2020):

- 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 HMSHDDD001.

A downhole EM survey completed on hole HMSHDD001 failed to identify an off-hole or in-hole conductor. Follow up soil sampling across the prospective 4km Shadow trend have identified several areas for potential follow-up drilling (Figure 2).

The Joint Venture has decided to drill an area to the north of the original Shadow drilling, focusing on the peak magnetic response and coincident copper and gold soil anomalism. Two, 200m holes are planned. (Figure 2).

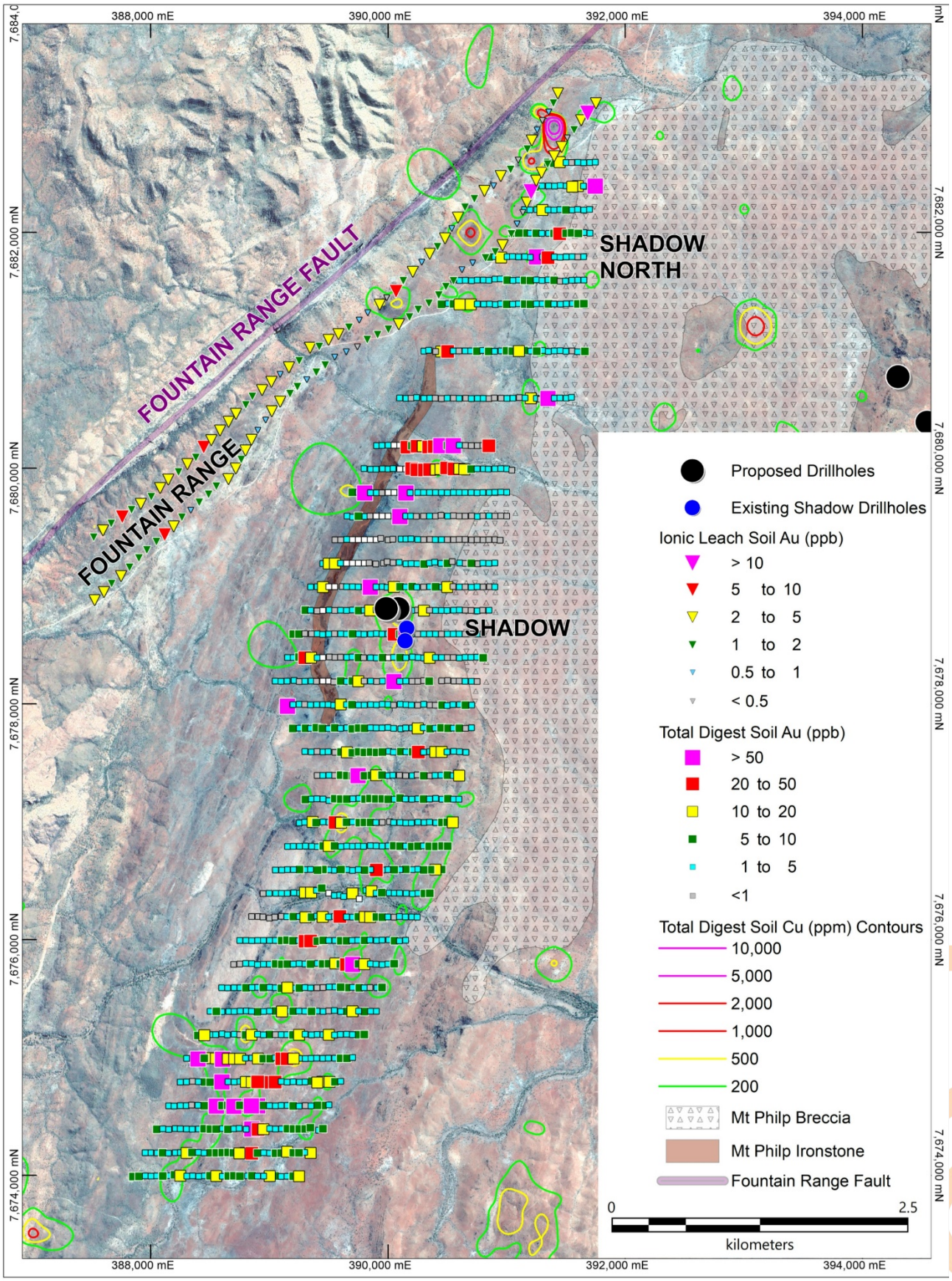

Figure 2. *Shadow trend and Fountain Range soil sampling program extents*

Toby

The 252m diamond hole drilled at Toby in July was designed to test a modelled conductor derived from a ground EM survey undertaken in early 2020.

Mineralised intercepts in the completed hole include:

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

The hole encountered a strongly altered and structurally complex sequence of sediments with minor sulphide. The ground EM conductor and historic heliborne VTEM anomaly are not considered to be explained by the low levels of sulphide and graphite encountered in the drill hole with the source of the conductor remaining inconclusive.

A weak below hole conductor was identified however the strength of this conductor does not match the intensity of the EM results seen in both Hammer's VTEM and Ground EM surveys.

As a result of the review of the downhole and ground EM surveys, the Joint Venture will proceed to test the eastern EM conductor which is more localised, not stratigraphically continuous and has a higher response than the western conductor tested by HMTODD001. The hole will be drilled to test the EM conductor and also a zone of elevated Cu-Au-Mo soil anomalism located on the eastern side of the conductor (Figure 3).

