

## **Key Highlights**

#### **EXPLORATION ACTIVITIES**

- Ravensthorpe Nickel Drill preparations underway RAV 9 & RAV 11.
- Fraser Range Projects (Ni-Co-Cu) Awaiting geochemical assay (3,000 hole auger) & geophysics (62 line km) results.
- Gibb River Cu Project Diamond Core hole **KCDD19001** assay results pending.

#### **NEW PROJECT AREAS - Lithium**

- The Fraser Range has the potential to host **LCT and NYF pegmatites,** along with magmatic Ni Cu sulphide deposits.
- The limited historical geochemistry data does show minor, discrete, anomalies for Li but also exhibits elevated associated pathfinder elements Rb & Be.

Western Australian critical metals explorer, **DMC Mining Limited (ASX: DMM) (DMC** or the **Company)** is please to provide its December 2022 Quarterly Activities Report.

#### **PROJECTS**

#### Ravensthorpe Nickel Project (DMC 100%)

After quarter end, DMC announced the results of recent geophysical and geochemical surveying at the Ravensthorpe Nickel Project. (Refer ASX Release 25 January 2023 – Ravensthorpe Nickel RAV 9 & RAV 11 Ready for Drill Testing)

The Company is very pleased that the RAV 9 & RAV 11 targets are drill ready after many months of systematic and methodical exploration,

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#### **Technical Summary**

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.

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 komatilte 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.

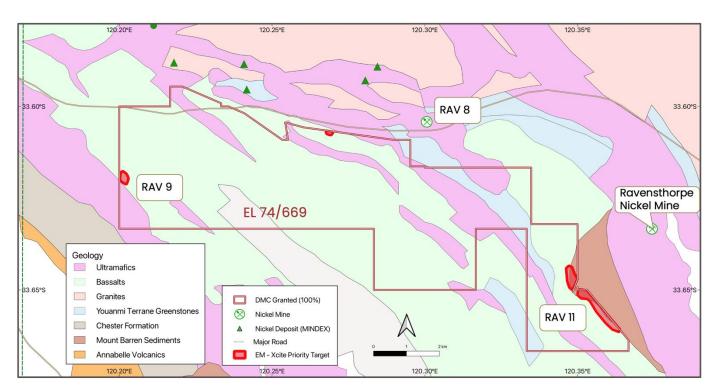


Figure 1: Ravensthorpe Nickel Project – RAV 9 & RAV 11 targets & Geology

Vortex Geophysics were contracted to complete the ground EM surveys at the RNP. Ground EM follow-up 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 wallrock 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.

#### RAV9

At RAV 9, initial survey design was to collect multiple Inloop, 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.

Table 2. Modelled FLEM Plate characteristics RAV 11.

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	<b>15S</b>	200	800	>7000
N1	254025	6274070	100	70	285	0	220	600	1500
Low Priority	254190	6273680	60	80	250	0	280	800	150



#### **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.

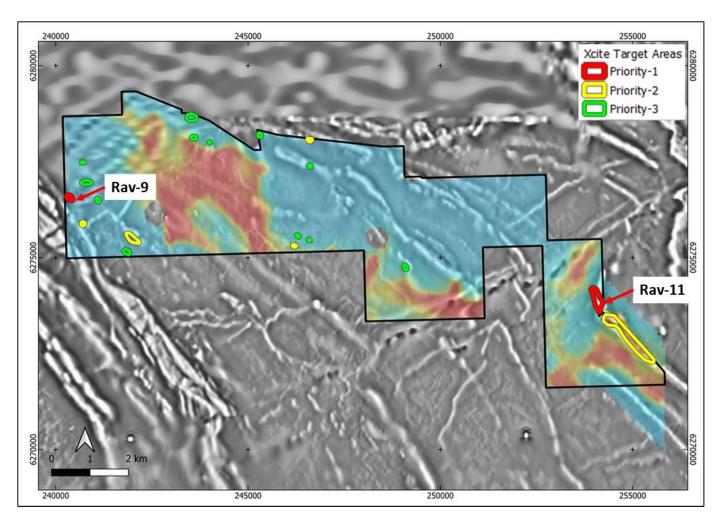


Figure 1a – Priority AEM Conductivity Targets Identified on the Ravensthorpe Nickel Project. Ravensthorpe project tenement E74/669 outline (black) and Xcite target areas coloured by priority over a semi-transparent late-time Xcite EM decay image (dB/dt Z Ch45) over a residual magnetic greyscale image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



