

# More Broad Zones of Copper Mineralisation confirmed at Brandy Hill South

# HIGHLIGHTS

- Latest drilling results identify broad zones of copper mineralisation associated with anomalous silver, molybdenum and tungsten:
  - 22.5m @ 1.02% Cu, 6.8g/t Ag, 32ppm Mo, 654ppm W from 375.50m

including 7.5m @ 1.65% Cu, 11g/t Ag, 15ppm Mo, 929ppm W from 375.50m

- 42m @ 0.46% Cu, 4.7g/t Ag, 29ppm Mo, 340ppm W from 90m<sup>1</sup>
- 35m @ 0.32% Cu, 2.8g/t Ag, 23ppm Mo, 323ppm W from 278m
- Potential for extensions to the known mineralisation highlighted, with significant results in the most north-western hole and the most southern hole completed to date
- Copper mineralisation defined over a strike length of 500m
- Mineralisation remains open along strike and at depth
- Technical review in progress to guide exploration strategy going forward

Recharge Metals Limited (ASX: REC) ("Recharge" or "the Company") is pleased to report further drill results from the Company's Brandy Hill South Project located within the Archaean Gullewa Greenstone Belt in Western Australia. These are the final assays from the extensive field program completed during 2022 and have encouragingly extended the known limits of the copper mineralisation delineated to date at the Brandy Hill South Prospect.

The strike length of copper mineralisation intersected to date exceeds 500 metres. Mineralisation remains open in all directions.

# Recharge's Executive Director, Felicity Repacholi-Muir, commented:

"Recharge is encouraged by the significant widths of copper mineralisation encountered in this last drill program. The Brandy Hill South Prospect has been a hub of activity since listing in October 2021, and in this short space of time we have delineated copper mineralisation over a strike length of 500m.

Recharge has engaged an industry consultant to complete an independent high-level review of Brandy Hill South's copper potential, which will help guide Recharge's exploration strategy.

We look forward to delivering strong news flow and building shareholder value during an active 2023."

# Discussion of Results

The final program for the calendar year comprised eight (8) drillholes for a total of 2,370.8m, including three (3) Reverse Circulation (RC) drillholes and five (5) diamond drillholes with RC precollars. Results from the RC samples were reported in the ASX Release dated 22<sup>nd</sup> November 2022.

This Release pertains to the assays from the diamond samples. The diamond drillholes were designed to test electromagnetic (EM) conductors identified from the downhole transient electromagnetic (DHTEM) surveying of earlier drillholes (refer ASX Release dated 14<sup>th</sup> July 2022). All holes intercepted a maficultramafic complex, intruded by felsic porphyry, including extensive zones of massive, semi-massive to disseminated sulphides.

<sup>&</sup>lt;sup>1</sup> Intersection includes a combination of assays from the precollar and from the diamond tail - refer Table 1



Drillhole results and locations are summarised below in Figure 1. A cross section depicting BHRCD027 and BHRCD029 is shown in Figure 2 (page 4). All significant intercepts are detailed in Table 1 (on page 5).



Figure 1. Brandy Hill South Prospect drillhole locations, highlighting the drillholes within this announcement.



Drillholes BHRCD027 and BHRCD028 were collared to the west of the Salt Creek Shear Zone and were designed to test the conductor modelled from earlier drillhole BHD026. The zones of sulphide mineralisation within BHRCD027 broadly coincided with the location of the position of the high-order conductor (~7,000 siemens) BHD026-3.

BHRCD027 returned the following significant assays:

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- 22.5m @ 1.02% Cu, 6.8g/t Ag, 32ppm Mo, 654ppm W from 375.50m
  - o including 7.5m @ 1.65% Cu, 11g/t Ag, 15ppm Mo, 929ppm W from 375.50m
- 20.96m @ 0.37% Cu, 3.2g/t Ag, 19ppm Mo, 343ppm W from 404.04m

No assays of note were returned from BHRCD028.

Drillholes BHRCD029 and BHRCD030 were designed to test the modelled DHTEM conductor referred to as BHD026-2. The zones of sulphides broadly coincided with the location of the modelled position of the high-order conductor (~2,400 siemens).

