

# **Drill Assay Results: Gibb River Cu Project**

### **Key Highlights**

- Results returned from KCDD19001 drillhole, sampled in October 2022.
- Local zones of anomalous Copper and Gold identified.
  - 3m at 244 ppm Cu and 21 ppb Au from 199m including 1m at 366 ppm Cu from 201m, and 1m at 37 ppb Au from 199m.
  - 4m at 242 ppm Cu from 208m including 1m at 332 ppm Cu from 209m.
  - 3m at 85 ppb Au from 189m including 1m at 161 from 189m and 1m at 94 ppb from 191m.
- Anomalous metals associated with structurally brecciated and hydrothermally altered zones within the Carson Volcanics unit.
  - Intensely brecciated Carson Volcanics with Hematite alteration from 198m (Cu-Au anomaly).
  - Intense Hematite alteration from 207m (Cu anomaly).
- Results illustrate the potential for the previously un-explored Carson Volcanics to host base and precious metal deposits.
- KCDD19001 was drilled in 2019 as an Exploration Incentive Scheme (EIS) drillhole, in partnership between the Western Australian Government and a previous explorer. The drillhole was never analysed in an appropriate manner despite copper minerals observed



Western Australian critical metals explorer, **DMC Mining Limited (ASX: DMM)** (**DMC** or the **Company**) is pleased to update the market on exploration results received from its Gibb River Cu Project in the East Kimberley region of Western Australia.

Diamond core results have been received from an EIS funded drillhole which was drilled by a previous explorer in 2019. The hole was not sampled and analysed in 2019, despite copper sulphides (Chalcopyrite) associated with logged structures and alteration zones.

Analysis of this drillhole aimed to investigate the potential for the Carson Volcanics to host base and previous metal deposits, and to help improve the understanding of the various mineralised observations across the Gibb River project. Sampling was focused on the basal Warton Sandstone (Pkw) and upper Carson Volcanic units (Pkc) contacts. The Pkw unconformably overlies the upper Pkc.

Outcomes of the sampling shows anomalous copper and gold within the Carson Volcanics, which confirms these metals to be widespread both laterally and stratigraphically across the unconformity. Presence of anomalous mineralisation in this hole is over 10 kilometres from the historical outcrop drilling to the north and supports a large area of exploration area potential for targeting sources of mineralisation (including at depth). Anomalous copper and gold results received for KCDD19001 are summarised below in Table 1.

Sample ID	Depth From (m)	Depth To (m)	Geology	Cu (ppm)	Au (ppb)
610016	189	190	Warton	6	161
610017	190	191	Sandstone	6	2
610018	191	192		18	94
610026	199	200	Dressisted	146	37
610027	200	201	Brecclated	220	-
610028	201	202	Volcarnes	366	6
610035	208	209	Intercely Altered	226	-
610036	209	210	Volcanics	332	1
610037	210	211		152	1
610038	211	212	]	258	1

Table 1: Anomalous copper and gold results received from KCDD19001.

Drillhole KCDD19001 is situated in the centre of a doubly plunging anticline structure (Menuairs Dome). The drillhole was ideally located to test the exploration potential of the entirely covered Carson Volcanics unit, a geological unit which has not received economical evaluation in this region.

From the results received by the Company, a background concentration for copper has been determined at a mean of approximately 90 ppm within the Carson Volcanics. Anomalies identified in Table 1 above exceed three times the background levels for this unit and are above the 90th percentile of 202 ppm.



Additionally, anomalous gold (up to 161 ppb) has been identified at the Warton Sandstone to Carson Volcanics transitional zone. This presents previously unidentified exploration potential for the project area.

Figure 1 below shows examples of the nature of copper sulphides observed in the drill core prior to 2022 sampling. Context of the drillhole location and regional context is shown in Figure 2 and Figure 3 respectively.



Figure 1: Left – Chalcopyrite on fracture surface. Right – Tarnished chalcopyrite in carbonate filled fracture.

#### FURTHER AND ONGOING WORK

The company is currently taking steps to progress the application to grant and reviewing exploration rationale for the region. The Company is also anticipating processing of HyLogging to be completed by CSIRO/GSWA and made available soon.





Figure 2 : Location of KCDD19001 drillhole.

#### DMC'S EXECUTIVE CHAIRMAN, DAVID SUMICH, COMMENTED:

"These results are very encouraging and are "proof of concept" for our exploration model. The Project has widespread copper anomalism across 27 historic drill holes and now includes this recent diamond drill hole. The exploration model is for Zambian style sedimentary exhalative (SedEx) or Mississippi valley type (MVT) deposit around the Menuairs Dome. We look forward to progressing exploration on the Project"





Figure 3 : Project Location Map.





