## **ASX ANNOUNCEMENT**





# DHTEM Delineates Strong Conductors at Brandy Hill South

### **Key Highlights**

- Down-hole transient electromagnetic (DHTEM) surveys of recently completed drillholes successfully identified strong conductors at Brandy Hill South Project
- Six conductors and two anomalous responses ranging from 100 siemens to 7,000 siemens identified at Brandy Hill South Project
- Two high-order conductors (2,400 siemens & 7,000 siemens) identified from drillhole BHD026
- The strong 'off-hole' conductors possibly relate to massive copper sulphide mineralisation and warrant immediate follow-up drill testing
- Further RC/diamond drilling to test DHTEM conductors and to further test for strike and depth extension of mineralisation planned to commence in August

**Recharge Metals Limited (ASX: REC, Recharge** or the **Company**) is pleased to announce the results from a recently completed ground-based geophysical survey program at its Brandy Hill South Project. The DHTEM surveying completed on holes BHRC017, BHRC025 and BHD026 detected strong off-hole conductors and anomalies, refer to figure 1.

#### **Recharge Managing Director Brett Wallace commented:**

"The results from the downhole geophysical survey carried out over our maiden drilling program are very encouraging, a number of new high-quality conductors have been identified that potentially represent copper sulphide mineralisation.

In particular, the strongly conductive body identified below and to the west of hole BHD026 is significant in that it has two highly conductive sources of 2,400 and 7,000 siemens which are indicative of potential massive sulphide mineralisation.

A drilling program is currently being planned to commence in August to target the EM conductors and to further test the strike and depth extensions to mineralisation."

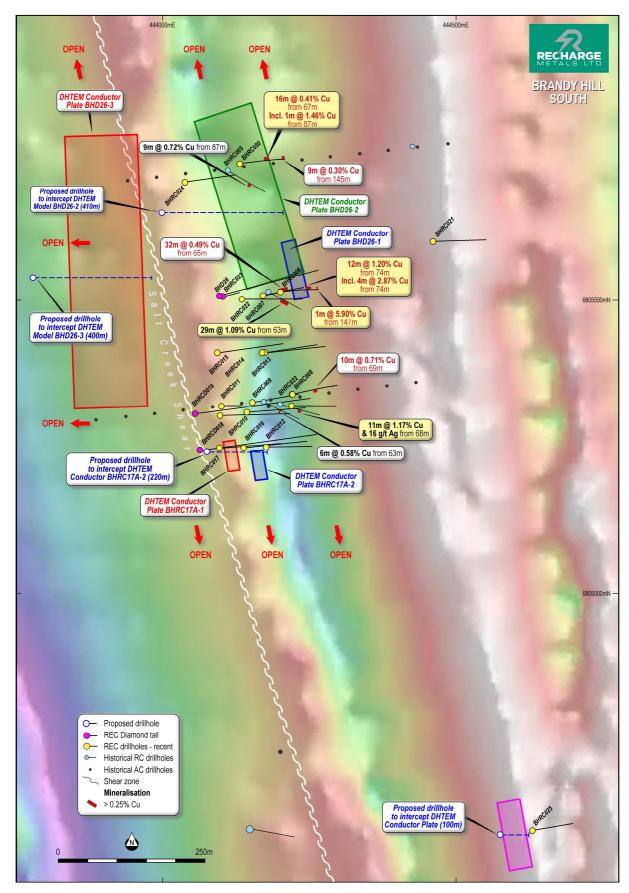


Figure 1: Brandy Hill South – Plan showing existing and proposed drilling, DHTEM/fixed loop survey and modelled FLEM conductor plates, overlying TMI magnetics image.

#### **DHTEM SURVEY**

DHTEM surveys have now been completed by Merlin Geophysical Solutions (**Merlin**) in February 2022 and May 2022 on four holes at the Brandy Hill South Project.

During February 2022, a total of 51 downhole stations were recorded for a total of 290 metres of DHTEM data, utilising two surface loops. A total of 84 downhole stations for a total of 670 metres of DHTEM data, utilising three surface loops, were completed in May 2022. The DHTEM surveys were completed using 200 metre surface loops, and downhole station spacing of 2.5m - 10m.