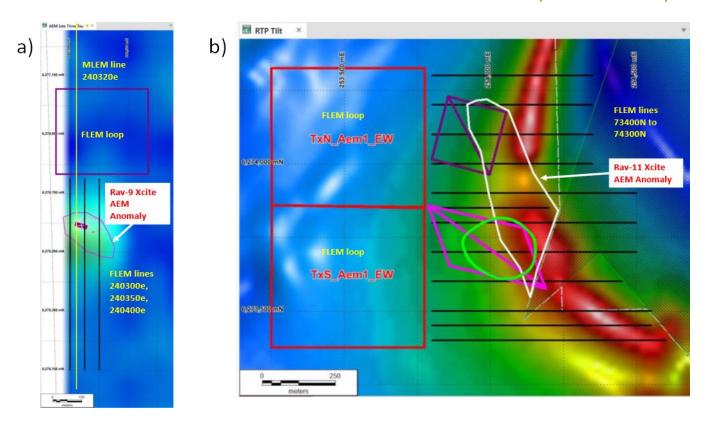


Figure 2 – a). MLEM and FLEM survey lines on AEM Late time Tau image for RAV 9 AEM target. See Figure 3 for results. Scale bar 100m

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



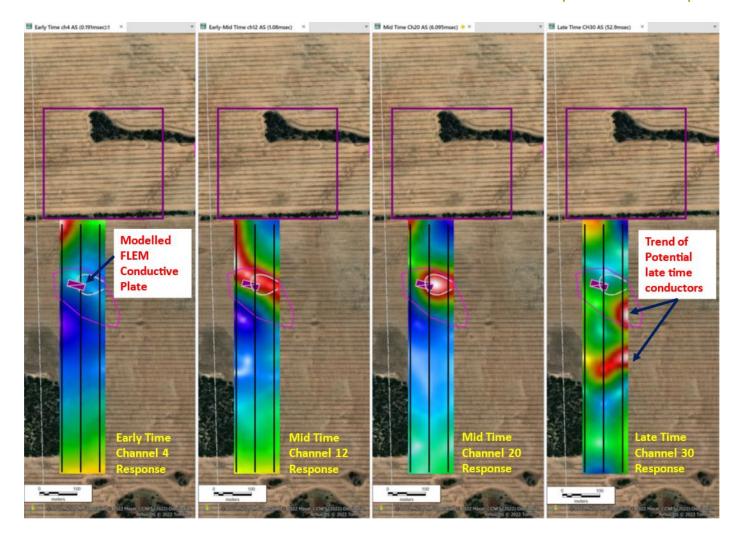


Figure 3 – Processed time channel images for Fixed loop data over RAV 9.

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 anomaly out line (magenta), Modelled plate (purple), Channel 20 anomaly outline (grey). Scale bar 100m.



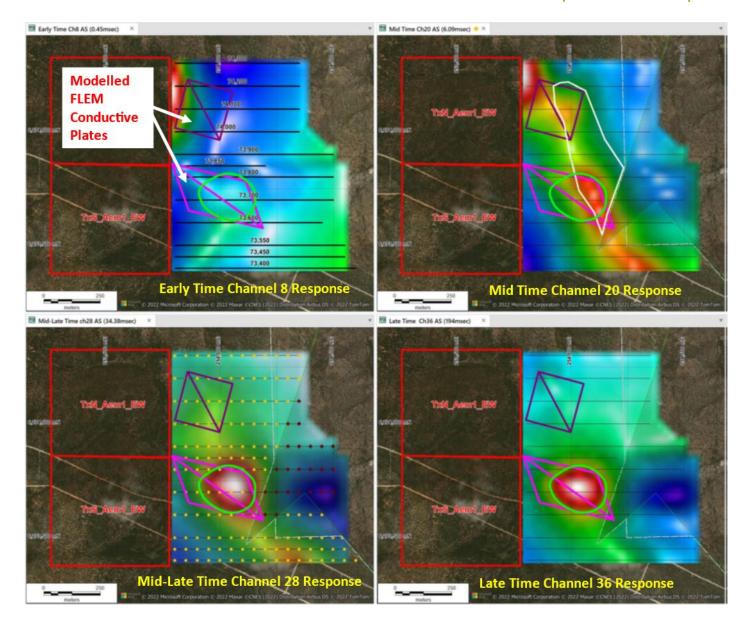


Figure 4 – Processed time channel images for the Fixed loop data over RAV 11. Demonstrating the development of the anomaly in time. Anomaly outline (lime) and modelled plates (S1: magenta, N1: purple). Transmitter loops (red) with receiver lines (black) & original RAV 11 AEM anomaly (white). Scale bar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



