25<sup>th</sup> January 2023



ASX Announcement

# **Exploration Update: Ravensthorpe** RAV 9 & RAV 11 targets ready for drill testing

## **Key Highlights**

- 3 high priority electromagnetic (EM) conductivity targets have been identified from ground surveys on the Ravensthorpe Nickel Project.
- EM acquisition consisted of low frequency Moving-Loop EM (MLEM) and Fixed-Loop EM surveys over targets at RAV 9 and RAV 11 identified from the Xcite airborne EM survey.
- Conductors are associated with magnetic anomalies and surficial geology and geochemistry interpreted to represent buried komatiite lava sequences.
- Planning is now underway to drill test the targets as soon as feasible.

Western Australian critical metals explorer, DMC Mining Limited (**ASX: DMM**) (**DMC or the Company**) is pleased to update the market on exploration results for the Ravensthorpe Nickel Project (**RNP**). Results of recent MLEM and FLEM surveys following up the RAV 9 and RAV 11 Xcite airborne EM targets (Figure 1) have delineated high-priority conductivity anomalies associated with what are interpreted to be buried komatiite volcanic sequences.

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

"The compelling RAV 9 and RAV 11 conductive targets are the culmination of systematic and methodical exploration over the past 12 months and we are highly encouraged to have identified them in a premier and productive nickel endowment region of WA. Our exploration team is currently finalising the drill planning process and we look forward to drilling as soon as possible.".



3 high-priority electromagnetic (EM) conductivity targets have been identified, one at RAV 9 and two at RAV 11. The conductors are associated with magnetic anomalies and indications from surficial geology and geochemistry interpreted to represent buried komatiite lava sequences.

Results from the MLEM and FLEM surveys will be followed up by diamond drilling to test the anomalies for potential nickel sulphide mineralisation as soon as permitting is in place.



Figure 1: Ravensthorpe Nickel Project – RAV 9 & RAV 11 targets & Geology

#### **Technical Summary**

Vortex Geophysics were contracted to complete the ground EM surveys at the RNP. Ground EM followup on Xcite airborne AEM priority anomalies RAV 9 and RAV 11 (Figure 1) comprised:

- RAV 9: a single line of MLEM and three lines of FLEM oriented north-south across the Xcite EM anomaly (Figure 2a).
- RAV 11: 12 lines of FLEM oriented east-west across the Xcite EM anomaly (Figure 2b).

Surface geochemistry conducted over the target areas returned high values for nickel and cobalt consistent with buried ultramafic lithologies but remain inconclusive as to sulphide potential. This is not seen as a negative as nickel sulphide systems are often closed geochemically and entirely contained within the target ultramafic host with little to no wall rock leakage or "halo" of the target metals. Unless intersected by the weathering profile, such buried sulphide systems may be geochemically blind to surface sampling and not return anomalous metal values in geochemical data.

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#### RAV 9

At RAV 9, initial survey design was to collect multiple inside transmitter loop, MLEM traverses over the anomaly in a north south orientation. For technical and logistical reasons, the survey designed was converted to FLEM after the completion of line 240320e which was affected by Induced Polarisation (IP) effects. However, despite this the MLEM recorded a significant late time anomaly. Follow-up with FLEM (Figure 3) delineated a discrete conductor beneath Line 240350e with further potential conductors apparent in the late time Channel 30 response trending towards the east. The plate model is shown in Figure 3 and Table 1.

#### Table 1. Modelled FLEM Plate characteristics RAV 9.

Plate	Centre	Depth	Dip	Dip Direction	Plunge	Length	Depth Extent	Conductance
Easting	Northing	m	Degrees	Degrees	Degrees	m	m	Siemens
240340	6276600	25	85	195	0	45	200	750

Due to constraints of land-owner farming activity at the time, the apparent late-time conductivity responses trailing to the east of the current eastmost survey line (Figure 3) was not immediately followed up and remains to be tested further.

#### RAV 11

At RAV 11, twelve lines of east-west oriented FLEM were read over the original AEM Xcite anomaly from two transmitter loops. The survey data recorded a strong anomaly with the response observable past at very late read time over multiple lines. Modelling and processing of the of FLEM survey data has defined three discrete conductors, two of which are highly conductive and represent priority 1 targets. The third is of moderate to low conductance and isn't considered a high priority for immediate follow-up work. The best conducting anomaly (S1) correlates with the boundary of the modelled westerly dipping magnetic body interpreted to represent buried komatiite volcanics. The other good conductor (N1) appears to be slightly displaced from the modelled magnetic body. The plate models **are shown in Figure 4 and Table 2**.