The aim of the DHTEM survey was to:

- detect and delineate bedrock conductors that may indicate the presence of massive sulphides associated with copper-gold mineralisation;
- assist in the on-going drill testing of the Brandy Hill South mineralised system (Cu-Au mineralisation) by providing approximate 3D target conductors and to provide locations for drill holes to test the interpreted target conductors; and
- determine if conductors identified from previous (2007) moving loop transient electromagnetic (**MLTEM**) surveying were adequately tested.

Interpretation of the DHTEM survey data has identified six conductors and two anomalous responses ranging in conductance from 100 to 7,000 siemens. The siemen value of the plates (conductance) is a function of thickness (m) and conductivity (S/m). The higher the number the more likely the presence of massive sulphide (chalcopyrite, pyrrhotite, pentlandite). In general a low conductance could be <50, moderate 50-250, high 250-1000 and very high 1000+.

The conductors have been interpreted and modelled by our geophysical consultant, Core Geophysics, with conductor plates generated for drill targeting.

Four Reverse Circulation (**RC**) with diamond tail drillholes have been planned to test the conductors, anomalies and modelled EM plates (Figure 1).

The following summary has been provided to the Company by the geophysical consultants from the DHTEM survey.

#### **Drillhole BHRC021**

- a. There is no evidence of a DHTEM anomaly consistent with the MLTEM model.
- b. The MLTEM anomaly (possible conductor) is probably related to an 'edge effect' from conductive overburden.

#### **Drillhole BHRC025**

- a. A broad, moderate off-hole anomaly at ~20m downhole was defined from drillhole BHRC025, which was modelled with a reasonably extensive moderately conductive source located to the west of the drill hole.
- b. A proposed drill hole has been designed to intersect the interpreted conductor.

#### **Drillhole BHRC017**

- a. Modelling of the DHTEM data highlights the presence of two moderately conductive (300–750 siemens) off-hole sources at ~60-80m and ~150-160m downhole in BHRC017.
- b. BHRCD018, recently completed to a depth of 399m, intersected the top plate at around 80m depth, correlating with massive sulphide mineralisation identified in drill core, but did not intersect the lower plate at approximately 150m (as shown in Figure 1), due to the conductor plate interpreted to be located to the north of the drillhole position.
- c. A proposed drill hole has been designed to intersect the lower conductor plate at ~190m downhole depth.

#### **Drillhole BHD026**

- a. Three strongly conductive sources have been identified in BHD026,(BHD26-1, BHD26-2 and BHD26-3).
  - BHD26-1 anomaly interpreted to intersect at ~270-280m downhole in BHD026 (BHD26-1). The model conductor correlates with massive sulphide mineralisation identified in drill core at 284m depth.
  - BHD26-2 is of particular interest as it located along strike of the BHD026-1 edge intersection, which correlates with massive sulphide mineralisation intersected in the drill hole at 284m. Modelling indicates the presence of a relatively large, strongly conductive (~2,400 siemens) off-hole source along strike of the BHD026 intercept.
  - BHD26-3 is interpreted to be a broad off-hole anomaly evident in BHD026 from ~40-120m downhole. Modelling results indicate the presence of a large, highly conductive (~7,000 siemens) off-hole source.
- b. Two further short-wavelength strong off-hole anomalies were observed at ~55-65m downhole in BHD026 (conductor plates BHD6-4 and BHD6-5). Modelling of the late channel data indicates the presence of two small, highly conductive sources very close to the drill hole.
- c. Two drill holes have been proposed to intersect the BHD26-2 and BHD26-3 conductor plates (Figure 2).