BHRCD029 returned the following significant assays:

- 12m @ 0.30% Cu, 1.3g/t Ag, 29ppm Mo, 450ppm W from 130m
- 15m @ 0.33% Cu, 2.9g/t Ag, 38ppm Mo, 181ppm W from 300m
- 23m @ 0.33% Cu, 2.8g/t Ag, 15ppm Mo, 209ppm W from 339m
- 10.93m @ 0.27% Cu, 2.1g/t Ag, 20ppm Mo, 253ppm W from 373m

BHRCD030 returned the following significant assays:

- 42m @ 0.46% Cu, 4.7g/t Ag, 29ppm Mo, 340ppm W from 90m
  - o Including 5m @ 1.56% Cu, 18.5g/t Ag, 28ppm Mo, 258ppm W from 91m
- 15m @ 0.26% Cu, 1.4g/t Ag, 20ppm Mo, 239ppm W from 214m
- 35m @ 0.32%, 2.8g/t Ag, 23ppm Mo, 323ppm W Cu from 278m
- 12m @ 0.26% Cu, 2.4g/t Ag, 25ppm Mo, 182ppm W from 370m

BHRCD034 was the most southern hole completed to date along the Salt Creek Shear and was designed to target a DHTEM conductor modelled from earlier drillhole BHRC017. Intense zones of sulphide mineralisation broadly coincided with the projected location of the modelled conductor BHD017A.

BHRCD034 returned the following significant assays:

- 3m @ 0.38% Cu, 4.9g/t Ag, 14ppm Mo, 380ppm W from 196m
- 4m @ 0.25% Cu, 1.4g/t Ag, 41ppm Mo, 528ppm W from 233m
- 13m @ 0.37% Cu, 2.4g/t Ag, 1182ppm Mo, 238ppm W from 306m

## Next Steps at Brandy Hill South

A leading industry consultant has been engaged to undertake a high-level and independent review of the copper potential of the Brandy Hill South Project. The initial review of the existing drill data, petrography, micro XRF and PXRF has supported the potential for the Brandy Hill South Prospect to represent a porphyry copper system. In line with this, it is anticipated that an Induced Polarisation (IP) survey may be useful to detect further disseminated sulphide mineralisation, which has been successfully employed at similar projects.

The independent review will guide Recharge's exploration strategy and the Company looks forward to updating shareholders with results of the review as it becomes available.





Figure 2. Cross section (refer to Figure 1) showing the significant intercepts in drillholes BHRCD027 and BHRCD029 and previous drilling at the Brandy Hill South Prospect.



Hole ID	East	North	RL	Dip	Azi	EOH			Inter	section			
						(100)	From	То	Width	Cu	Ag	Мо	w
						(m)	(m)	(m)	(m)	%	g/t	ppm	ppm
BHRCD027	443800	6805684	275	-60	90	450.5	375.5	398	22.50	1.02	6.8	32	654
						incl.	375.5	383	7.50	1.65	11.0	15	929
						and	395.82	397	1.18	2.00	12.8	49	1090
							404.04	425	20.96	0.37	3.2	19	343
						incl.	412	413	1	1.38	11.5	19	420
BHRCD028	443773	6805546	275	-60	90	393.3				NSA			
BHRCD029	444002	6805701	275	-60	90	411.5	130	142	12	0.30	1.3	29	450
							205	215	10	0.25	0.8	11	195
							240	244	4	0.26	1.4	13	163
							246	249	3	0.26	1.7	472	127
							253	259	6	0.26	3.2	64	185
							282	291	9	0.26	1.2	25	157
							295	299	4	0.26	1.9	48	100
							300	315	15	0.33	2.9	38	181
							339	362	23	0.33	2.8	15	209
						incl.	339	340	1	1.68	14.8	119	330
							373	383.93	10.93	0.27	2.1	20	253
BHRCD030	444000	6805648	275	-60	90	424.5	90	132 <sup>1</sup>	42	0.46	4.7	29	340
						incl.	91	<b>96</b> <sup>1</sup>	5	1.56	18.5	28	258
							214	229	15	0.26	1.4	20	258
							234	236	2	0.29	1.3	21	255
							250	259	9	0.27	2.1	185	118
							278	313	35	0.32	2.8	23	323
						incl.	311	312	1	1.08	13.3	47	310
							330	335	5	0.28	3.4	9	140
							343	347	4	0.26	1.9	8	123
							359	362	3	0.30	7.0	42	203
							370	382	12	0.26	2.4	25	183
BHRCD034	444078	6805230	275	-60	90	376.6	190	192.57	2.57	0.31	3.3	143	1391
							196	199	3	0.38	4.9	14	380
							214	216	2	0.37	3.7	73	140
							220	223	3	0.25	1.4	69	247
							233	237	4	0.25	1.4	41	528
							286	288	2	0.28	2.4	14	205
							291	293	2	0.28	2.0	34	325
							306	319	13	0.37	2.4	1183	238
							328	331	3	0.28	1.7	14	370