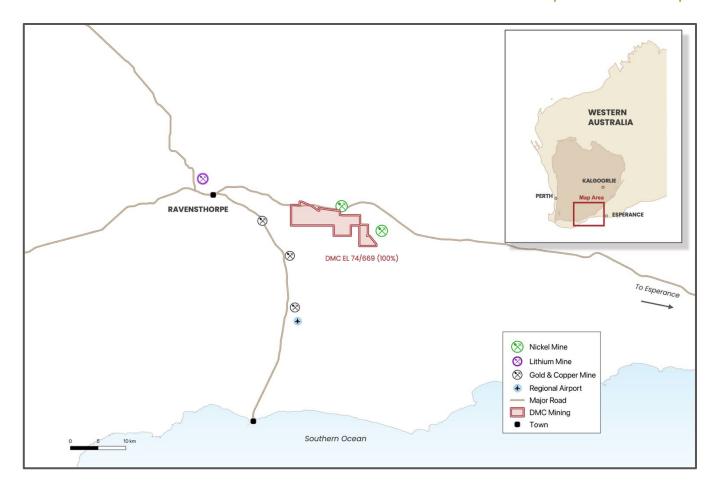


Figure 5 – Ravensthorpe Nickel Project E74/669 – Regional Map.



#### Fraser Range (DMC 100%) - Lithium

During the quarter, The Company announced it had uncovered lithium potential within its 100% owned Fraser Range Projects (Refer ASX Release 19<sup>th</sup> December 2022 – DMC Uncovers Lithium Potential Within Fraser Range)

The comprehensive review of historical geological and geochemical data was completed in conjunction with a remote sensing spectral review to further understand Li potential.

#### **Key Highlights**

- The Fraser Range has the potential to host LCT and NYF pegmatites, along with magmatic Ni - Cu sulphide deposits within the metamorphic rocks of the Albany-Fraser Orogen.
- The Biranup Zone Metagranitic Unit and the Eddy Suite (of which DMC holds ~620km²) have both been identified by GSWA as potential pegmatite trap lithologies, as well as hosting pegmatites as a minor occurrence.
- Historical mapping surrounding the Fraser Range tenements have shown to identify pegmatites in outcrop and drilling associated with similar geological conditions as the Fraser Range tenements.
- The limited historical geochemistry data does show minor, discrete, anomalies for Li but also exhibits elevated associated pathfinder elements Rb & Be.
- Sentinel-2 VNIR/SWIR spectral processing with multivariate techniques shows several discrete targets for Li potential based on surrounding known Li occurrences.



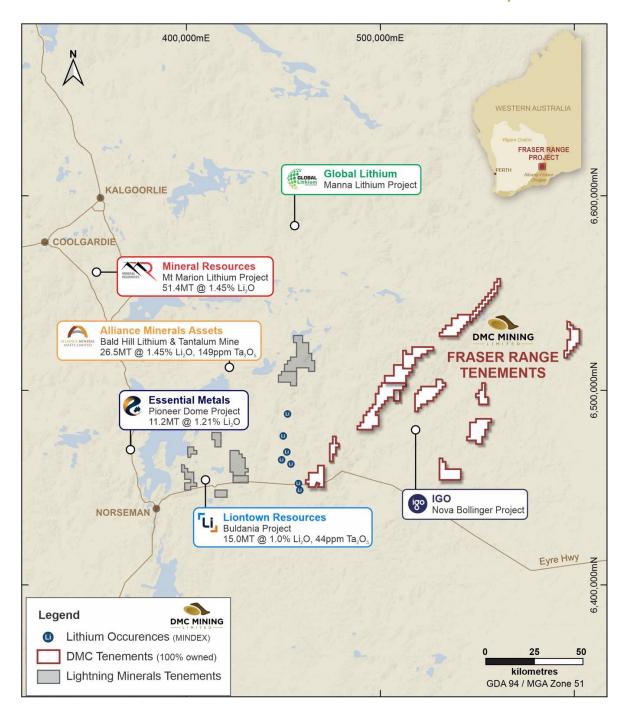


Figure 6: DMC Fraser Range Tenements, Minedex Lithium Occurrences, and surrounding Li Resources.