Even Steven South

The Even Steven South prospect is located approximately 15km to the northeast of the Kalman deposit in a similar structural position immediately west of the Pilgrim Fault.

The prospect is characterized by a 6km long zone containing a linear magnetic and gravity ridge coinciding with outcropping albite ("red rock") magnetite alteration and a zone of soil anomalism at +25ppb Au and +200ppm Cu. Mineralised breccia textures are commonly visible at surface in the core of this anomaly (Figure 4).

Trafalgar

The historic Trafalgar copper-gold mine is approximately 19km north of Hammer's Kalman deposit. The project sits adjacent to the Fountain Range fault with oxidised copper mineralisation appearing in remnant material mined and left on surface by a previous operator. The ore was mined from several small access drives from a main shaft and stockpiled on surface awaiting processing (Figure 5 and 6).

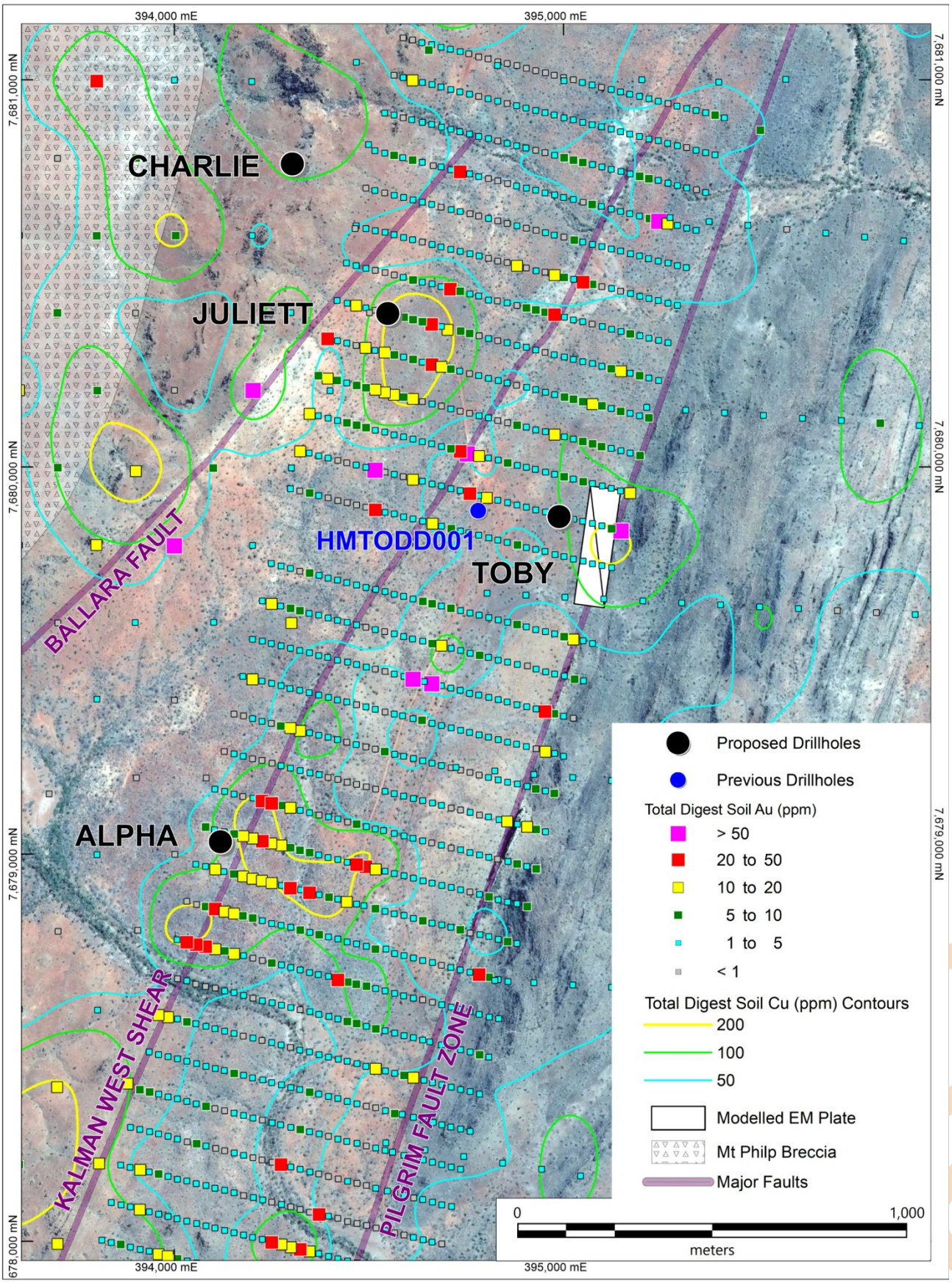

Figure 3. *Toby region showing Toby, Alpha, Juliett and Charlie targets*

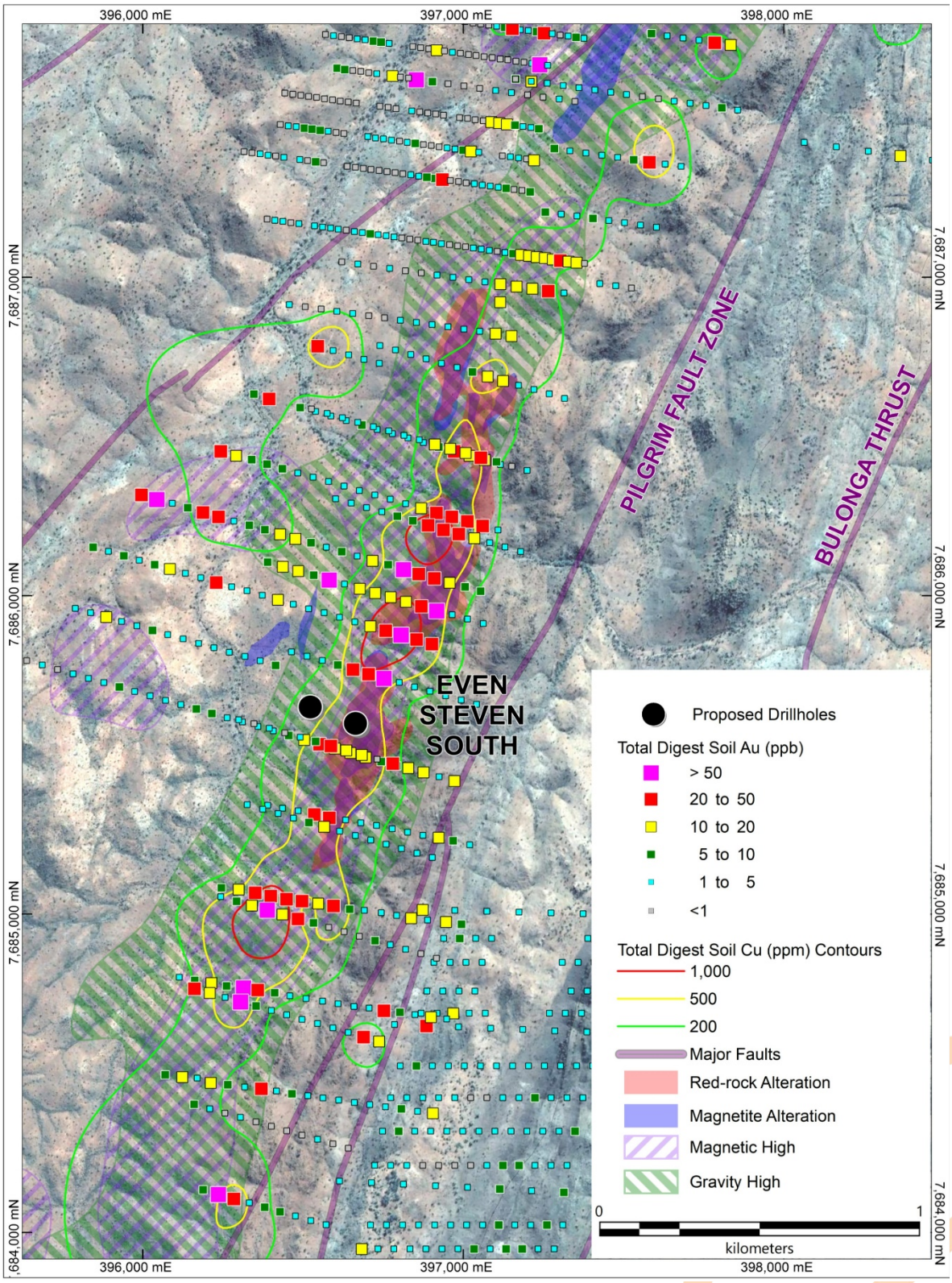

Figure 4. *Even Steven South target showing alteration and geochemical features*

Figure 5. *Trafalgar access showing mineralised stockpiles*

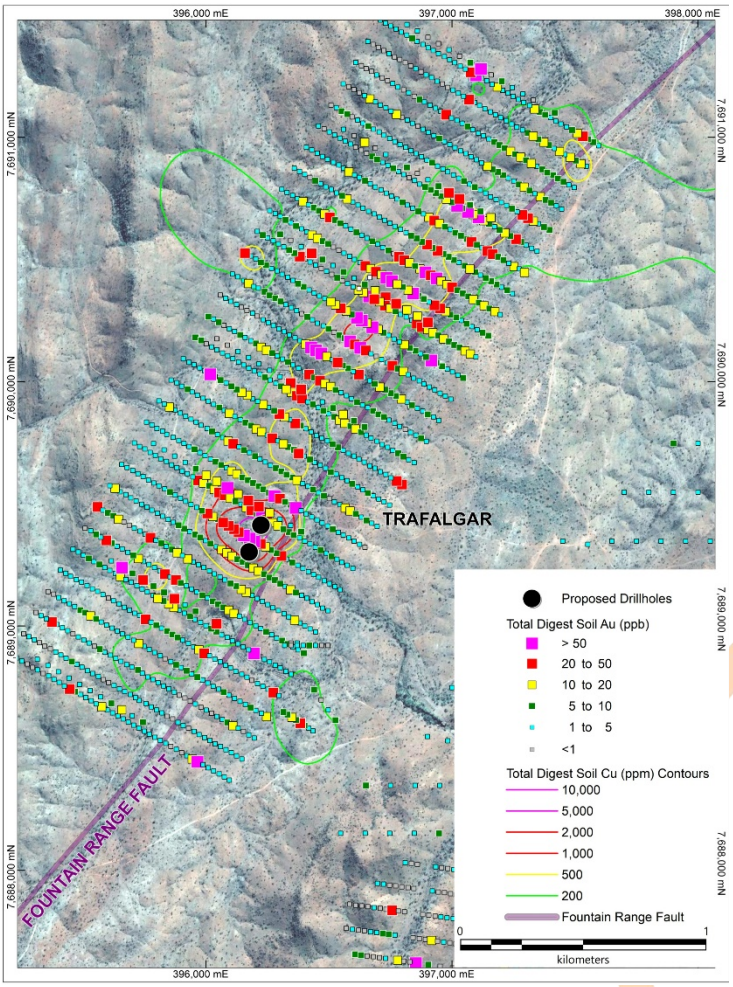

Figure 6. *Location plan Trafalgar target*

The Joint Venture will undertake two 150m drillholes at Trafalgar. It appears that no historical drilling has been conducted at this target with Hammer unable to locate any notes or records of drilling.