Plate	Plate	Centre	Depth	Dip	Dip Direction	Plunge	Length	Depth Extent	Conductance
	Easting	Northing	m	Degrees	Degrees	Degrees	m	m	Siemens
S1	254150	6273680	125	70	245	15S	200	800	>7000
N1	254025	6274070	100	70	285	0	220	600	1500
Low Priority	254190	6273680	60	80	250	0	280	800	150

#### Table 2. Modelled FLEM Plate characteristics RAV 11.

#### Next Steps

The EM plates will be tested with diamond drilling. Planning is underway for a program of holes to test the anomalies once appropriate permitting has been completed. Borehole EM will be conducted once drilling is completed, as well as extension of the FLEM to the east of the current RAV 9 FLEM survey.



#### Ravensthorpe Nickel Project

The Ravensthorpe Nickel Project (DMC 100%, EL 74/669) is located in a highly prospective geological setting for nickel sulphide deposits (Figure 1). The Project has at least **15km strike length of the Bandalup ultramafic rock,** the target host rocks that are prospective for Kambalda-style nickel sulphide deposits.

The Project is very well serviced by roads, power, and other necessary mining infrastructure.

Approved for release by the Board of Directors

For further information, please contact:

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Figure 1a – Priority AEM Conductivity Targets Identified on the Ravensthorpe Nickel Project. Ravensthorpe project tenement E74/669 outline (black) and Xcite target areas coloured by priority over a semi-transparent late-time Xcite EM decay image (dB/dt Z Ch45) over a residual magnetic greyscale image (TMIRTP HP500m)





Figure 2 – a). MLEM and FLEM survey lines on AEM Late time Tau image for RAV 9 AEM target. See Figure 3 for results. Scale bar 100m

Figure 2 – b). FLEM survey lines on RTP filtered magnetic image for RAV 11 AEM target. See Figure 4 for results. Scale bar 250m





Figure 3 – Processed time channel images for Fixed loop data over RAV 9.

Demonstrating the development of the anomaly in time, note the potential good late time conductors to the east of survey line 230400e. Original AEM RAV 9 anomalies out line (magenta), Modelled plate (purple), Channel 20 anomaly outline (grey). Scale bar 100m.





Figure 4 – Processed time channel images for the Fixed loop data over RAV 11. Demonstrating the development of the anomaly in time. Anomaly outline (lime) and modelled plates (S1: magenta, N1: purple). Transmitter loops (red) with receiver lines (black) & original RAV 11 AEM anomaly (white). Scale bar 250m.





Figure 5 – Ravensthorpe Nickel Project E74/669 – Regional Map.



#### **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 Tony Donaghy who is a Registered Professional Geoscientist (P.Geo) with the association of Professional Geoscientists of Ontario (PGO), a Recognised Professional Organisation (RPO). Mr Donaghy is an employee of CSA Global, an ERM Company, and is contracted as Exploration Management Consultant to DMC Mining Limited. Mr Donaghy 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 Donaghy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **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

William (Bill) Witham 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 30 Sept) ~A\$3.4mill

# JORC Code, 2012 Edition – Table 1 report Ravensthorpe Nickel 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) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Vortex Geophysics carried out time-domain fixed loop and moving loop electromagnetic (FLEM, MLEM, EM) surveys over project in October-November 2022.</li> <li>Data acquired along N-S (Rav-9) and E-W (Rav-11) survey lines spaced nominally 100m apart. 16 lines were surveyed for a total of 10 line kms. Station spacing for FLEM was 50m, transmitter frequency 1Hz (some 0.5Hz data). Emit_smartem24 reciever, Emit_smartfluxgate receiver sensor, Vortex_vtx-100 transmitter.</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>No Drilling undertaken</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>	No Drilling undertaken
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>	No Drilling undertaken

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>	
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>	No Drilling undertaken
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 have been established.</li> </ul>	<ul> <li>Data acquired along N-S (Rav-9) and E-W (Rav-11) survey lines spaced nominally 100m apart. 16 lines were surveyed for a total of 10 line kms. Station spacing for FLEM was 50m, transmitter frequency 1Hz (some 0.5Hz data). Emit_smartem24 reciever, Emit_smartfluxgate receiver sensor, Vortex_vtx-100 transmitter.</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>Final EM data reviewed, processed and interpreted by external geophysical consultants Montana GIS.</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>	Data acquired using WGS84 and projection MGA zone 51.
Data spacing	<ul> <li>Data spacing for reporting of Exploration Results.</li> </ul>	See Sampling Techniques section