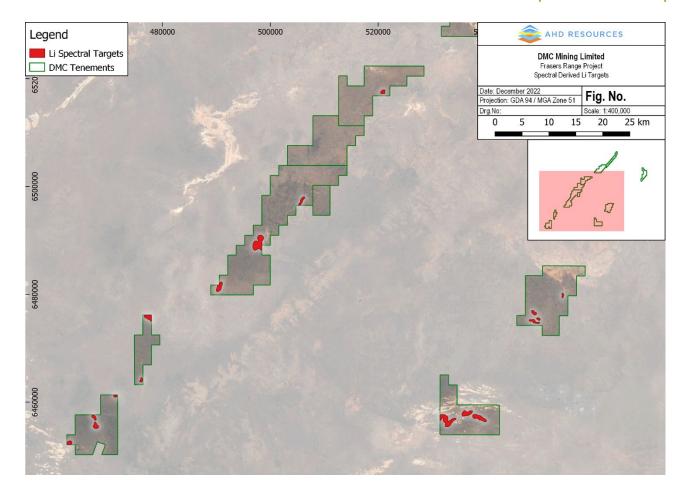


Figure 7: Follow-up Targets Defined from Spectral Processing.

A summary of the review has concluded the following:

- 1. The historical exploration over the tenement package did not focus sufficiently on pegmatite potential and hence data collection was limited (typically focused on gold) suggesting the tenement is under assessed for Li potential.
- 2. Discrete 30ppm Li samples within the tenements are shown to be spatially anomalous given the interpreted geology and are spatially related to elevated Rb, K, and Be (Beryllium). While these values are not high with respect to their absolute values, the impact of analytical method is believed to be affected by unconsolidated cover which was typically the sample medium. The ratio of Li to pathfinders is supporting evidence of elevated Li anomalies.
- 3. Where there has been focus on field mapping of outcrops, pegmatites have been interpreted (noted only outside of DMC tenements) and these maps suggest pegmatites could strike across the tenement package.
- 4. Spectral targeting has identified several discrete zones where multivariate analysis indicates that similar spectral signatures over surrounding Li occurrences is present within the tenement package.



#### Fraser Range (DMC 100%) Ni - Co - Cu

The Company continues to await results of ground geochemistry and ground geophysics surveys at the Fraser Range Project (FRP).

The surveys were over a number of high priority target areas consistent with potential for buried nickel-copper-cobalt mineralisation.

