

# QUARTERLY ACTIVITIES REPORT for the Period Ending 30 June 2022

#### Highlights Tennant Creek Projects

- Visual Copper intersected in follow-up drilling at Hermitage
  - 38m interval of new mineralisation consisting of malachite, native copper, and chalcopyrite/ bornite(?) in HERCDD005 (from ~38m down hole), hosted in brecciated hematite-quartz- jasper (as shown in Photo 1).
  - 57m interval of mineralisation consisting of native copper, malachite, and chalcopyrite in HERCDD006 (from 127m), hosted in brecciated hematite-quartz-jasper ironstone, with intermittent intervals of chloritehematite and vuggy hematite.

#### High Grade Gold Resource for Mauretania

- Shallow, high grade maiden Mineral Resource Estimate (MRE) for the Mauretania gold deposit at Tennant Creek:
  - 256,216t at 3.5g/t Au for 28,974oz Au

#### Successful NTGS Co-Funding Collaboration Grants

- Emmerson was awarded co-funding for three Geophysics and Drilling programs for:
  - Golden Forty South aimed at refining the processing of geophysical anomalies to more accurately pinpoint drill targets.
  - Golden Forty East –a diamond drill program aimed at discovering extensions to the historic, highgrade Golden Forty mine.
  - High-Definition Drone Magnetic Survey in the Northern Project Area
    – aimed at building on the
    success of flying drone magnetics to target new gold and copper mineralisation.
- Visual Gold and Copper Intersected at Hermitage
  - o The latest drillhole at Hermitage (HERCDD010) reveals multiple intersections of:
    - Extensive malachite in voids and vugs within hematite ironstone (from 74m);
    - Native copper both in the ironstone and as vug fill;
    - Visible gold in massive hematite-magnetite-quartz ironstone;
    - **Chalcopyrite** as veins, fractures, and cement in quartz-dolomite-hematite hydrothermal breccia (below the fault) and as blebs (to 190m); and
    - Chalcopyrite and bornite in stockwork quartz veins, fractures and stringers that gradually grade to minor blebs/specks of chalcopyrite (at 222m), as shown in Photo 2.

#### NSW Copper-Gold Project Advances

• Kiola project awarded co-funding drilling grant by the NSW Government.

#### Strong Balance Sheet – Fully Funded for 2022-23 Drilling

- Successful Capital raising of \$5.22m, before costs.
- Cash held as at 30 June 2022 of \$9.0m.

#### **Emmerson Resources Limited**

ABN 53 117 086 745



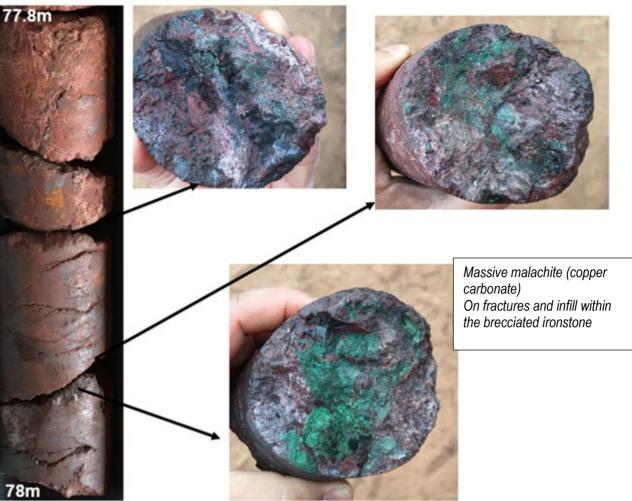


Photo 1: Examples of the new zone of mineralisation in HERCDD005.



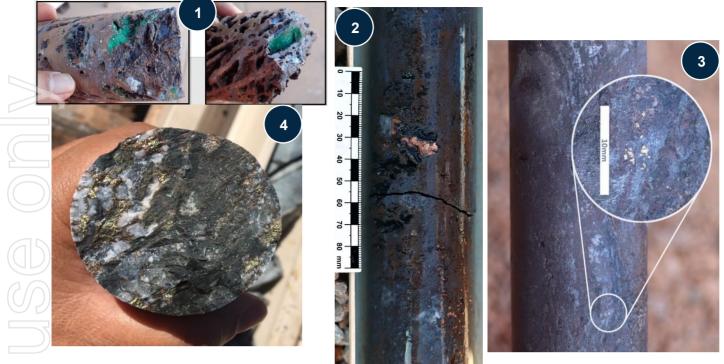


Photo 2: Examples of the four main zones of mineralisation intersected in HERCDD010 (from shallow to deep):

Top – malachite (copper carbonate) in hematite ironstone with voids/vugs (from 83m).

Right – native copper (dark brown and brassy color) in hematite-magnetite ironstone and vugs (from 130m).

Far right – free disseminated gold in hematite-magnetite-quartz ironstone (from 165m).

Bottom left – **new zone** (below the fault) of chalcopyrite (yellow) and bornite (purple/brown) in quartz stockwork veins (from 190m).

#### Emmerson's Managing Director, Rob Bills commented:

"Great progress continues on a number of fronts – the most exciting being at Emmerson's 100% owned Hermitage project which is shaping up as one of our best copper-gold discoveries – we eagerly await the assay results

The next quarter will build on our emerging gold royalty business with drilling commencing in the Joint Venture area at Golden Forty - an historic high-grade gold mine. Emmerson has identified several new targets at Golden Forty east and south that have the potential of adding further high-grade gold and if successful, advancing to the mining schedule which currently includes the Mauretania, Chariot and Black Snake resources.

Noting that Emmerson receives a 6% gold production royalty on any declared mine within the JV areas. Our emerging royalty business shields our shareholders from both the capital and operating expenditures plus the associated risks with moving from discovery into production... particularly relevant in the current environment where many producers are reporting escalating AISC (all in sustaining costs)."



