

#### **ASX ANNOUNCEMENT**

19 April 2022

### QUARTERLY ACTIVITY REPORT FOR THE PERIOD ENDING 31 March 2022

## ASX: NXM Capital Structure

Shares on Issue 288 million Options 20 million Cash on Hand \$17.023 million (31/03/2022)

### **Corporate Directory**

Mr Paul Boyatzis
Non-Executive Chairman

Mr Andy Tudor Managing Director

Dr Mark Elliott Non-Executive Director

Mr Bruce Maluish
Non-Executive Director

Mr Phillip Macleod
Company Secretary

### **Company GOLD Projects**

- Wallbrook Project
- Bethanga Copper-Gold Project - VIC
- Pinnacles Project
- Pinnacles JV Project (with Northern Star Resources Ltd)

### **MARCH QUARTER HIGHLIGHTS**

### **Wallbrook Gold Project**

- Drilling at Crusader-Templar prospect continues to intersect broad high-grade mineralisation
- ➤ 5 Drill rigs operating (3 reverse circulation [RC] drill rigs and 2 diamond drill rigs)
- Drill testing of regional targets at Solomon and Branches prospects commenced

### Crusader / Templar Prospect RC & Diamond Drill Results

Selected results from RC drilling during the quarter include:

- > 5m @ 9.53g/t Au (within 11m @ 5.32g/t Au from 96m);
- 7m @ 5.36g/t Au (within 19m @ 2.65g/t Au from 65m);
- 4m @ 4.17g/t Au (within 15m @ 1.32g/t Au from 94m);
- > 2m @ 13.28g/t Au (from 247m);
- > 3m @ 4.75g/t Au (from 86m);
- > 4m @ 3.06g/t Au (within10m @ 1.44g/t Au from 263m);
- > 5m @ 2.08g/t Au (within 9m @ 1.22g/t Au from 157m);
- > 8m @ 1.71g/t Au (within 12m @ 1.20g/t Au from 31m);
- > 7m @ 5.36g/t Au (within 19m @ 2.65 g/t Au from 65m);
- > 5m @ 9.53g/t Au (within 11m @ 5.32g/t Au from 96m).

### Selected results from diamond drilling during the quarter include:

- DDH#6: 4m @ 4.26g/t Au from 736m (within 10.45m @ 1.82g/t Au from 732m);
- DDH#6: 3.75m @ 3.52 g/t Au from 298m (within 8.25m
   @ 1.69g/t Au from 293m)(Visible Gold [VG] sample);
- > DDH#5: 1.22m @ 4.97g/t Au (within 5.02m @ 1.78g/t Au from 524.2m)(VG sample);
- DDH#5: 0.39m @ 7.75g/t Au (within 4.06m @ 1.13g/t Au from 695m); and
- DDH#5: 0.73m @ 2.64g/t Au (from 715m).

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### WALLBROOK GOLD PROJECT

During the quarter ended 31 March 2022, **Nexus Minerals Limited (ASX: NXM)** (**Nexus** or **the Company**) continued to undertake drill programs evaluating the Crusader / Templar Prospect, within the broader Eastern Goldfields Wallbrook Gold Project ("Wallbrook"), to follow up on the outstanding high-grade assay results received from previous drill campaigns. As more drilling is completed in the RC programs, the density of drilling will increase and internal characterisitcs to the mineralisation including internal plunge geometry to the mineralisation will mature. Nexus has commenced the follow-up 40,000m RC program, following-on from the 30,000m RC program that was completed during the quarter.

The gold mineralisation tenor and widths observed during the quarter included 41 holes which are consistent with the results seen in previous drilling at Crusader-Templar where broad mineralisation in the shallower levels <100m (Hole#244: 5m @ 4.20g/t Au within 18m @ 1.48 g/t Au from 70m and Hole #313: 2m @ 3.81g/t Au within 13m @ 1.01g/t Au from 47m), gives way to broad high-grade mineralisation at depths of >100 metres (Hole#288: 4m @ 6.04g/t Au, within 15m @ 2.59g/t Au from 190m and Hole#308: 3m @ 5.56g/t Au, within 14m @ 2.05g/t Au from 188m).