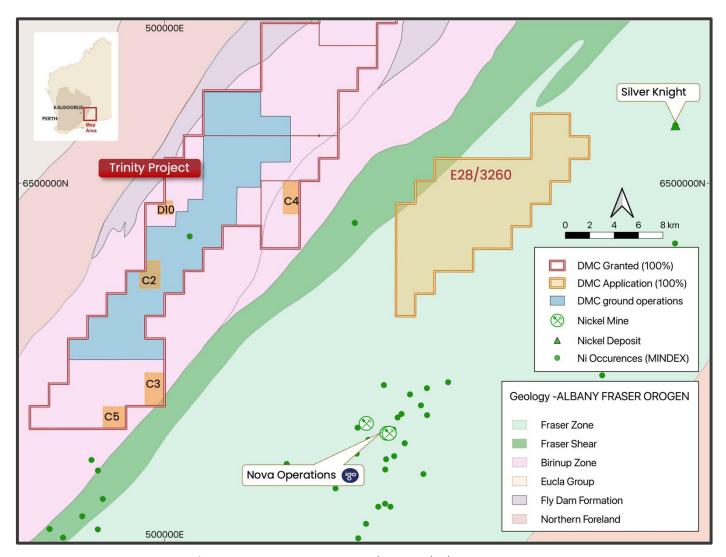


Figure 8 – Fraser Range Project – Priority Target Areas



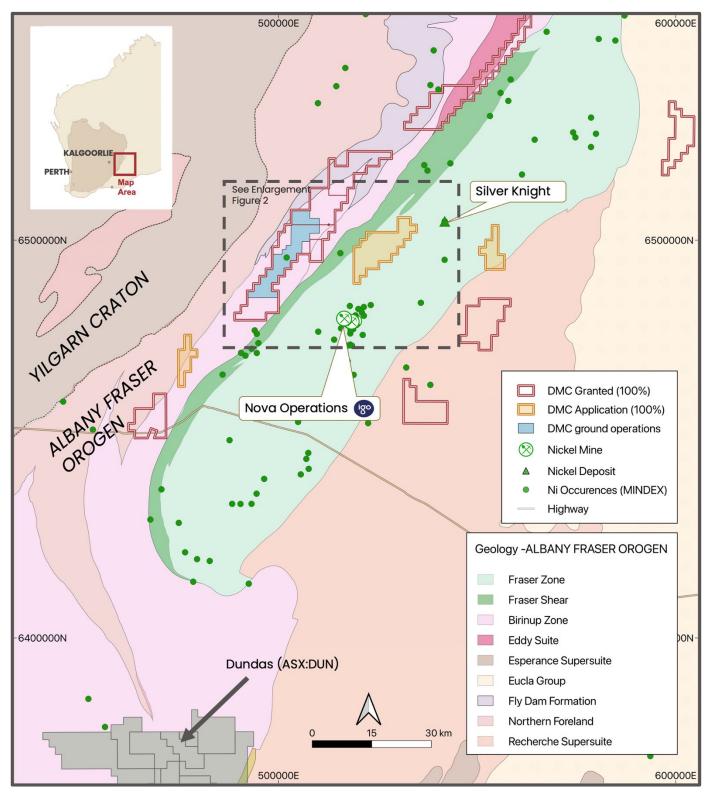


Figure 9 - Fraser Range Project Location Map



#### Gibb River Cu Project (DMC 100%) (In Application)

During the quarter The Company released results (rock chips) from a field reconnaissance and orientation survey at the Gibb River Cu Project (Refer ASX Release 25<sup>th</sup> November 2022 – Field Results Validate Historic Drilling at Gibb River)

#### Key Highlights;

- Results confirm Cu anomalism (up to 315 ppm Copper in rock samples) within shale units of the Pentecost Sandstone Formation, at the Middle to Lower member contact zone.
- Results confirm validity of 1970's rock sampling and percussion drilling carried out by Durack and Anglo Exploration, which also contained widespread copper anomalism around this contact.
- The Project comprises a prospective tenement package (~573km²) for Cu with previous drilling (**27 drill holes**) in the East Kimberley region of Western Australia (Refer Figure 11).
- **Diamond drillhole KCDD19001 Results expected Q1 2023.** This drillhole has historically logged chalcopyrite but was never assayed.
- The exploration model is for Zambian style sedimentary exhalative (SedEx) or Mississippi valley type (MVT) deposit around the Menuairs Dome.

EMX NSW 1 ('EMX' – a subsidiary of EMX Royalty Corp) completed a single diamond hole to 249.4m depth in the center of the Menuair Dome (KCDD19001) in 2019. This hole tested the crest of the dome for sedimentary hosted copper mineralisation within the Warton Sandstone, drilling 51.9m into the underlying Carson Volcanics. Drillhole KCDD19001 was not assayed at a laboratory, only spot pXRF analysis was conducted. GSWA co-funded this drilling. Upon initial photo revision of the KCDD19001 core, the following observations are noted;

- Potassium-feldspar fracture alteration noted from 200m.
- Copper sulphide fracture fill and veining from circa 224m to EOH.

**DMC** is awaiting assay results of KCDD19001. Figure 10 illustrates the photo interpretation of Cu sulphides in an example tray.