#### TENNANT CREEK: discovering high grade gold, copper, and cobalt projects from our 100% owned tenements plus building the pipeline of mining projects with Strategic Alliance funding to generate future low risk, royalty streams

#### Mineral Resource Estimate Declared for the Mauretania Gold Deposit

A maiden Mineral Resource Estimate (MRE) of 28,974 ounces of gold was reported for the Mauretania Gold Project (ASX: 6 April 2022) (Figures 1 & 2). The MRE is an important part of the mining studies being undertaken by JV partner Tennant Consolidated Mining Group (TCMG) and adds to the previously announced Chariot MRE; with a view to commencing future mining and processing.

A total of 28,974 ounces of gold have been estimated and classified as Indicated and Inferred under the JORC 2012 Code. The MRE (Table 1) is reported above a 0.5g/t gold cut-off grade and above the 190mRL (within 140m of surface).

Mauretania MRE at a cut-off grade 0.5 g/t gold, above 190mRL						
Classification	Tonnes (K)	Gold grade (g/t)	Ounces (K)			
Indicated	159	4.8	25			
Inferred	97	1.4	4			
Total	Total 256		29			

#### Table 1: Mauretania Mineral Resource Estimate

Note: Inconsistencies in total tonnage and ounces reporting are due to rounding

The Mauretania orebody remains open and yet to be explored at depth. For instance, the recently announced intersection from MTDD010 of 3.95m at 57g/t gold and 0.23% copper from 207m (ASX: 5 July 2021) sits 70m below the base of the currently reported MRE (Figure 3). The recent results from the high-resolution drone geophysical survey supports the interpretation of the host ironstone continuing at depth.

The Mauretania MRE is reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC Code) and the Australian Securities Exchange Listing Rules.

#### Geology and Geological Information

Mauretania is a blind discovery made by Emmerson from recognising that high grade gold and copper can be associated with predominantly hematite ironstones along major structures. The mineralisation occurs within a structurally controlled, pipe-like ironstone, which has a sub-vertical plunge and presents a challenging target to fully delineate from surface drilling. Additionally, up until the advent and recent application of the high-resolution aeromagnetic drone surveys, these hematite dominant deposits were previously overlooked due to their relatively subtle magnetic response.

Mineralisation in the oxide zone (above 190mRL) at Mauretania is hosted in brecciated hematite-rich ironstone, locally vuggy, and associated with jasper–quartz ± magnetite. The gold mineralisation in the primary zone (below 190mRL) is hosted in brecciated magnetite–hematite–quartz ironstone and within the chlorite-hematite-magnetite alteration occurring on the footwall.

#### Visual Copper Intersected in Follow-up, Phase 2 Drilling at Hermitage

Discovery RC drill hole HERC003 (the phase 1 drill program) intersected 116m at 3.4% copper and 0.88g/t gold (ASX: 28 March 2022). Drill hole HERCDD005 (phase 2 drill program) intersected a previously unknown ironstone (Figure 4) that contains a **38m** – interval of mineralisation consisting of malachite, native copper, and chalcopyrite  $\pm$  bornite(?) (ASX: 10 May 2022) (Photo 1). This intersection is awaiting assay and occurs 38m down hole and is hosted within a brecciated hematite-quartz- jasper ironstone with malachite occurring along fractures (up to 2% volume), aggregates of native copper (up to 2% volume) and blebs of chalcopyrite  $\pm$  bornite(?) (up to 2% volume). This new zone of mineralisation occurs some 40m to the north of the previously defined, central ironstone which was intersected at 155m (down hole). And where a 7m interval of chalcopyrite mineralisation (up to 2% volume) occurs in stockwork quartz veins hosted by chlorite-hematite ironstone, before being truncated by a late fault.



In addition, diamond drill hole HERCDD006 intersected the central ironstone and **57m interval of mineralisation consisting of native copper, malachite, and chalcopyrite** from 127m down hole (ASX: 10 May 2022). This intersection is awaiting assay and is hosted in brecciated hematite-quartz-jasper ironstone, with intermittent intervals of chlorite-hematite and vuggy hematite. The mineralisation consists of variable amounts of native copper and malachite (up to 2% volume) in the upper portion and blebs plus stringers of chalcopyrite (up to 2% volume) within quartz stockwork veins in the lower zones.

All visual volume percent estimates are approximate only and accurate values will be reported once assay results are returned from the laboratory. Significant delays are being experienced at the laboratory with first assay results likely available in late July 2022.

The true thickness of these various copper zones identified to date remain unknown and will require further drilling to better delineate their full spatial extent, as it is becoming increasingly apparent that there are a number of both shallow secondary and also deeper primary copper targets within the Hermitage project.

Hermitage is one of a cluster of prospects that occurs within the northern corridor at Tennant Creek. The other prospects of North Star, Jasper Hills, Katherine Star and Northern Star, Edna Beryl, Thrace, and Macedon are contained within ML30177 and MLC705 respectively – both 100% owned by Emmerson and excluded from the joint venture earn-in. These prospects occur along the northern gravity corridor, within denser, hematitic shales, jasper, and ironstones (Figure 5).

#### Visual Gold and Copper Mineralisation in Follow-up, Phase 2 Drilling

The most recent diamond drill hole HERCDD010 (phase 2 program) was an angled (-73 degree) scissor hole designed to test beneath the post mineral fault that was encountered in discovery hole HERC003 and HERCDD005 (Figure 4) (ASX: 14 June 2022).

Significantly, HERCDD010 has revealed that the upper copper zone grades to disseminated gold (with visible gold, Photo 2) hosted in massive and brecciated hematite-magnetite-quartz before encountering the fault/shear zone from 171m to 180m (down hole).