Charlie

The Charlie prospect is close to the eastern margin of the Mt Philp Breccia and the interpreted position of the Ballara Fault. A regional VTEM survey conducted in 2016 detected an EM anomaly at the prospect, however a follow up ground EM survey earlier this year failed to clearly delineate a notable target. Reconnaissance sampling in 2018 identified a zone of gossanous red rock breccia up to 40m thick. First pass rock chip sampling over the area obtained individual peak grades of up to 1.36g/t Au, 25.6g/t Ag, 1.2% Cu and 1.23% Zn (see ASX announcement dated 15 October 2018). A single 200m drill hole is planned to target this zone (Figures 3 and 7).

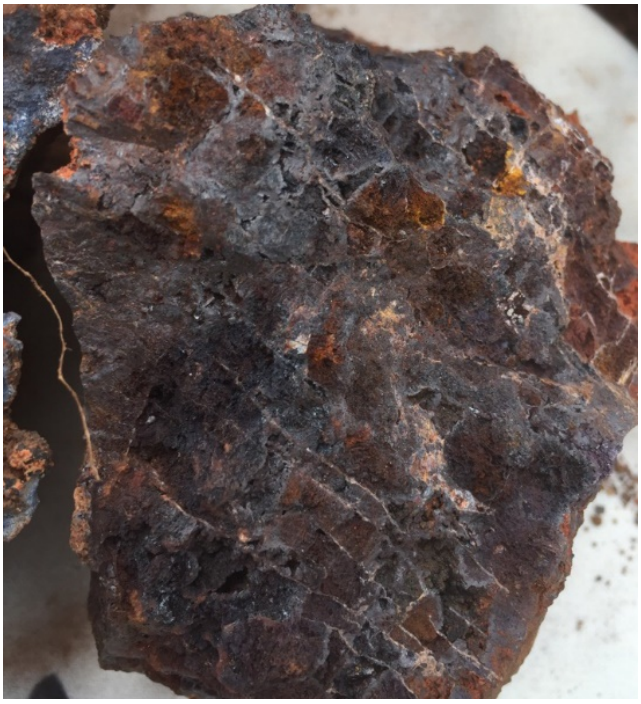

Figure 7. *Example of gossan from the Charlie Prospect*

Alpha

The Alpha prospect is located approximately 1km to the south of the Toby prospect and sits in a similar stratigraphic position. The prospect has a coincidental gold and copper soil anomaly with peak values of 837ppm copper and 46ppb gold. Numerous rock chips with grades of up to 5% copper and 0.24g/t gold have been recorded (see ASX announcement dated 15 October 2018). There has been no previous drilling undertaken at the prospect. A single 200m hole is planned (Figure 3).

Juliett

The Juliett prospect is located immediately north of the Toby prospect and is also coincident with a broad copper and gold soil anomaly. This area is characterised by an outcropping gabbroic unit with visible sulphide veining and strong epidote alteration. A single 200m hole is planned (Figure 3).

Dronfield

Soil sampling was conducted over the JOGMEC JV Dronfield Northwest project area. The aim of the sampling program was to investigate magnetic and gravity anomalies delineate in Phase 1 of the Joint Venture.

The assays for these programs consisted of a mix of 4 acid digest and partial leach soil sampling. The results will be evaluated in more detail in early 2021 (Figure 8).