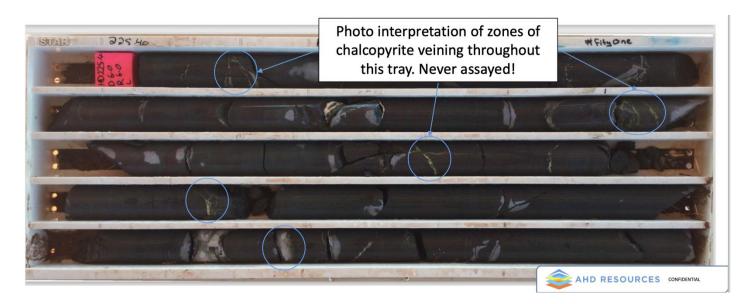


Figure 10 - KCDD19001 GSWA core photo of Tray #51 with interpreted Cu sulphide mineralisation

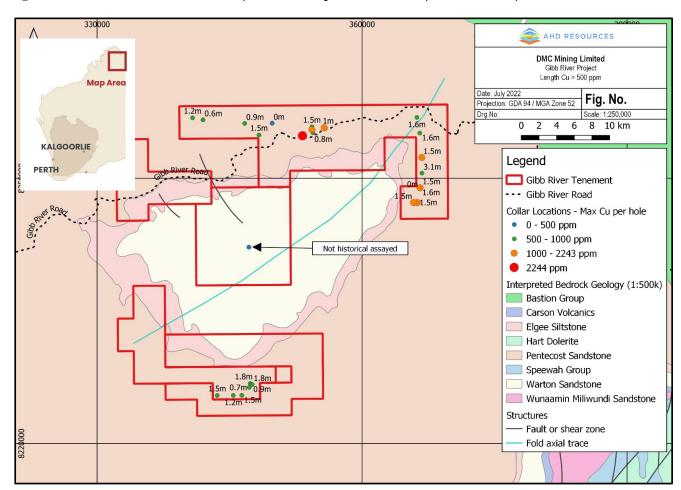


Figure 11 – Gibb River Cu Project location map, historic drill locations, Cu grade & Cu length Cu>500ppm.



#### **CORPORATE**

#### **Cash Holdings**

Cash on hand as the end of the quarter was \$2,785,158.

#### **Related Party Payments:**

Pursuant to item 6 in the Company's Appendix 5B – Quarterly Cashflow Report for the Quarter ended 31 December 2022, the Company made payments totalling \$98,665 to related parties and associates.

These payments relate to existing remuneration arrangements being Executive Chairman, Non-Executive Directors, Company Secretarial and Financial Accounting Services. All related party payments are consistent with remuneration arrangements detailed in the Prospectus dated 29 October 2021.

#### Information required by Listing Rule 5.3.1:

During the quarter the Company spent \$304,722 on exploration activities which were largely comprised of payments for ground geophysical surveys, and ongoing technical support at Fraser Range and Ravensthorpe Projects.

#### Information required by Listing Rule 5.3.2:

There were no mining production and development activities during the Quarter.

#### Information required by Listing Rule 5.3.3:

Project Name	Region	Tenement Number	Status	DMC Interest as at 30 Sept 2022	DMC Interest as at 30 Dec 2022
Trinity	Fraser Range (WA)	EL 28/2831	Granted	100%	100% <sup>2</sup>
Trinity	Fraser Range (WA)	E28/2883	Granted	100%	100% <sup>2</sup>
Trinity	Fraser Range (WA)	E28/2816	Granted	100%	100% <sup>2</sup>
Trinity	Fraser Range (WA)	E28/2815	Granted	100%	100% <sup>2</sup>
Enduro	Fraser Range (WA)	E63/1918	Granted	100%	100% <sup>2</sup>
Talon Ridge	Fraser Range (WA)	E28/2829	Granted	100%	100% <sup>2</sup>



Talon Ridge	Fraser Range (WA)	E28/2813	Granted	100%	100% 2
Hardtail	Fraser Range (WA)	E28/2814	Granted	100%	100% <sup>2</sup>
Propel	Fraser Range (WA)	E28/2830	Granted	100%	100% <sup>2</sup>
Propel	Fraser Range (WA)	E69/3592	Granted	100%	100% <sup>2</sup>
Ravensthorpe Nickel Project	Ravensthorpe (WA)	E74/669	Granted	100%	100% <sup>2</sup>
Bandalup Hill	Ravensthorpe (WA)	E74/758	Application	0%	100%
Enduro North	Fraser Range (WA)	E63/2255	Application	100%	100% <sup>2</sup>
Propel North	Fraser Range (WA)	E28/3242	Application	100%	100% <sup>2</sup>
Trinity East	Fraser Range (WA)	E28/3260	Application	100%	100% <sup>2</sup>
Gibb River Cu Project	Kimberley Region (WA)	E80/5781	Application	100%	100% 1
Gibb River Cu Project	Kimberley Region (WA)	E80/5782	Application	100%	100% 1
Gibb River Cu Project	Kimberley Region (WA)	E80/5783	Application	100%	100%1
Gibb River Cu Project	Kimberley Region (WA)	E80/5785	Application	100%	100% 1
Gibb River Cu Project	Kimberley Region (WA)	E80/5786	Application	100%	100%1