Beneath the fault, an 11m wide zone of quartz-dolomite-hematite hydrothermal breccia that hosts chalcopyrite as both blebs and matrix fill (up to 2% volume) was intersected. Followed by a new style of mineralisation consisting of stockwork, chalcopyrite-bornite quartz veins (up to 2% volume) and fractures that gradually grade out to minor blebs/specks of chalcopyrite at 222m (down hole ).

As is the case across the industry, we continue to experience significant delays in the turnaround of assay results from the laboratory and now expect the first results from drill hole HERC005 to be in late July 2022 and the remainder of the holes in late August 2022. All visual volume percentage estimates are approximate only and accurate values will be reported once assay results are returned from the laboratory.

Other drill holes now completed in Phase 2 drilling include:

- HERCDD006 which intersected hematite-jasper-quartz ironstone from 127m to 184m with visible malachite and native copper in the oxide zone and chalcopyrite blebs/stringers at depth;
- HERC008 intersected ironstone from 53m to 103m with visible malachite grading to chalcopyrite;
- HERC009 intersected the main ironstone at 96m and traversed vuggy hematite and jasper-hematite with malachite blebs until the hole was terminated due to drilling difficulties at 137m;
- HERC011 intersected the main ironstone from 70m to 131m with malachite blebs from 70m to 75m; and
  - HERC012 intersected the main ironstone from 88m to 137m with visible disseminated blebs of malachite and chalcopyrite indicating the mineralisation and ironstone is still open to the east.

The faults encountered in this drilling are common across the TCMF and are likely post mineral thrust faults as seen at the nearby North Star and Jasper Hills projects. Typically, they have relatively small displacements and the ironstones and mineralisation continue at depth, which has now been confirmed in drill hole HERCDD010.

The mineralisation encountered to date is hosted in multiple, east-west striking, structurally controlled, ironstone (hematitemagnetite) bodies that are steeply north plunging and remain open in all directions. Their tabular to pipelike geometry limits their surface (horizontal) footprint, with the grades and likely plunge extent the subject of the pending assay results and further drilling. Noting that some of the major historical deposits in the TCMF have similar surface/plan dimensions as Hermitage, with the largest being Warrego (1.5moz gold and 173,000t copper) where the host ironstone had dimensions in plain view of approximately 200m by 50m, and a plunge of +600m.



#### Successful NTGS Co-Funding Collaboration Grants Supports Discovery

Emmerson Resources has been successfully awarded co-funding grants through the Geophysics and Drilling Collaborations (GDC) program administered by the Northern Territory Geological Survey (NTGS).

The GDC is a competitive grants program funded by the Northern Territory (NT) Government's \$9.5 million per annum Resourcing the Territory initiative. Testament to the quality of the proposals submitted by Emmerson, the program will co-fund Emmerson's projects to address geoscientific knowledge gaps, advance exploration activity, and support the discovery and development of resources in the Territory.

Emmerson took part in the Round 15 Geophysics and Drilling Collaborations program, with three submissions successfully made and awarded for:

- Golden Forty South aimed at refining the processing of geophysical anomalies to more accurately pinpoint drill targets.
- Golden Forty East a diamond drill program aimed at discovering extensions to the historic, high-grade Golden Forty gold mine.
- High-Definition Drone Magnetic Survey in the Northern Project Area aimed at building on the success of flying drone magnetics to target new gold and copper mineralisation.

Emmerson's recent discovery drill hole at the 100% owned Hermitage (116m at 3.4% copper and 0.88g/t gold in drill hole HERC003) (ASX: 28 March 2022) is testament to the potential of applying new technology and ideas to reinvigorate the rich discovery history across the TCMF. All three high impact programs will commence shortly and directly benefit the understanding of these high-grade gold-copper-cobalt, iron-oxide deposits.

#### NSW: hunting for large copper-gold porphyry deposits

#### Kiola Project – High Impact Drilling in Late 2022

Emmerson's Kiola project is one of the **highest ranked**, **early-stage gold-copper projects** in the portfolio and is centred on the 15km<sup>2</sup> Kiola Geochemical Zone (KGZ) (Figure 6). It encompasses favourable Ordovician age rocks that display anomalously high gold and copper geochemistry plus historic workings. Recent work has confirmed that the KGZ contains many of the attributes of world class porphyry gold-copper mineralisation and is divided into a northern area centred on the Nasdaq skarn and a southern area around the South Pole, Kiola and Right-Hand Creek mine.

Emmerson's multifaceted field program has included soil and rock chip geochemistry, with rock chip samples returning up to **19.6g/t gold and 2.16% copper** (ASX: 12 March 2020). It has also utilised aspects of the ARC Linkage project such as "green rock alteration" and age dating to refine the subsurface 3D model and provide vectors to the core of the copper and gold mineralisation. This has provided the framework for linking the surface geology and mineralisation within the 15km<sup>2</sup> KGZ to a unifying model at depth.

A recent 3D model derived from a large geophysical survey (MIMDAS) was a significant investment and has produced some very exciting results. In that the copper and gold prospects at the surface are now interpretated as part of a much larger, potentially mineralised system at depth, stretching over 5km from the Nasdaq Skarn in the north to the Yards prospect in the south (Figure 7).

#### Kiola Project Awarded New Frontiers Drilling Grant

The New Frontiers Cooperative Drilling grants program by the NSW Government encourages private exploration drilling in the search of high value mineral deposits in prospective underexplored areas of NSW and where companies are using the latest technology to identify new deposits.

This program is a co-funded initiative where the NSW Government provides up to 50% of direct drilling costs for individual projects. Emmerson is pleased to advise that it has recently been awarded a grant of \$118,000 for the upcoming drilling at Kiola.