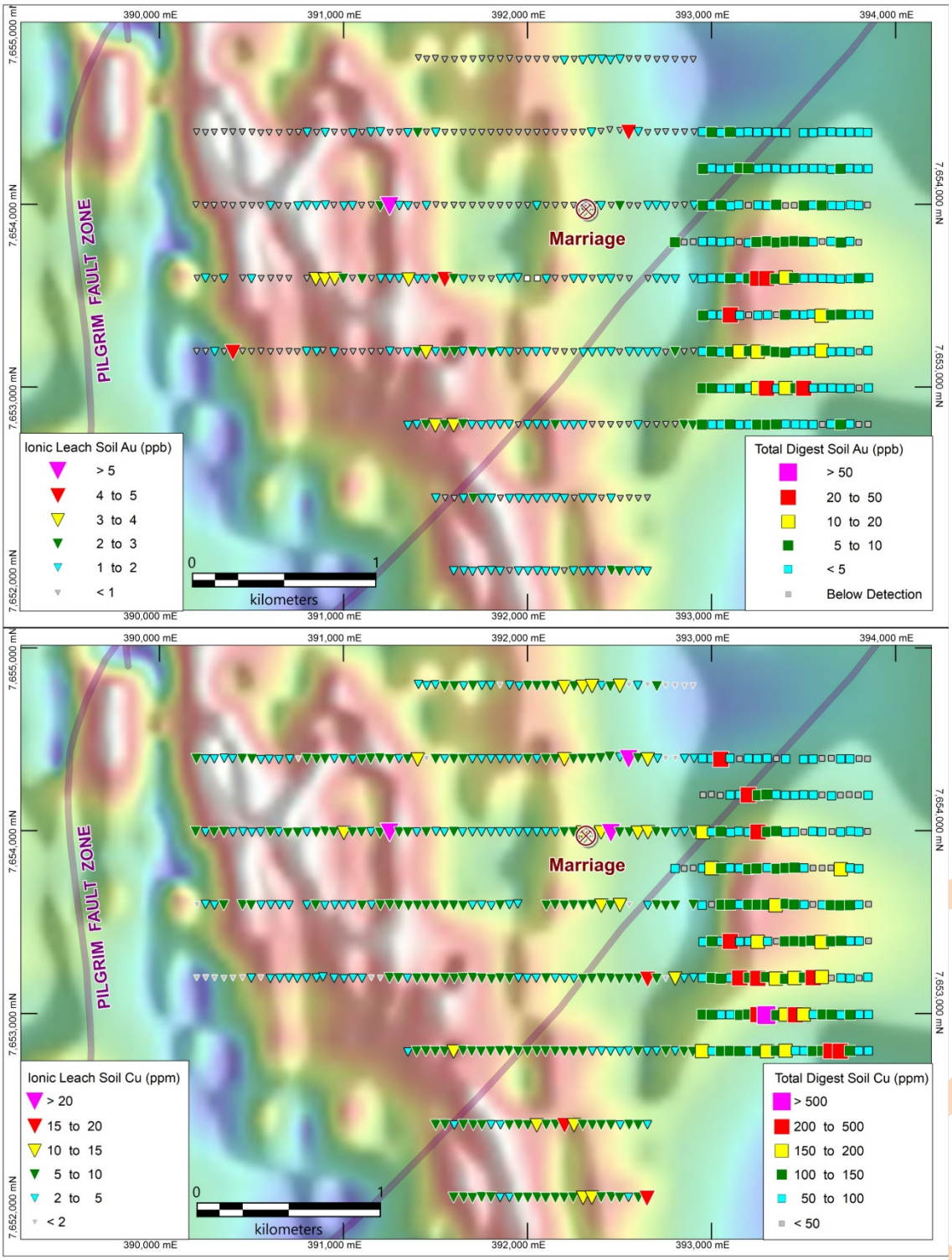

Figure 8. *Dronfield soil sampling program*

Malbon

An orientation soil sampling program was conducted over several discrete magnetic and gravity anomalies in the Malbon region. The anomalies are related to magnetite alteration marginal to the Wimberu granite Results from the survey will be utilised to determine zones for infill sampling early in 2021 (Figure 9).