Table 1 – Summary data of DHTEM plate models generated

Drill hole ID	BHRC017	BHRC025	вно	0026
Conductor Plate ID	BHRC17A-2	BHRC21-1	BHD26-2	BHD26-3
Interpreted Intersection depth	190	65	360	325
Conductor Plate Dip	65	70	70	76
Conductor Plate Dip direction	260	263	253	268
Hole depth	220	100	410	400
Conductance (Siemens)	750	100	2,379	6,883

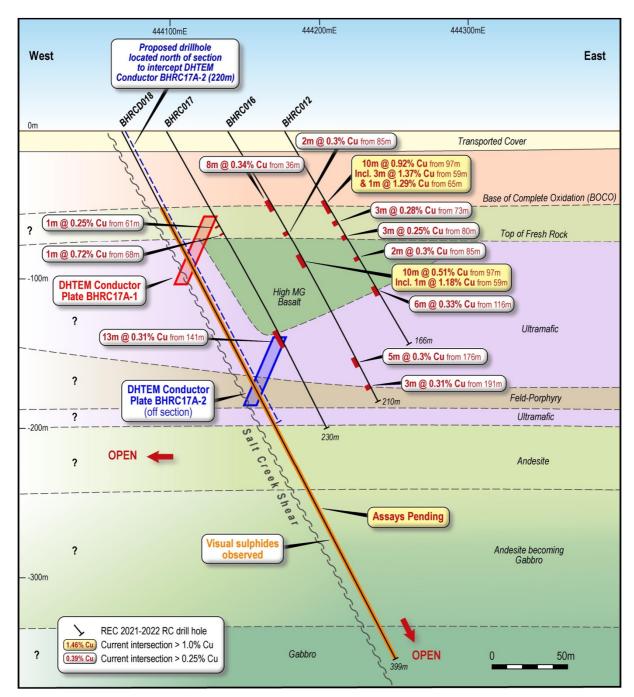


Figure 2: Section 6805250mN. Two moderate 'off-hole' EM conductors identified. Hole BHRCD018 interpreted to have intercepted conductor plate BHRC17A-1. Conductor plate BHRC017A-2 is located off-hole to the north and considered to have not been intercepted. One drillhole planned to test BHRC017A-2 at 190m depth.

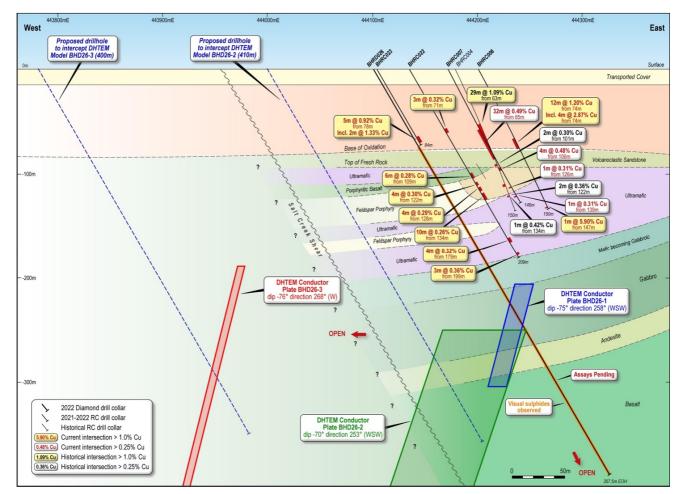


Figure 3: Section 6805500mN. Three strongly conductive sources have been identified from DHTEM survey of hole BHD026 (conductor plates BHD26-1, BHD26-2 and BHD26-3). Two drillholes proposed to test conductor plates BHD026-2 and BHD026-03.

#### **Brandy Hill South Project**

The 100% owned Brandy South Project is located within the Archaean Gullewa Greenstone Belt within the Murchison Province, Yilgarn Craton. Recharge acquired the project from Revolution Mining Pty Ltd (**Revolution Mining**) during 2021.

During 2019, Revolution Mining drilled three shallow reconnaissance RC holes aimed at 'proof of concept' testing of the inferred strike of the Salt Creek Shear (and subsidiary structures) beneath the cover. All three holes intersected significant copper mineralisation over a large part of the drilled strike length, and all holes finished in copper mineralisation.