## TABLE 1: SIGNIFICANT BRANDY HILL SOUTH DRILL INTERCEPTS

Notes:

NSA =No Significant Assays <sup>1</sup> includes precollar assay results reported in the ASX Release dated 22<sup>nd</sup> November 2022

Bold indicates intersections using at  $\geq$ 1% Cu cut-off Collar locations are shown as GDA94 Datum, projected to MGA Zone 50 coordinates

All drillholes are orientated Azimuth: -60°, Dip -90° azimuth relative to True North



This announcement has been authorised for release by the Board of Recharge Metals Limited.

-ENDS-

For further details, please contact:

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#### **Competent Person Statement**

The information in this announcement that relates to Exploration Results is based on information compiled or reviewed by Ms Felicity Repacholi-Muir, a Competent Person who is a Director of the Company. Ms Repacholi-Muir is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activities 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. Ms Repacholi-Muir consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

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, 9 June 2022, 14 July 2022, 8 August 2022, 15 September 2022, 14 October 2022, 24 October 2022 and 22 November 2022.





Figure 3. Location of the Brandy Hill South Project illustrating the current drilling area



### **ANNEXURE 1:**

The following Tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of the Exploration Results at the 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	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.	This ASX Release includes the results from five (5) diamond drillholes. Samples comprise half core and quarter core in HQ3 diamond core. Sample length are nominally 1m lengths but vary from 0.1m to 2m and separated by geological boundaries where appropriate. Quarter core was used for submission of 2m intervals through interpreted barren zones. Sampling has been carried out using standard protocols and QAQC procedures as per industry best practice. Drillhole locations were surveyed by handheld GPS units which have an accuracy of ± 3m.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Drilling was completed with a track mounted drill rig, with HQ sized core from the end of the precollar to the end of the drillhole. All HQ diamond drill core was orientated using a Reflex ACT III Orientation Tool.
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.	Diamond Core measured using standard measuring tape. Length of core is then compared to the recorded interval drilled from core blocks placed in trays at end of runs. Intervals of core loss were logged and entered into the database. All care was taken to obtain 100% core recovery (HQ). Core recoveries were excellent and usually 98-100%. Rare core loss was present only in fracture zones. There is no observed sample bias, nor a relationship observed between grade and recovery.
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.	Drillholes were logged geologically and structurally; they are considered to have been carried out to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. All drill core was photographed, core recovery calculated; core marked up along the orientation line and logged by experienced geologists familiar with the style of deposit and stratigraphy. The percentage of visible sulphide (pyrrhotite, pyrite, chalcopyrite, bornite etc) was estimated for each significant geological unit. Geological logging is both qualitative and quantitative. Lithology, alteration, mineralisation, veins and structural data is captured digitally and stored securely in the Recharge Metals database. The drillholes were logged in full.



Criteria	JORC Code explanation	Commentary			
Sub- sampling	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond core is cut in half along the orientation line. The right side of the core is collected for analysis.			
techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and	Sample sizes are considered to be representative and appropriate for the style of base and precious metal mineralisation observed. The entire hole has been			
	appropriateness of the sample preparation technique.	sampled and submitted for assay. Recharge has its own internal QAQC protocols			
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	Materials (CRM). QAQC has been checked with no apparent issues.			
	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.	Certified reference standards were inserted at a rate of 1:25 through mineralised zones based on geological interpretation. Field duplicates were collected from diamond drilling at an approximate ratio of 1:25.			
	Whether sample sizes are appropriate to the grain size of the material being sampled	core.			
	Size of the material being sumpled.	Duplicate sample results were compared with the original sample results and there is no bias observed in the data.			
Quality of Tr assay data as and w laboratory Fr tests X du al N st cl (ii est	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples were sent for analysis to Australian Laboratory Services Pty Ltd (ALS) in Perth, Western Australia (a commercial accredited independent laboratory). The analytical techniques used include Mixed Acid Digest (nitric, perchloric and hydrofluoric acids) with an ICP-AES finish for Cr, Cu, Fe, Mg, Ni & Zn and ICP- MS finish for Ag, As, Bi, Co, Mo, Pb, Sb, Te & W. Au,			
	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	(40g charge) with an ICP-MS finish.			
	checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	This combination of assays suites is considered comprehensive and a near total digest and considered considered by Recharge to be appropriate for the Brandy Hill South mineralisation.			
		Portable XRF measurements were taken to supplement visual mineral identification, especially sulphide species. These results are not considered material and as such, XRF results will not be released on the ASX.			
		Sample preparation for fineness checks were carried out by the laboratory as part of their internal procedures to ensure the grind size of >90% passing 75 micron was being obtained. Laboratory QAQC involves the use of internal lab standards using certified reference material (CRM), blanks, splits and replicates as part of their in-house procedures. Certified reference materials, having a good range of values are inserted blindly and randomly. Repeat and duplicate analysis returned acceptable results. No umpire laboratory checks have been undertaken by			