Date	ASX Release
25 November 2022	Field Results Validate Historic Drilling at Gibb River
28 October 2022	September Quarterly Activities Report
1 August 2022	June Quarterly Activities Report

The Company confirms that it not aware of any new information or data that materially affects the information included in this document and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

#### **Competent Person's Statement**

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Andrew Dawes who is a Member of the Australasian Institute of Mining and Metallurgy and is a Principal Geologist employed by AHD Resources, independent consultants to DMC. Mr Dawes has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity being 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 Dawes consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Approved for release by the Board of Directors

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#### Forward Looking Statements

Some statements in this announcement regarding estimates or future events are forward-looking statements. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Statements regarding plans with respect to the Company's mineral properties may also contain forward looking statements.

Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results expressed or implied by such forward-looking statements. These risks and uncertainties include but are not limited to liabilities inherent in exploration and development activities, geological, mining, processing and technical problems, the inability to obtain exploration and mine licenses, permits and other regulatory approvals required in connection with operations, competition for among other things, capital, undeveloped lands and skilled personnel; incorrect assessments of prospectivity and the value of acquisitions; the inability to identify further mineralisation at the Company's tenements, changes in commodity prices and exchange rates; currency and interest rate fluctuations; various events which could disrupt exploration and development activities, operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions; the demand for and availability of transportation services; the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks and various other risks. There can be no assurance that forward-looking statements will prove to be correct.



# About DMC MINING LIMITED (ASX:DMM)

DMC Mining is a **dedicated critical metals explorer in Western Australia**. The large tenement holding (~1,250km<sup>2</sup>) throughout the Fraser Range and at Ravensthorpe, located at the **margins of the Yilgarn Craton** where numerous world class deposits have been discovered.

As a critical metals explorer, DMC provide investors with excellent exposure to the **growing demand** for EV batteries.

Debuted on the ASX in late 2021, the company is focused on delivering on its exploration programmes and providing tangible results for investors. Our modern approach to nickel exploration will result in a more streamlined and cost-efficient exploration process that will ultimately deliver higher returns for investors.