The keenly anticipated drill program at Kiola has been beset by COVID restrictions, operational and weather limitations, however, drilling is now scheduled to commence later in the year.



#### CORPORATE: funding in place to support growth and future exploration programs

#### \$5.2m Raising to Accelerate Exploration Activities

Emmerson Resources completed a highly successful \$5.0m placement to both existing and new institutional and sophisticated investors (ASX: 14 April 2022).

Under the Placement, Emmerson issued 43,478,261 fully paid ordinary shares ("Shares") at an issue price of \$0.115 per Share.

In addition to the Placement, a Share Purchase Plan ("SPP") was undertaken through which existing shareholders were offered the opportunity to acquire up to \$30,000 worth of new Shares on the same terms as the Placement to raise up to a further \$1.5 million (before costs). Upon closing of the SPP on 13 May 2022, and with the deterioration of market conditions, few shareholders elected to take up the offer and the Company received applications for 1,913,038 new fully paid ordinary shares for a total subscription of \$220,000 (ASX: 20 May 2022).

The Placement and SPP price represented an 11.4% discount to the 30-day calendar Volume Weighted Average Price (VWAP) to 11 April 2022.

#### Quarterly Cashflow Report

The Quarterly Cashflow Report (Appendix 5B) for the period ending 30 June 2022 was released to ASX the same day as this report and provides an overview of the Company's financial activities. Significant items in the Appendix 5B include:

- Proceeds from issue of shares of \$5,220,000 less related transaction costs of \$337,000.
- Exploration expenditure for the reporting period of \$889,000 which was fully offset by reimbursement from Joint Venture Partners.
- Corporate and other operating expenditure, net of other income, totalling \$302,000.
- Total amount paid to directors of the entity in the period (item 6.1 of the Appendix 5B) of \$123,000 which includes salary, directors' fees, consulting fees and superannuation.

#### Key Activities Expected in September Quarter 2022

#### • Northern Territory:

- o Completion of Phase 2 drilling at the Hermitage discovery and assay results.
- o Continued native title negotiations to facilitate drilling of the nearby Jasper Hills copper-gold-cobalt project.
- Generation of new projects in the Southern Project Area (the SPA is the subject of the Exploration Earn-In and Joint Venture EEJV) utilising the recent high-resolution drone geophysical survey.
- Drilling for extensions and updating the resource model for the Golden Forty Mine and surrounds in the Southern Project Area (part of the EEJV).
- Further geophysical drone surveys across key areas of the Northern Project Area.
- New South Wales:
  - Commencement of drilling at Kiola subject to securing a drilling contractor and within the constraints of the weather and COVID protocols.



#### **Announcements**

Rob Bills	Media enquiries
For further informatio	n, please contact:
5 April 2022	Annual Geoscience Exploration Seminar Presentation
6 April 2022	High-Grade Gold Resource for Mauretania at Tennant Creek
12 April 2022	Trading Halt
14 April 2022	\$6.5M Raising to Accelerate Exploration Activities
14 April 2022	Proposed Issue of Securities – ERM
14 April 2022	Proposed Issue of Securities – ERM
14 April 2022	Proposed Issue of Securities – ERM
26 April 2022	Notice Under Section 708A(5)(e)
26 April 2022	Application for Quotation of Securities – ERM
26 April 2022	Change of Director's Interest Notice
27 April 2022	Share Purchase Plan Opens
27 April 2022	Update - Proposed Issue of Securities – ERM
29 April 2022	Quarterly Cash Flow Report
29 April 2022	Quarterly Activities / Appendix 5B Cash Flow Report
4 May 2022	RIU Sydney Resources Round-Up Investor Presentation
10 May 2022	Visual Copper Intersected in Drilling at Hermitage Project
10 May 2022	Notification Regarding Unquoted Securities – ERM
20 May 2022	Results of Share Purchase Plan
20 May 2022	Application for Quotation of Securities – ERM
24 May 2022	Change of Director's Interest Notice
10 June 2022	Successful NTGS Co-Funding Collaboration Grants for TC
14 June 2022	Visual Gold and Copper Intersected in Drilling at Hermitage
15 June 2022	Australian Gold Conference Presentation
15 June 2022	Investor Update

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#### This release has been authorised by the Board of Emmerson Resources Limited.



#### About Emmerson Resources, Tennant Creek and New South Wales

Emmerson has a commanding land position and is exploring the Tennant Creek Mineral Field (TCMF), one of Australia's highestgrade gold and copper fields that has produced over 5.5Moz of gold and 470,000t of copper from deposits including Warrego, White Devil, Orlando, Gecko, Chariot, and Golden Forty. These high-grade deposits are highly valuable exploration targets, and to date, Emmerson's discoveries include high-grade gold at Edna Beryl and Mauretania, plus copper-gold at Goanna and Monitor. These discoveries were found utilising new technology and concepts and are the first discoveries in the TCMF for over two decades.

## A recent rush of new tenement applications by major and junior explorers in the Tennant Creek district, not only highlights the prospectivity of the region for copper and gold but also Emmerson's strategic 1,700km<sup>2</sup> land holding.

In addition, Emmerson is exploring across four early-stage gold-copper projects in NSW, identified (with our strategic alliance partner Kenex/Duke Exploration) from the application of 2D and 3D predictive targeting models – aimed at increasing the probability of discovery. Duke can earn up to 10% (to pre BFS) of any project generated providing certain success milestones are met.

The highly prospective Macquarie Arc in NSW hosts >80Moz gold and >13Mt copper with these resources heavily weighted to areas of outcrop or limited cover. Emmerson's four exploration projects contain many attributes of the known deposits within the Macquarie Arc but remain underexplored due to historical impediments, including overlying cover (farmlands and younger rocks) and a lack of effective exploration.