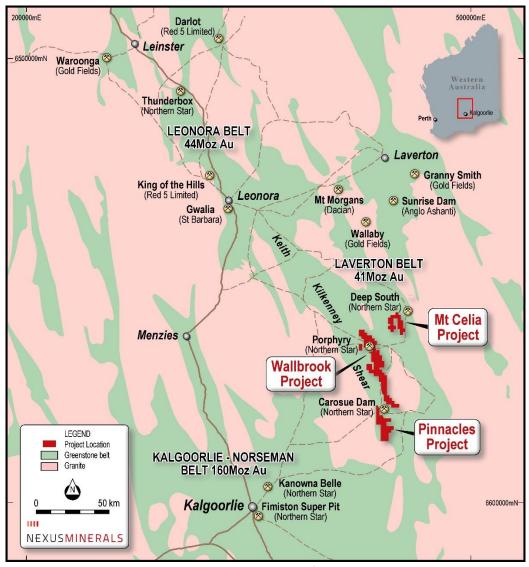


Figure 1: Nexus Eastern Goldfields projects

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## **NEXUSMINERALS**

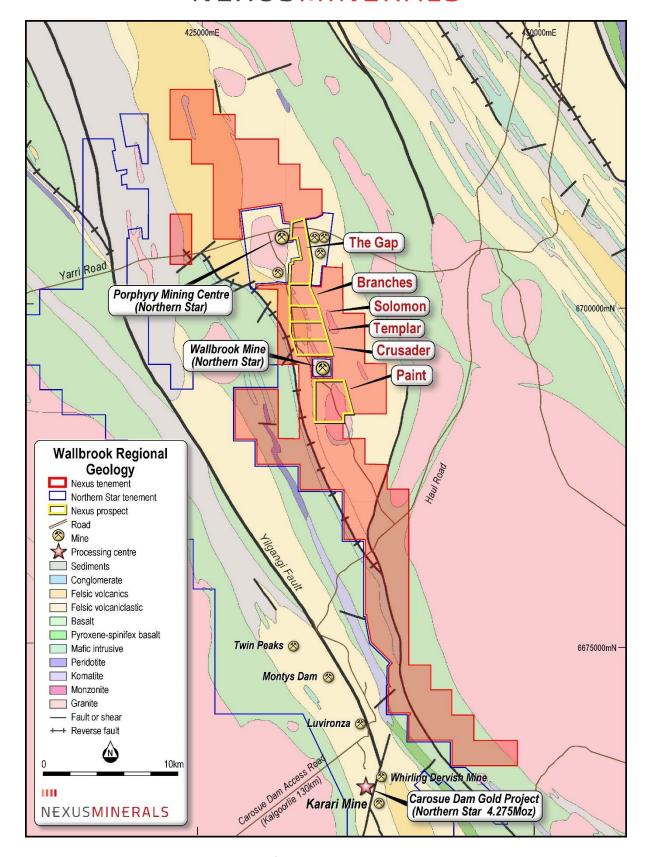


Figure 2: Nexus Eastern Goldfields Wallbrook Project Tenure and Prospects



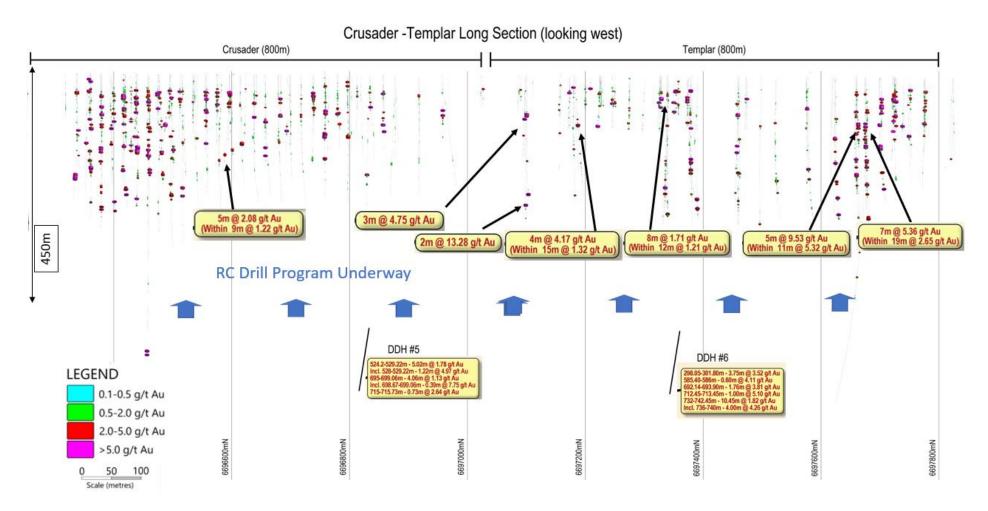


Figure 3: Crusader–Templar Prospect All Drill Holes Long Section
Looking West 1.6km Strike Extent
All existing RC and diamond drill strings with results colour coded for downhole gold values.