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Significant intercepts were calculated using industry standard Micromine software internally verified by Recharge staff. No twin holes were drilled during this program. Geological logging was entered digitally then sent to the Company's database. Sampling, collar, and laboratory assay data is captured electronically and also sent to the Company's database. Uploaded data is reviewed and verified by the geologist responsible for the data collection. No adjustments were made to any assay data.
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.	The drill hole collar position was located with a handheld GPS (±3m). Downhole surveys were completed on all diamond drillholes using a north seeking gyro downhole survey tool at downhole intervals of approximately every 30m. Core orientation was completed using Reflex ACT III Orientation Tool. The grid system used for location of all drill holes as shown in tables and on figures is MGA Zone 50, GDA94. Hole collar RLs were estimated from local surveyed 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.	<ul> <li>Drill hole spacing is variable, being on nominal 100m x 50m, 100m x 100m and 200m x 100m grid.</li> <li>Drill hole spacing and distribution is not considered sufficient as to make geological and grade continuity assumptions appropriate for Mineral Resource estimation. The holes completed are for exploration purposes.</li> <li>No sample compositing has been applied</li> </ul>
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.	It is not believed that the drilling orientation has introduced any sampling bias. The understanding of the structure and geology intersected in drilling is in progress and accurate true widths cannot be assumed at this time.
Sample security	The measures taken to ensure sample security.	Sample chain of custody is managed by Recharge. Sampling was carried out by Recharge field staff. Samples are stored at a secure site and transported to the Perth laboratory by Recharge employees. Core was collected and processed on site and transported to Perth for core cutting, sampling and submission for analysis.
Auaits or reviews	The results of any audits or reviews of sampling techniques and data.	No audit on sampling techniques and data have been completed.



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 results relate to drilling completed on exploration licence E59/2181. The tenement is wholly owned by Recharge and is in good standing. The tenement mainly overlays pastoral land. There are no known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous exploration over E59/2181 has been limited. Modest programs of geophysical surveying, aircore and RC drilling have been completed by previous tenement holders.
Geology	Deposit type, geological setting and style of mineralisation.	The mineralisation at Brandy Hill South is interpreted to be of porphyry style which occurs within a possible larger scale Archean subduction related geological setting. The deposit and host rocks have been deformed and metamorphosed to upper amphibolite facies. The mineralisation at Brandy Hill South typically consists of chalcopyrite + pyrite + pyrrhotite, massive sulphides, blebby and semi massive sulphides and disseminations and stringers within felsic units and porphyry units.
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.	All drill hole information is included in Tables within this announcement.
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.	Exploration results are based on length-weighted- average grades. No maximum grade truncations have been applied. A cut-off grade of 0.25% Cu has been applied to significant intersections, with intersections have a minimum length of 2m, no more than 4m consecutive waste, with the final grade being ≥ 0.25% Cu. High- grade intercepts have been calculated with a cut-off grade of 1% Cu, with intersections have a minimum length of 1m, no more than 2m consecutive waste, with the final grade being ≥ 0.1% Cu. All significant intersections have been reported. No metal equivalent values have been reported.
Relationship between mineralisatio	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to	The drillholes were orientated perpendicular to the interpreted strike of the geology and mineralisation. Reported intercepts are down hole lengths, true widths



Criteria	JORC Code explanation	Commentary
n widths and intercept lengths	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').	are unknown at this stage.
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 significant and relevant intercepts 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.	All material exploration data has been included in this announcement and previous Recharge ASX announcements.
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.	An independent review is underway, with an Induced Polarisation (IP) survey likely to be undertaken.