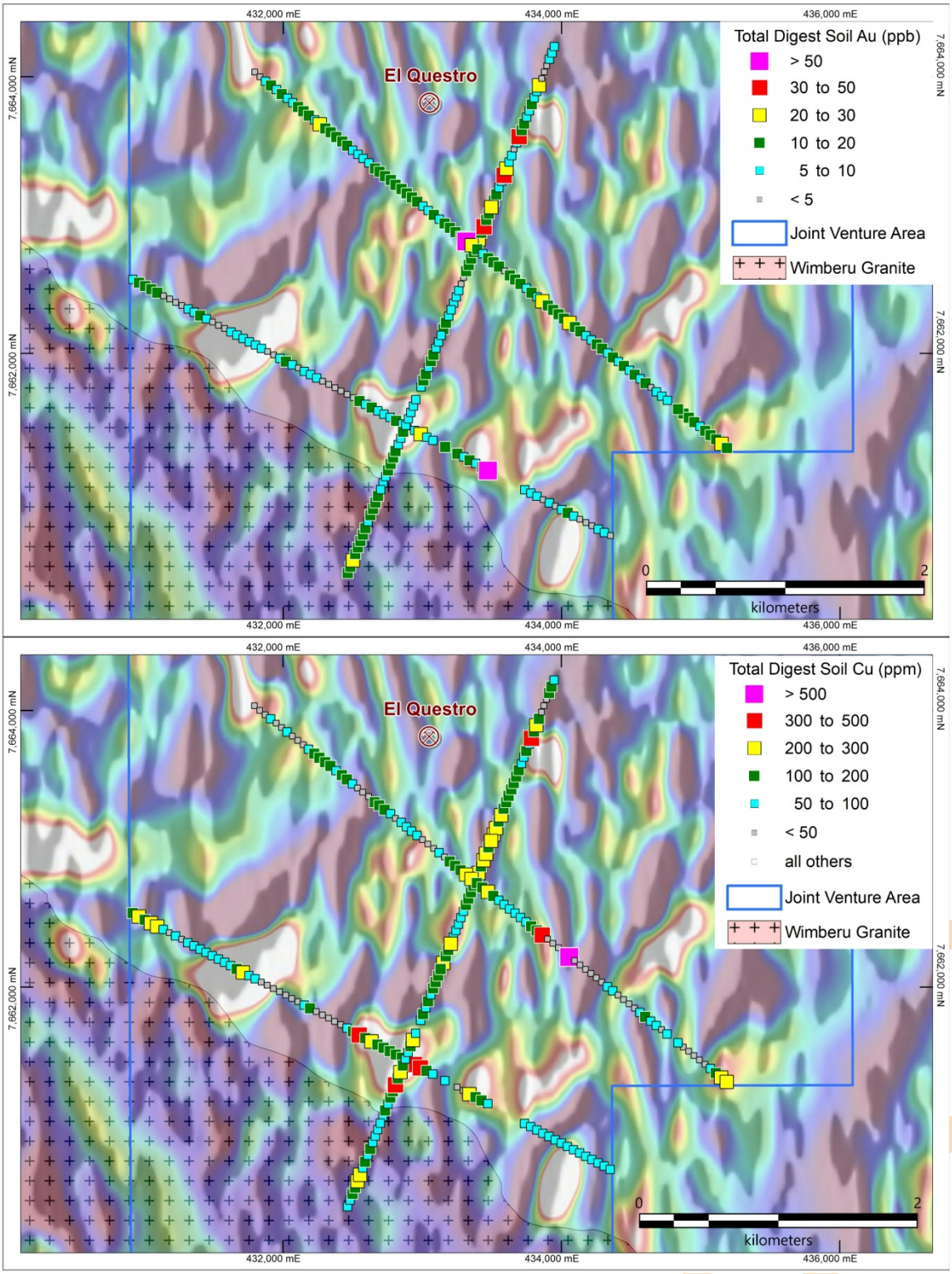

Figure 9. *Malbon soil sampling program*

Hammer's 100% Exploration Portfolio

Tick Hill Region

Hammer's first detailed work program in the Tick Hill region was designed to provide an initial assessment of the gold potential of Hammer's tenements. Approximately 1000 soil samples from seven zones were collected and analysed via a partial digest method. (See ASX release 23 September 2020)

Highlights from Hammer's partial leach gold results include;

- A program high, gold value of 13ppb is located on eastern side in the main Zone 4.
- Continuous and broad Au anomalies are located within the Zone 2 and Zone 6 with both anomalies trending more than 1km long. The maximum Au value 5.5ppb was recorded in Zone 6 and 6.0ppb Au in Zone 2. It is believed that Zone 2 could have similar overall lithological and magnetic signature to position of Tick Hill, on the eastern side of quartz-feldspar intrusive.

In comparison, the Tick Hill deposit was discovered by a joint MIM and Carpentaria Exploration Company Pty. Ltd. team in October 1989. Follow up work on a bulk cyanide leach ("BCL") sampling anomaly of 6.9 ppb gold in a stream draining the Tick Hill deposit culminated in the drilling of early discovery holes (Figure 10).

Several gold anomalous zones were identified by the sampling. Field reviews of the areas of interest have commenced and will continue in quarter 1 next year with the aim of delineating drill ready targets for quarter 2, 2021.