Criteria	JORC Code explanation	Commentary
and distribution	<ul> <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>EM survey line spacing is considered appropriate for style of target mineralisation.</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>EM survey lines designed to be near-perpendicular to the general geological strike, and are considered to be appropriate for the project area.</li> </ul>
Sample security	The measures taken to ensure sample security.	• N/A
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• N/A

### **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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>EM surveys were completed on E74/669. DMC has 100% tenure.</li> <li>Approx 70% of the Project area is over freehold farmland.</li> <li>Discussions are underway for any future ground disturbing</li> <li>exploration.</li> <li>The project is within the Wagyl Kaip native title claim area, necessary heritage notifications were given prior to exploration activities.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>No previous EM survey's completed by other parties.</li> <li>During the 2007-2009 period, Global Nickel Investments Limited (GNI) conducted a 200x100m spaced, auger geochemistry programme over the eastern portion of the current tenement in an effort to identify the position of potential ultramafic units</li> </ul>

Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	<ul> <li>Commentary</li> <li>which locally host both nickel laterite and nickel sulphide mineralisation. A total of 348 samples were collected.</li> <li>Three low order gold anomalies (peak 70ppb Au) were identified from the geochemical programme with only low levels of nickel (peak 272ppm Ni) and chromium associated with two of the gold anomalies suggesting laterisation of the soil in these areas.</li> <li>In 2011, Phillips River Mining Limited (PRH) conduced a regional geochemical sampling program. 223 samples were collected from the western portion of the current tenement.</li> <li>During the 2010-2016 period, Australasian Mining Limited (AML) and Alpha Fine Chemicals Limited conducted a soil sampling on an 800x160m grid immediately south of the RAV8 Project. A total of 280 soil samples were collected. The survey identified several "anomalous" samples to 500ppm Ni in the ultramafic horizons to the North. Some of these anomalies show continuity of &gt;500m across strike. The gold in soil values reveal few anomalies of any significance. A small set of historical workings on the western margin of the soil survey were rock chip sampled (quartz mullock) which returned 5.24ppm Au. The workings are hosted in weathered ultramafic, with quartz veins sub-parallel to the observed schistosity (moderate dip to the southwest). The gold in soil reveals elevated values ~180m along strike to the southeast, suggesting the gold mineralising system has some continuity. The mineralisation may continue to the northwest; however, the area is dominated by alluvium and would require drilling to be effectively prospected. The gold bearing quartz veining is hosted in ultramafic, which is</li> </ul>
		somewhat unusual. The possibility of a more brittle, gold
		receptive host occurring in the adjacent, alluvium covered area

Criteria	JORC Code explanation	Commentary
		along strike to the west must be considered
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Ravensthorpe Project covers a portion of the northern margin of the metasedimentary Maydon Syncline, within the Archaean RGB. The geology is dominated by highly deformed and metamorphosed ultramafics, mafics, metasediments and granitic gneiss intruded by dolerite dykes. The ultramafic units contain komatiitic flows and peridotitic intrusives with associated Ni-sulphide mineralisation.</li> <li>The tenement is dominated by subdued topography and lower elevation compared to the terrain north of the highway. The majority of the soil surface has been modified by cropping. Subcrop of the mafic and ultramafic units which dominate the area is common, but not dominant across the area. Compared to the geology north of the highway, there has been significantly greater removal of Tertiary duricrusts and associated weathering profiles within E74/669. Soils are dominated by "fresh" clays derived from recent weathering of mafic and ultramafic saprock.</li> <li>Tenement E74/669 contains several sequences of the Bandalup Ultramafic, which are the host unit for nickel sulphide mineralisation in the area, the closest being at the RAV8 mine to the north</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> </ul>	• N/A

Criteria	JORC Code explanation	Commentary
	<ul> <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>	
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>	• N/A
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>	• N/A
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>Refer to figures in the body of the text</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>	• N/A
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>	• N/A
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,</li> </ul>	<ul> <li>Infill EM may be required east of the Rav-9 anomaly. Both Rav-9 and Rav-11 will be drill tested once appropriate permitting and access clearances have been secured.</li> </ul>

Criteria	JORC Code explanation	Commentary
provided this information is not commercially sensitive.		