Significant copper (and nickel) mineralisation was intersected over a wide zone (300m  $@ \ge 1,000$  ppm Cu) central to a 100-150m wide subsidiary shear zone east of the main interpreted Salt Creek Shear. The drilling program encountered copper sulphide mineralisation in shear altered dolerite.

The principal exploration target was volcanic-hosted massive Cu-Zn sulphide mineralisation within the felsic volcanic sequence of the Windaning Formation of the Luke Creek Group. The Windaning Formation and underlying Gabanintha Formation are concealed beneath 20 to 65m of unconsolidated Quaternary sand.

Recharge acquired the project based upon the exploration potential of the main geological structure within the Brandy Hill South Project, the Salt Creek Shear, which runs north-south and deforms the belt on a regional scale. The information at the time of acquisition suggested that the quartz-sulphide, vein-hosted copper-gold mineralisation in the Brandy Hill South Project area may be classified as of the hydrothermal, epigenetic type.

#### **Next steps for Recharge**

Recharge is planning a further drill program designed to test the conductors, anomalies and modelled EM plates, plus the strike extension of mineralisation in both directions and depth extension.

Recharge anticipates commencing drilling in August.

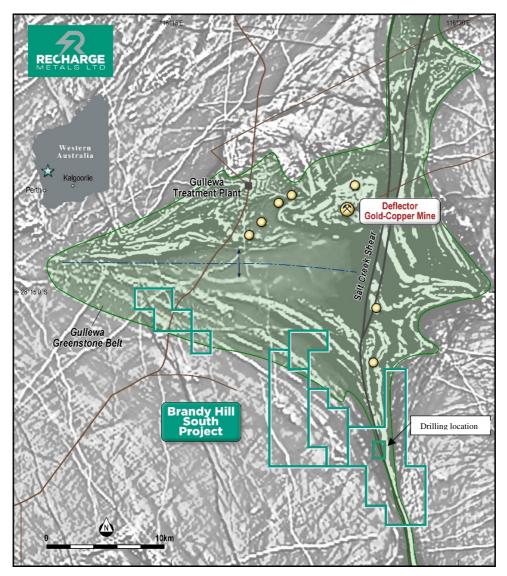


Figure 4: Brandy Hill South Project tenements and deposit locations over magnetics and geology

#### **Change of Address**

The company announces the following change to their company details

Company Address	Postal Address
Level 2 16 Ord Street	GPO Box 2517
West Perth WA 6005	Perth WA 6831
Email: info@rechargemetals.com.au	

This announcement has been authorised for release by the board.

#### **Contacts**

For more information, please contact:

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Mr Alex Cowie

Media & Investor Relations

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#### **Competent Person Statement**

The information in this announcement that relates to Exploration Results is based on information compiled and fairly represented by Mr Brett Wallace, Managing Director of Recharge Metals Ltd, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Wallace has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he has undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Wallace consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

#### **Previous Disclosure**

The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results information included in this report from previous Company announcements, including Exploration Results extracted from the Company's Prospectus announced to the ASX on 7 October 2021 and the Company's subsequent ASX announcements of 15 November 2021, 8 February 2022, 29 March 2022, 5 April 2022,10 May 2022, 18 May 2022, and 9 June 2022.

# **About Recharge Metals**

**Recharge Metals Ltd** is an Australian copper developer and explorer, focusing on Australian copper projects.

Three 100% owned Western Australian development and exploration projects:



- Brandy Hill South Cu-Au mineralisation
- Tampia East Cu-Ni-Au mineralisation
- Bohemia Cu- Pb-Zn mineralisation

# Appendix A JORC Code, 2012 Edition – Table 1 Report – Brandy Hill South Project

# **Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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)</li> </ul>	<ul> <li>All new data collected from the Brandy Hill South Project discussed in this report is in relation to a Down Hole Transient Electromagnetic (DHTEM) survey which commenced during February 2022 and was completed in May 2022.</li> <li>This report does not include any drilling or sampling data</li> </ul>
Drilling techniques	<ul> <li>may warrant disclosure of detailed information.</li> <li>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).</li> </ul>	Not applicable – this release does not relate to drilling activities.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable – this release does not relate to drilling activities