### Directors & Management

**David Sumich** Executive Chairman

Frank Knezovic Non Executive Director

**Bruce Franzen** Non Executive Director

**CSA Global** Consulting Exploration Manager **A.C.N** 648 372 516

**Shares on Issue** 46.35 mill

**Options**(\$0.30 exp Dec 2024) 1.0 mill

**Options** (\$0.20 exp April 2026 ) 25.575 mill

**Cash** (as at 31 Dec) ~A\$2.8mill

# JORC Code, 2012 Edition – Table 1

#### 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) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Historic diamond drillhole was cut to quarter core by GSWA staff at the Perth Core Library.</li> <li>Sampling was conducted on a meter-to-meter basis.</li> <li>Anomalous results determined to be above the 90<sup>th</sup> percentile for the relevant geological unit of interest.</li> <li>Samples submitted to Bureau Veritas and analysed under FA003, LA101 and XRF103 procedures.</li> </ul>
Drilling techniques	<ul> <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>	<ul> <li>Diamond NQ3.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <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>	<ul> <li>Drillhole recoveries have previously been reported to DMIRS in WAMEX report A120961. The Company has reviewed these and believe the drill recovery to be good.</li> <li>No sample bias is believed to have occurred as drill core was determined to be intact when reviewed by Company representative prior to sampling.</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> </ul>	<ul> <li>Review of the 2019 logging undertaken on the drill core prior to selecting intervals to sample.</li> <li>Geological descriptions (lithology) recorded, along with changes in</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <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>	<ul> <li>alteration and veining (style and intensity).</li> <li>These descriptions are considered quantitative in nature.</li> <li>Drill core reviewed and logged from 0 – 249.4m (EOH).</li> </ul>
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> <li>The nature, quality and appropriateness of the assaying and</li> </ul>	<ul> <li>Sample preparation and analysis completed at Bureau Veritas in Canning Vale under FA003, LA101 and XRF103 analysis suites.</li> <li>Sample preparation comprises of oven drying, jaw crushing and pulverizing to -105 microns (95% first pass).</li> <li>Samples collected on a meter-to-meter basis from 199 to 249.4m (EOH).</li> <li>Sample sizes are considered appropriate for the technique and purpose.</li> <li>Samples were collected in plastic bags, then grouped into cardboard boxes by GSWA staff. Samples were then delivered to the laboratory by Company personnel.</li> <li>Surface samples submitted to Bureau Veritas in Canning Vale.</li> </ul>
assay data and laboratory tests	<ul> <li>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 have been established.</li> </ul>	<ul> <li>Analysed for 48 elements via four acid digest, with ICP-MS finish (4A/MS48). This technique is considered appropriate for elements assayed.</li> <li>Analysed for 11 oxides via lithium borate fused XRF (XRF103).</li> <li>Analysed LOI via TGA (XRF103).</li> <li>Analysed for 51 elements via Laser Ablation ICP-MS (LA101).</li> <li>Analysed for Au via 40g lead fused Fire Assay with ICP-MS finish (FA003).</li> <li>Lab repeats, standards and blanks used and reported.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <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>	<ul> <li>No significant intersections have been reviewed.</li> <li>Anomalous thresholds have been statistically determined based on the data set.</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> </ul>	<ul> <li>Collar location recorded using unknown model Handheld GPS form previous explorer.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul><li>Specification of the grid system used.</li><li>Quality and adequacy of topographic control.</li></ul>	<ul> <li>Grid system used for collar location is the UTM Geocentric Datum of Australia 1994 (MGA94 Zone 52).</li> <li>Location is from previous annual DMIRS WAMEX report A120961.</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>	<ul> <li>Unknown sample representivity at this stage of exploration.</li> <li>No compositing undertaken.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Sampling assumed to be perpendicular to geological formations based on surface mapping and interpretation of stratigraphy.</li> <li>Sampling orientation not considered to have introduced a bias.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were transported from GSWA Core Library in Carlisle to Bureau Veritas in Canning Vale by Company representative.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No reviews carried out to date.

## 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 Gibb River Project (Menuairs Dome) consists of E80/5781, 5782, 5783, 5785 and 5786 – all are pending exploration license applications.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Durack Mines and Australian Anglo American Ltd undertook regional exploration from the late 1960's until the early 1970's. Exploration on the Menuairs Dome area which included &gt;1,200 soil samples, 18</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>diamond and 8 percussion drillholes. WAMEX report a2381.</li> <li>EMX NSW 1 completed a single EIS funded diamond hole to 249.4m in the center of Menuairs Dome testing the Warton Sandstone to Carson Volcanics contact. WAMEX reports a122961 and a122962</li> <li>Various other explorers (including CRA and Stockdale) conducted Diamond exploration from 1980 through to 2004 (see WAMEX reports a10870, a11978, a19386, a40967, a44540, a50727 and a68358).</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Menuairs Dome has the potential to contain Zambian style sedimentary exhalative (SedEx) base metals within the siltstone/shale horizons of the Pentecost Sandstone Formation, predominately found at the transition of Pkpm to Pkpl. Potential for sulfide hosted vein deposits is also present within the Carson Volcanics units, underlying the Warton sandstone in the center of the Menuairs Dome.</li> <li>Historical Copper mineralization has been identified within shales and siltstones at the Pkpm to Pkpl boundary.</li> <li>Lithologically the formations present at the Menuairs Dome align with a shallow shelf depositional environment, with some deeper anaerobic depositional environments towards the base of Pkpl as made evident by Glauconite presence.</li> <li>Menuaris Dome is a doubly plunging anticlinal structure ('dome').</li> <li>Lithologies observed in the field of the Pentecost Lower and Middle Members confirm the presence of shale rich horizons containing copper oxides.</li> <li>Diamond core logging confirmed trace copper bearing sulphides withing the Carson Volcanics unit.</li> </ul>
Drill hole	A summary of all information material to the understanding of the	
Information	exploration results including a tabulation of the following information	Hole ID MGA E MGA N Elevation Dip Azimuth
	for all material arill noies: $\circ$ easting and northing of the drill hole collar	KCDD19001 347185 8242209 NR -85 10
<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	Significant intercepts are included in the body of this	

Criteria	JORC Code explanation	Commentary
	<ul> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> 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.	announcement.
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>	<ul> <li>No levelling of the raw geochemical data was undertaken.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <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>	<ul> <li>The hole was vertical. True width equals down hole width.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Appropriate maps have been included in the body of this announcement.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>Comprehensive reporting has been completed.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>All meaningful data and relevant information has been included in the body of this announcement.</li> </ul>

Criteria	JORC Code explanation	Commentary
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>Native title work in progress.</li> <li>Review exploration rationale with expanded geochemical and geological knowledge.</li> </ul>