#### About Tennant Consolidated Mining Group (TCMG)

TCMG is a subsidiary of TA Private Capital Security Agent Ltd and advised by TransAsia Private Capital (TA), a Hong Kong headquartered assets management firm, best known for its private debt solutions spanning trade finance through mid-tenor supply chain financing to mid to longer tenor term and project loans. TA has a diverse portfolio of capital deployed globally including within the Australian mining sector.

TCMG's focus is to rationalise assets in the Tennant Creek area, with the objective of undertaking detailed studies with the ultimate goal of developing a centralised processing facility commercialising known mill feed sources in and around Tennant Creek.

#### Regulatory Information

The Company does not suggest that economic mineralisation is contained in the untested areas, the information contained relating to historical drilling records have been compiled, reviewed, and verified as best as the Company was able. As outlined in this announcement the Company is planning further drilling programs to understand the geology, structure, and potential of the untested areas. The Company cautions investors against using this announcement solely as a basis for investment decisions without regard for this disclaimer.

#### **Competency Statement**

The information in this report that relates to database used in the estimation is based on information compiled by Dr Ana Liza Cuison, MAIG, MSEG. Dr Cuison is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Cuison is a full-time employee of the Company and consents to the inclusion in this report of the matters based on her information in the form and context in which it appears.

The information in this report that relates to Mineral Resource estimate and classification for the Mauretania Gold deposit is based on information compiled by Justine Tracey. Justine Tracey is an employee of Optiro Pty Ltd, and a Chartered Professional of the Australasian Institute of Mining and Metallurgy. Justine Tracey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the JORC Code')". Justine Tracey consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

#### **Cautionary Statement**

The Exploration Targets described above are conceptual in nature. It must be noted that that there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

#### Forward-Looking Statements

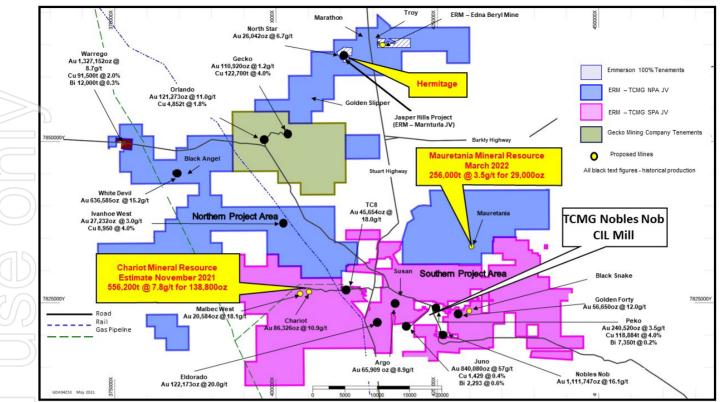
This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Emmerson Resources Limited's anticipated future events, including future resources and exploration results, and other statements that are not historical facts. When used in this document, the words such as "could, "estimate", "plan," "expect," "intend,"



"may", "potential," "should," and similar expressions are forward-looking statements. Although Emmerson believes that its expectations reflected in these forward- looking statements are reasonable, such statements involve risks, assumptions, uncertainties, and other important factors, many of which are beyond the control of the Company, and which may cause actual results, performance, or achievements to differ materially from those expressed or implied by such statements.

The Company does not undertake any obligation to update forward-looking statements even if circumstances or management's estimates or opinions should change. Forward-looking statements are provided as a general guide only and should not be relied on as an indication or guarantee of future performance. Given these uncertainties, investors should not place undue reliance on forward-looking statements. The Company cautions investors against using this announcement solely as a basis for investment decisions without regard for this disclaimer.





**Figure 1:** Map of the Emmerson Tennant Creek Project showing the Northern Project Area (NPA), and Southern Project Area (SPA), which is covered by the Exploration (EEJV) and Small Mines (SMJV). Yellow dots are potential small mines and/or remnant resources. Noting that Emmerson retains 100% of the Jasper Hills, Hermitage, North and Northern Star, Katherine Star, Thrace, Macedon and Edna Beryl projects.

Note:

Quoted production from major historical deposits after Ahmad, M. and Munson, T.J. (2013). Geology and mineral resources of the Northern Territory, Special Publication 5, p. 9:37.

For Chariot mine and Malbec West mine, quoted production from Giants Reef Mill Reconciled Production to end of month September 2005 (internal report).



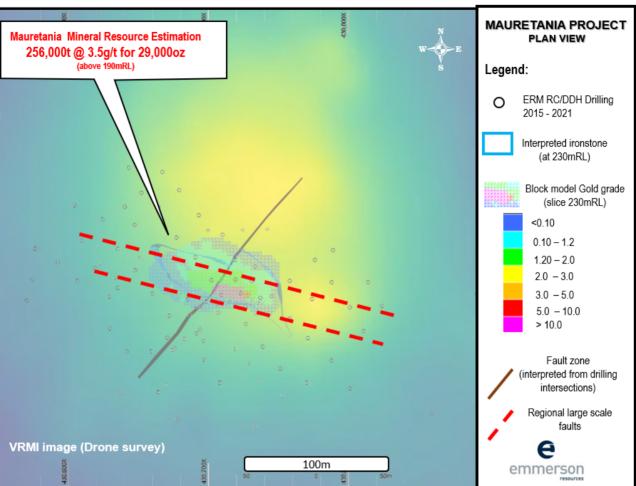
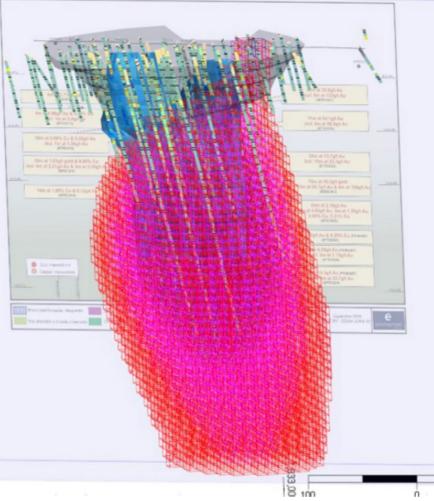


Figure 2: Plan view of Mauretania deposit and drill hole location. Also showing the grade colour at 230mRL and the interpreted ironstones, regional structures, and recent aeromagnetic survey.