Criteria	JORC Code explanation	Commentary
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Not applicable – this release does not relate to drilling activities
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Not applicable – this release does not relate to drilling activities
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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</li> </ul>	DHTEM Parameters:  Contractor: Merlin Geophysical Solutions  Date: February & May, 2022  Survey Type: DHTEM  Stn Spacing: 2.5 – 10 m  Receiver  Receiver: DigiAtlantis  RX Sensor: DigiAtlantis

Criteria	JORC Code explanation	Commentary
	have been established.	Components: A,U and V
		Transmitter
		Transmitter: Merlin
		Frequency: 1Hz
		Loop Size: 200m x 200m,
		Tx Turns: 1
		Tx Current: ~150A
		Ramp: 1.000ms
		The survey data quality was monitored by geophysical consultants, Core Geophysics.
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Not applicable – this release does not relate to drilling activities.
assaying	The use of twinned holes.	
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>A handheld GPS has been used to determine the location of each of the drillhole positions, measurements are accurate to ±3 metres.</li> <li>The GDA94 grid system is used for location of all drill holes as shown in tables and on figures and recorded in UTM MGA Zone 50.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	Not applicable – this release does not relate to drilling activities, nor are the results of the DHTEM survey used for Mineral Resource and Ore Reserve estimation procedure(s) and classifications 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.	Not applicable – this release does not relate to drilling activities

Criteria	JORC Code explanation	Commentary
	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.	
Sample security	The measures taken to ensure sample security.	Not applicable – this release does not relate to drilling activities.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The DHEM surveys have been quality controlled and reviewed by Core Geophysics, geophysical consultants

# **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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The results relate to exploration licence E59/2181</li> <li>The tenements are held 100% by Recharge.</li> <li>The tenement mainly overlays pastoral land.</li> <li>The tenement is held securely and no impediments to obtaining a licence to operate have been identified.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>1990 Julia Mines NL – aeromagnetic survey (Au).</li> <li>1991 Reynolds Australia Metals Ltd – 30 AC holes 1,836m (Au)</li> <li>1992 Reynolds Australia Metals Ltd – Soil sampling, groundwater sampling, 41 RAB holes 2,084m (Au, Cu)</li> <li>1994 Normandy Poseidon Ltd – 25 AC holes &amp; 2 RC holes 2,022m, gravity survey (base metals)</li> <li>1996 Julia Mines NL – Soil sampling (Au, Cu)</li> <li>2001 Julia Corporation Ltd – 24 AC holes 1,855m (Au)</li> <li>2007 Independence Group – Aeromagnetic survey, MLEM survey, 2 RC holes 300m, (Ni)</li> <li>2019 Revolution Mining – 3 RC holes 450m (Cu)</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The geology of the Brandy Hill South area is not yet fully understood and the Company continues to revise geological interpretations using all available data and results of current and future drilling programs</li> <li>The mineralisation is interpreted to be of sulphide style which occurs within a possible larger scale Archean subduction related geological setting.</li> <li>The mineralisation at Brandy Hill South typically consists of chalcopyrite + pyrite, disseminations and stringers within a dolerite with quartz veining.</li> <li>The mineralisation typically forms broad, folded, tabular zones in the order of 50-100m true thickness and may contain zones of higher grade material with less continuity.</li> </ul>
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	Not applicable – this release does not relate to drilling activities.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Not applicable – this release does not relate to drilling activities.
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	The DHEM survey has identified several conductors at three prospect locations, the magnitude or conductance of the conductors is measured in

Criteria	JORC Code explanation	Commentary
15ineralization widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	siemens which is a measure of the size and conductivity of the bodies.
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.	Refer to Figures included in the body of the announcement.
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 to avoid misleading reporting of Exploration Results.	All results have been reported
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.	• None
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further RC and/or diamond drilling is planned to re-commence in the near future with the aim of testing selected EM conductor plates .</li> <li>The details of the drilling are outlined within the body of the release.</li> </ul>