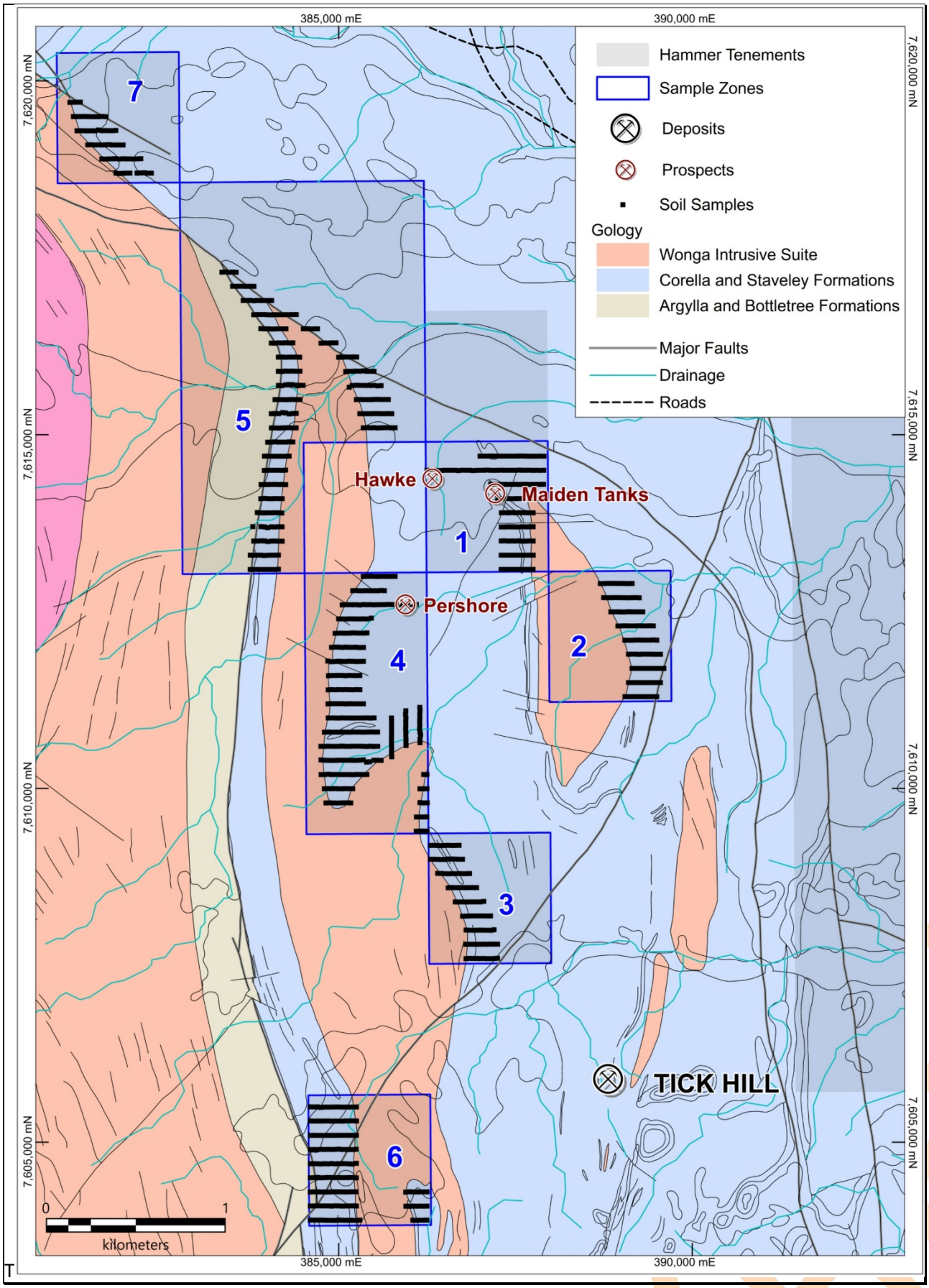

Figure 10. *Tick Hill soil sampling area*

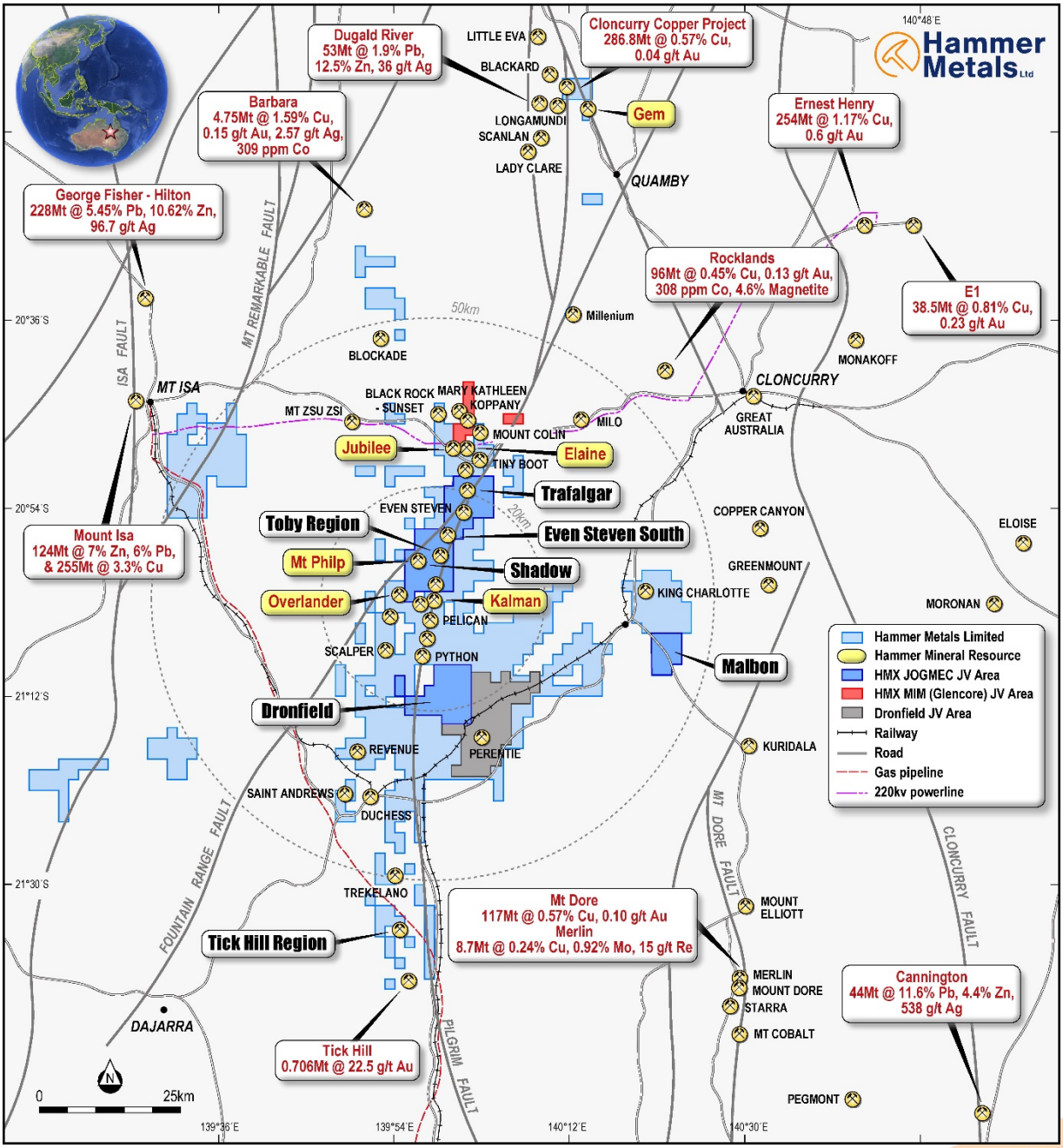

Figure 11. *Hammer Metals Mt Isa Project Area*

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

For further information please contact:

Daniel Thomas
Managing Director

T +61 8 6369 1195
E info@hammermetals.com.au

- END -

About Hammer Metals

Hammer Metals Limited (ASX: HMX) 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. Hammer holds a strategic tenement position covering approximately 2,200km^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 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.

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 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.