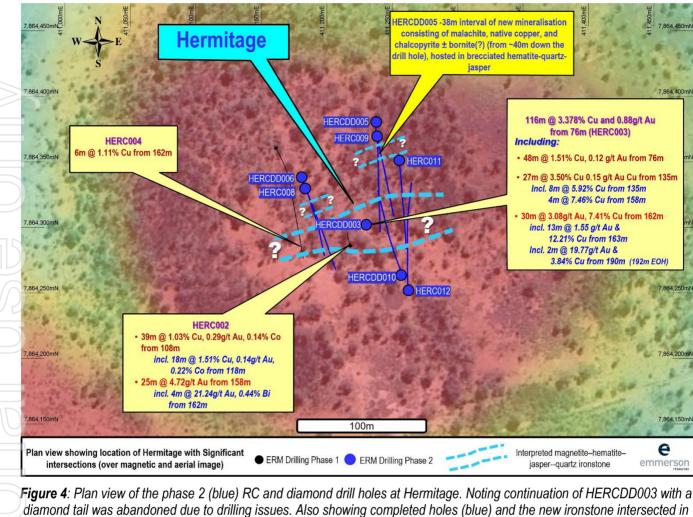






**Figure 3:** Mauretania Discovery – conceptual open pit (grey) and inversion model of the drone aeromagnetic survey (pink & red). Indicating potential for continuation of the magnetite- hematite ironstone down plunge. Also noting that recent drill hole MTDD010, some 70m below this MRE intersected 3.95m at 57g/t gold and 0.23% copper (from 207m, ASX: 5 July 2021).





HERCDD005.



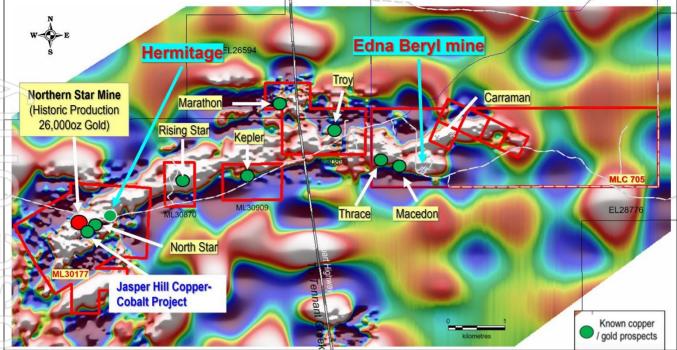
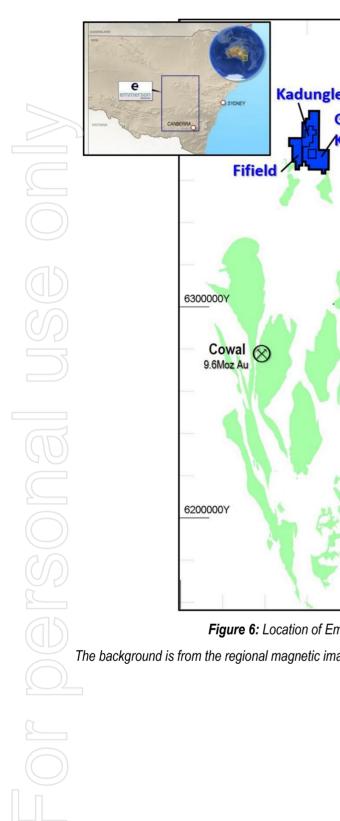


Figure 5: Map of the northern corridor with gold, copper, and cobalt projects. Background colour is the residual gravity map with white representing the northern gravity (high) ridge. Noting that ML30177 (Jasper Hills, Hermitage, North and Northern Star) plus MLC 705 (Edna Beryl, Thrace, and Macedon) are 100% owned by Emmerson.





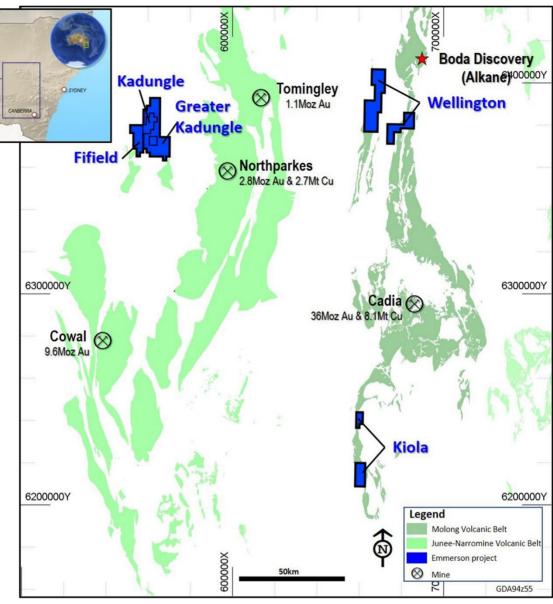
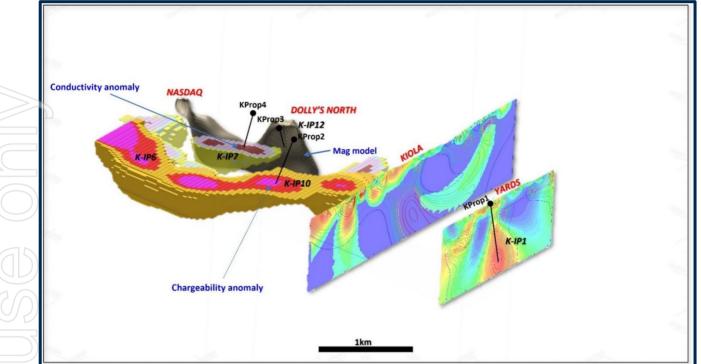


Figure 6: Location of Emmerson's NSW Projects (Lachlan Resources).