 $<sup>^{\</sup>rm 1}$  Held via DMC's 100% owned subsidiary, Romany Minerals Pty Ltd

 $<sup>^{2}\,\</sup>mbox{Held}$  via DMC's 100% owned subsidiary, Isker Mining Pty Ltd



#### Information required by Listing Rule 5.3.4:

DMC provides the following disclosures required by ASX Listing Rule 5.3.4 regarding a comparison of its actual expenditure to date since listing on 22 December 2021 against the 'use of funds' statement in its Prospectus dated 29 October 2021.

Total Funds	5,440	
Funds raised from the Offer	5,000	
Pre IPO funds	440	
Funds Available	\$'000	

	Use of Funds \$'000	Actual \$'000	<b>Variance</b> \$'000
Expenditure Item	2 years – as per prospectus	22.12.21 – 31.12.22	Use of Funds Vs Actual
Expenses of the Offer	(261)	(189)	73
Lead Manager Fee	(300)	(319)	(19)
Acquisition Costs of Tenements	(106)	(83)	24
Exploration Expenditure	(2,775)	(794)	1,981
Administration Costs	(1,655)	(959)	695
Working Capital	(343)	(100)	2431
TOTAL	(5,440)	(2,443)	2,997

The Company notes the following differences between Variance and the Company's expected Variance at this time following listing on the ASX.

<sup>&</sup>lt;sup>1</sup> Variance incurred during the December 2022 quarter relates to due diligence expenditure related to new tenement applications.



#### **Announcements**

Investors are directed to the following material announcements (available at www.dmcmining.com.au) made by DMC during 2022 & 2023 for full details of the information referenced in this Quarterly Report.

Date	ASX Release
25 January 2023	Ravensthorpe Nickel RAV 9 & RAV 11 Ready for Drill Testing
19 December 2022	DMC Uncovers Lithium Potential Within Fraser Range
25 November 2022	Field Results Validate Historic Drilling at Gibb River
5 October 2022	DMC Increases Critical Metals Project Tenure in Fraser Range
31 July 2022	DMC June Quarter Activities Report
26 July 2022	Exploration to Commence
21 March 2022	Exploration Programme to Test Priority Targets at Fraser Range
10 March 2022	Multiple Ni Targets from EM Survey at Ravensthorpe
12 January 2022	Exploration commenced – Ravensthorpe Nickel Project



#### **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.

#### Competent Person's Statement - Gibb River Cu Project

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.

#### **Forward Looking Statements**

Certain information in this document refers to the intentions of DMC, however these are not intended to be forecasts, forward looking statements or statements about the future matters for the purposes of the Corporations Act or any other applicable law. Statements regarding plans with respect to DMC's projects are forward looking statements and can generally be identified by the use of words such as 'project', 'foresee', 'plan', 'expect', 'aim', 'intend', 'anticipate', 'believe', 'estimate', 'may', 'should', 'will' or similar expressions. There can be no assurance that the DMC's plans for its projects will proceed as expected and there can be no assurance of future events which are subject to risk, uncertainties and other actions that may cause DMC's actual results, performance or achievements to differ from those referred to in this document. While the information contained in this document has been prepared in good faith, there can be given no assurance or guarantee that the occurrence of these events referred to in the document will occur as contemplated.

Approved for release by the Board of Directors

For further information, please contact:

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#### **Executive Chairman**

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#### **Stewart Walters**

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## **About DMC MINING LIMITED (ASX:DMM)**

DMC Mining is a dedicated critical metals explorer in Western Australia. The large tenement holding (~1,050km²) throughout the Fraser Range and at Ravensthorpe, is 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 battery metals.

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 critical metals 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 31 Dec 22)

~A\$2.79mill