JORC Table 1 report – Mt Isa Project Exploration Update

- This table is to accompany an ASX release updating the market with drilling from areas within the Hammer Metals Limited Mt Isa Project.
- As of the reporting date approximately:
  - 1520, -80# soil samples have been taken at the Shadow Trend, Malbon and Dronfield.
  - The multielement analysis of a further 1211 soil samples has been reported over Mt Philp.
  - 1507, -2mm partial leach soil samples conducted in the Tick Hill and Dronfield regions.
- Any 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.*	***Soil Sampling Shadow, Dronfield and Malbon*** • 1520, -80 mesh soil samples were taken at Shadow, Dronfield and Malbon. • At each sample site a minimum of 100gms of sieved soil was collected immediately below the organic layer. • Samples were analysed by SGS for Au by ICP-MS after an Aqua Regia Digest. A 49-element suite was analysed by ICP MS and OES after a 4-acid digest. • Sample spacing over the Shadow trend was 50m on 200m spaced lines. • Sample spacing at Dronfield was 50m on 200m spaced lines. • At Malbon sampling was conducted along 3 lines totalling 12.3 linear kilometres. Sample spacing along these lines was approximately 50m. ***Mt Philp Multielement analysis of legacy soils*** • Reanalysis of 1211 soil samples over the Mt Philp breccia was undertaken. • Samples were analysed by SGS for a 49-element suite by ICP MS and OES after a 4-acid digest. • The Au results from this program have been previously released to the market. • Sample spacing was 200m on 200m spaced lines. ***Tick Hill and Dronfield partial leach soil analysis*** • 1507, -2mm partial leach soil samples were taken in the Tick Hill and Dronfield regions.

Criteria	JORC Code explanation	Commentary
		• At each sample site a minimum of 150gms of -2mm sieved soil was collected at a depth of between 100mm and 200mm. • Samples were analysed by ALS using partial leach followed by ICP-MS analysis for a 61-element suite. • At Fountain Range the survey consisted of two lines approximately 5.7km in length running parallel to the Fountain Range Fault. Along these lines samples were taken at approximately 100m spacing. • At Dronfield sample spacing was 50m on 400m spaced lines. • At Tick Hill sampling was conducted over 8 discontinuous areas on a 50m sample spacing on 200m spaced lines.
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).*	• No drilling is being reported in this release
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.*	• No drilling is being reported in this release
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.*	• No drilling is being reported in this release
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.*	• The soil sampling methods described above are appropriate for the elements under consideration. • In all soil programs standard and blank samples were inserted at 50 sample intervals. • No drilling is being reported in this release

Criteria	JORC Code explanation	Commentary
	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.*	
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.*	• The analytical methods described above utilised differing digests. • Four acid digest utilised in some of the above-mentioned programs achieves a near total digest however some of the more resistive minerals will not be fully dissolved by this digest • Other programs utilised a partial digest. This digest is designed to only capture materials accumulating on the outside of mineral grains. • All methods are appropriate in terms of their application and level of detection.
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.
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.*	• Datum used is UTM GDA 94 Zone 51. • RL information will be merged at a later date utilising the most accurately available elevation data.
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.*	• The sample and line spacing employed in all soil programs was specifically designed for specific mineralisation models. • Soil sampling cannot establish mineralisation or grade continuity at economic levels.

Criteria	JORC Code explanation	Commentary
	Whether sample compositing has been applied.	
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.*	• Sampling programs for Dronfield, Tick Hill and Shadow were designed to test trends by orienting sample lines perpendicular to major trends. • Sampling at Fountain Range and Malbon was designed to highlight areas which will be followed up by conventional soil sampling. The lines in these programs were oriented to detect dispersions of target elements.
Sample security	*The measures taken to ensure sample security.*	• Samples were packed into sealed bags and either taken directly to labs by HMX personnel or consigned via a reputable courier company.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• The dataset associated with this reported exploration has been subject to data import validation. • All assay data has been reviewed by two company personnel. • No external audits have been conducted.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
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 28 tenements. The tenements relevant to this release are: 26130, 26777, 26775, 26474, 26694, 14019 and 26902. • These tenements are 100% held by Hammer Metal Limited subsidiaries, Mt Dockerell Mining Pty Ltd or Mulga Minerals Pty Ltd. • With the exception of the Tick Hill soil sampling, which is located on EPM26777, the work reported herein is located within the Mt Isa East Joint Venture, between Hammer Metals Limited and JOGMEC. This JV covers part, or all of the tenements listed above.

Criteria	JORC Code explanation	Commentary
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 Shadow and Mt Philp survey areas are associated with the large intrusive complex termed the Mt Philp Breccia. • The Malbon Survey area spans the northern margin of the Williams-aged Wimberu Granite. • The Dronfield survey area covers a zone close to the margin of the Wimberu Granite where it is proximal to the regional scale pilgrim Fault. • The Tick Hill sampling area is located in geological settings similar to the high grade former Tick Hill Deposit. This area is located in Hammer-controlled tenements surrounding the Tick Hill Deposit Mining Leases.
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 Competent Person should clearly explain why this is the case.*	• No drilling is being reported in this release
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.*	• No drilling is being reported in this release

Criteria	JORC Code explanation	Commentary
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').*	• No drilling is being reported in this release
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.*	• No drilling is being reported in this release
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.
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 of all soil sampling areas will be conducted in the first half of 2021 with the aim to delineate drill targets for the 2021 field season. • Drilling will be initiated during December 2020.