The background is from the regional magnetic image representing the Molong and Junee-Narromine Volcanic Belts of the Macquarie Arc.





**Figure 7:** Proposed drilling at Kiola shown on 3D and 2D MIMDAS Geophysical Model and inversions stretching over 5km from the mineralised Nasdaq skarn in the north to the Yards prospect in the south. Proposed drill holes (traces) include KProp 1 to 4. Noting the red reflects chargeable and conductive anomalies centred around the Dolly's North intrusive (which is also magnetic = black).



### Mining Tenements Held at 30 June 2022 (Northern Territory, Australia)

Tenement	Name	Interest %	Tenement	Name	Interest %	Tenement	Name	Interes %
EL10114	McDougall	100	ML30742	Black Cat	100	MLC38	Memsahib East	100
EL10124	Speedway	100	ML30743	True Blue	100	MLC380	Mulga 1	100
EL10313	Kodiak	100	ML30870	Rising Star	100	MLC381	Mulga 1	100
EL10406	Montana	100	ML30872	The Extension	100	MLC382	Mulga 1	100
EL23285	Corridor 2	100	ML30893	Troy	100	MLC383	Mulga 1	100
EL23286	Corridor 3	100	ML30909	Archmedes	100	MLC384	Mulga 2	100
EL23905	Jackie	100	ML30911	Wolseley	100	MLC385	Mulga 2	100
EL26594	Bills	100	ML30912	Ivanhoe	100	MLC386	Mulga 2	100
EL26787	Rising Ridge	100	ML30938	EXP195	100	MLC387	Mulga 2	100
EL27011	Snappy Gum	100	ML30945	Metallic Hill	100	MLC4	Peko Extended	100
EL27408	Grizzly	100	ML31074	Rocky Range	100	MLC406	Comet	100
EL27537	Chappell	100	ML31123	Gibbet 1	100	MLC407	Comet	100
EL27538	Mercury	100	ML31651	White Devil	100	MLC408	Comet	100
EL28601	Malbec	100	ML32214	Mauretania	100	MLC409	Comet	100
EL28602	Red Bluff	100	MLA29527	Wiso	100	MLC432	Mulga 1	100
EL28603	White Devil	100	MLA29528	Wiso	100	MLC48	Tinto	100
EL28618	Comstock	100	MLA29529	Wiso	100	MLC49	Mt Samuel	100
EL28760	Delta	100	MLA29530	Wiso	100	MLC498	Eldorado	100
EL28761	Quartz Hill	100	MLA29532	Wiso	100	MLC499	Eldorado	100
EL28775	Trinity	100	MLC127	Peko East Ext 4	100	MLC5	Peko Extended	100
EL28776	Whippet	100	MLC129	Peko Sth-East	100	MLC50	Eldorado Anom	100
EL30167	Dolomite	100	MLC120	Golden Forty	100	MLC500	Eldorado	100
EL30505	Golden East	100	MLC130	Golden Forty	100	MLC500	Eldorado	100
EL30584	Juno North	100	MLC132	Golden Forty	100	MLC502	Eldorado	100
EL30584	Battery Hill	100	MLC132	Golden Forty	100	MLC502 MLC503	Eldorado	100
	Russell	100		Golden Forty	100	MLC503 MLC504		100
EL31832			MLC134				Eldorado	100
EL31833	Prosperity	100	MLC135	Golden Forty	100	MLC505	Eldorado	100
EL31834	Colombard	100	MLC136	Golden Forty	100	MLC51	Eldorado Anom	
EL31835	Bishops Creek	100	MLC137	Golden Forty	100	MLC518	Ellen, Eldorado	100
EL31919	Billy Boy	100	MLC138	Golden Forty	100	MLC520	Great Northern	100
EL32030	Grey Bluff East	100	MLC139	Golden Forty	100	MLC522	Aga Khan	100
EL32213	Golden Slipper	100	MLC140	Golden Forty	100	MLC523	Eldorado	100
EL9403	Jess	100	MLC141	Golden Forty	100	MLC524	Susan	100
EL9958	Running Bear	100	MLC142	Golden Forty	100	MLC527	Mt Samuel	100
ELA27539	Telegraph	100	MLC143	Golden Forty	100	MLC528	Dingo, Eldorado	100
ELA27902	Lynx	100	MLC144	Golden Forty	100	MLC529	Cats Whiskers	100
ELA30123	Mosquito Creek	100	MLC146	Golden Forty	100	MLC53	Gold Forty	100
ELA30746	Mule	100	MLC147	Golden Forty	100	MLC530	Lone Star	100
ELA30747	Power of Wealth	100	MLC148	Golden Forty	100	MLC535	Eldorado No. 5	100
ELA30749	Mary Anne	100	MLC149	Golden Forty	100	MLC54	Gold Forty	100
ELA31355	Mt Samuel	100	MLC15	Eldorado 4	100	MLC546	The Mount	100
HLDC101	Sally No Name	100	MLC16	Eldorado 5	100	MLC55	Golden Forty	100
HLDC37	Warrego No. 1	100	MLC176	Chariot	100	MLC555	Tennant Creek	
HLDC39	Warrego Min	100	MLC177	Chariot	100	MLC558	New Hope	100
HLDC40	Warrego No. 2	100	MLC18	West Gibbet	100	MLC56	Golden Forty	100
HLDC41	Warrego No. 3	100	MLC182	Riesling	100	MLC576	Golden Forty	100
HLDC42	Warrego S7	100	MLC183	Riesling	100	MLC577	Golden Forty	100
HLDC43	Warrego S8	100	MLC184	Riesling	100	MLC581	Eldorado ABC	100
HLDC44	Warrego No. 2	100	MLC253	Mulga 1	100	MLC582	Eldorado ABC	100
HLDC45	Warrego No. 1	100	MLC254	Mulga 1	100	MLC583	Eldorado ABC	100
HLDC46	Warrego No. 1	100	MLC255	Mulga 1	100	MLC584	Golden Forty	100
HLDC55	Warrego No. 4	100	MLC256	Mulga 2	100	MLC585	Golden Forty	100
HLDC56	Warrego No. 5	100	MLC257	Mulga 2	100	MLC586	Golden Forty	100
HLDC58	Wiso Line No. 6	100	MLC258	Mulga 2	100	MLC591	TC8 Lease	100
HLDC59	Warrego No. 6	100	MLC259	Mulga 2	100	MLC592	TC8 Lease	100



Tenement	Name	Interest %	Tenement	Name	Interest %	Tenement	Name	Interest %
HLDC94	Warrego No. 4	100	MLC260	Mulga 2	100	MLC593	TC8 Lease	100
HLDC95	Warrego No. 3	100	MLC261	Mulga 2	100	MLC594	TC8 Lease	100
HLDC96	Wiso Basin	100	MLC32	Golden Forty	100	MLC595	TC8 Lease	100
HLDC97	Wiso Basin	100	MLC342	Tinto	100	MLC596	TC8 Lease	100
HLDC99	Wiso No.3 pipe	100	MLC343	Rocky Range	100	MLC597	TC8 Lease	100
MA23236	Udall Road	100	MLC344	Rocky Range	100	MLC598	Golden Forty	100
MA30798	Little Ben	100	MLC345	Rocky Range	100	MLC599	Mt Samuel	85
MCC203	Galway	100	MLC346	Rocky Range	100	MLC601	TC8 Lease	100
MCC211	Shamrock	100	MLC347	Golden Forty	100	MLC602	TC8 Lease	100
MCC212	Mt Samuel	85	MLC348	Brolga	100	MLC603	TC8 Lease	100
MCC239	West Peko	100	MLC349	Brolga	100	MLC604	TC8 Lease	100
MCC240	West Peko	100	MLC35	Golden Forty	100	MLC605	TC8 Lease	100
MCC308	Mt Samuel	85	MLC350	Brolga	100	MLC606	Lone Star	100
MCC316	The Trump	100	MLC351	Brolga	100	MLC607	Lone Star	100
MCC317	The Trump	100	MLC352	Golden Forty	100	MLC608	Lone Star	100
MCC334	Estralita Group	100	MLC353	Golden Forty	100	MLC609	Lone Star	100
MCC340	The Trump	100	MLC354	Golden Forty	100	MLC610	Lone Star	100
MCC341	The Trump	100	MLC355	Golden Forty	100	MLC611	Lone Star	100
MCC344	Mt Samuel	100	MLC36	Golden Forty	100	MLC612	Lone Star	100
MCC364	Estralita	100	MLC362	Lone Star	100	MLC613	Lone Star	100
MCC365	Estralita	100	MLC363	Lone Star	100	MLC614	Lone Star	100
MCC366	Estralita	100	MLC364	Lone Star	100	MLC615	Lone Star	100
MCC524	Estralita	100	MLC365	Lone Star	100	MLC616	Lone Star	100
MCC55	Mondeuse	100	MLC366	Lone Star	100	MLC617	Mt Samuel	50
MCC56	Shiraz	100	MLC367	Lone Star	100	MLC619	Ture Blue	85
MCC57	Mondeuse	100	MLC368	Lone Star	100	MLC644	Enterprise	100
MCC66	Golden Forty	100	MLC369	Lone Star	100	MLC645	Estralita	100
MCC67	Golden Forty	100	MLC37	Golden Forty	100	MLC654	TC8 Lease	100
MCC9	Eldorado	100	MLC370	Lone Star	100	MLC66	Traminer	100
MCC925	Brolga	100	MLC371	Lone Star	100	MLC67	Traminer	100
MCC926	Brolga	100	MLC372	Lone Star	100	MLC683	Eldorado	100
ML22284	Billy Boy	100	MLC373	Lone Star	100	MLC692	Warrego Mine	100
ML23216	Chariot	100	MLC374	Lone Star	100	MLC705	Apollo 1	100
ML30096	Malbec	100	MLC375	Lone Star	100	MLC91	Carraman/Klondyke	100
ML30177	North Star	100	MLC376	Mulga 1	100	MLC92	Carraman/Klondyke	100
ML30322	Verdot	100	MLC377	Mulga 1	100	MLC93	Carraman/Klondyke	100
ML30620	Kia Ora	100	MLC378	Mulga 1	100	MLC94	Carraman/Klondyke	100
ML30623	Pinnacles South	100	MLC379	Mulga 1	100	MLC95	Carraman/Klondyke	100
ML30716	Comstock	100	J					

### Mining Tenements Held at 30 June 2022 (New South Wales, Australia)

5	Tenement	Name	Interest %
	EL8463	Wellington	90
F	EL8464	Fifield	90
	EL8590	Kiola	90
	EL8766	Greater Kadungle	100
	EL8999	Kadungle	89