### **Metallurgical Testwork**

Four ~13kg composite mineralised samples were submitted to ALS Metallurgy Services in Perth WA for gold gravity / leach analysis. The four composite samples represent one oxide and one fresh sample from central Crusader prospect and one oxide and one fresh sample from central Templar Prospect.

The results from this preliminary metallurgical testwork are all positive and indicate:

- 1) Elevated levels of free liberated gravity recoverable gold ranging from 46.69% to 85.32%.
- 2) Total extractable gold (via gravity plus standard leach) produced overall gold recoveries of
  - a. 98% (Oxide material composites)
  - b. 97.6% (Fresh material composites)
- 3) Gold leach kinetics for the gravity leach tests were all fast, with majority of the gold leaching in the first 2-4 hours.
- 4) The gravity/direct leach tests produced calculated gold head grades ranging from 5.40g/t Au to 7.90g/t Au respectively, which were higher than original average gold head grade assays ranging from 2.91g/t Au to 7.76g/t Au. This is likely attributed to the coarse gold content.
- 5) Reagent use, sodium cyanide and lime consumption, were low for all tests.
- 6) Low levels of organic carbon were present, decreasing the likelihood of gold-robbing in the solution during cyanidation.
- 7) Base metals are low in concentration decreasing the possibility of excess cyanide consumption. Arsenic assays also returned very low levels.

### **Mineral Consultants**

Snowden Optiro Mineral Consultants (**Snowden**) has been engaged to assist in the Company's exploration efforts. They undertook a site visit during the quarter to commence work on geological, alteration and mineralisation modelling.



### **Crusader-Templar Deep Diamond Drilling**

Results from the quarter for diamond drilling completed at Crusader – Templar to date have shown gold mineralisation is hosted in hematite altered quartz porphyry and volcaniclastic units.

The gold mineralisation intersected in the deep diamond holes has confirmed the altered mineralised quartz porphyry unit continues from near surface to depths in excess of 600m vertically. The RC and diamond drilling completed to date across the entire 1.6km of strike at Crusader-Templar has shown excellent strike and depth continuity to the mineralisation.

The deep diamond drilling program will continue to test for mineralised zones at around the 600m level, with the aim of "tagging" the mineralisation at this depth along the full extent of the 1.6km strike. Currently the strike is being tested with broad spaced deep diamond drill holes approximately 200m apart, with 4 holes completed to date - DDH#2, DDH#6 and DDH #10 (assays pending). The diamond drill program will also be testing:

- The 300m level to allow for effective RC drill program planning, as the 3 RC drill rig program continues to advance downwards from the shallower levels; and
- The 100 150m level to "twin" RC holes to verify the mineralised zones identified in shallower RC drilling.



Photo 1: Crusader – Templar Prospect Diamond Drill Hole #6 736m – 740m 4m @ 4.26g/t Au (Within 10.45m @ 1.82g/t Au from 732m) Mineralised, altered and silicified quartz porphyry – "The Right Rocks"

### **Regional Exploration Activities**

The Company has undertaken initial RC drilling of two regional exploration targets, Solomon and Branches prospects. These prospects were identified by regional gravity and magnetic surveys.

At the Solomon prospect, Nexus drilled 3 broad spaced RC lines (17 RC drill holes for 3,812m), testing for the northern extension of the mineralised corridor ~800m north of Crusader-Templar. The holes successfully intersected similar host rocks and alteration style as that observed in the Crusader-Templar mineralised corridor. That being a hematitie altered / silicified quartz porphyry that has intruded a volcaniclastic host rock unit.

At the Branches prospect the Company is close to completing a planned 18 RC hole – 3,750m drill program. The Branches prospect is a further 2km north of Solomon prospect with historical Nexus drilling results at the prospect including 25m @ 2.86g/t Au from 43m (see ASX release dated 23 November 2020). Early indications are promising with extensive hematitie altered / silicified quartz porphyry rock units being intersected.

Nexus has also commenced a regional gravity survey which will concentrate on an area of some 95km<sup>2</sup> in the central project area (Figure 4). The survey will cover the same area that had a ground magnetic survey completed by Nexus in 2021. The aim being to identify gravity low corridors coincident with the existing ground magnetic anomalies, providing further regional targets for drill testing.

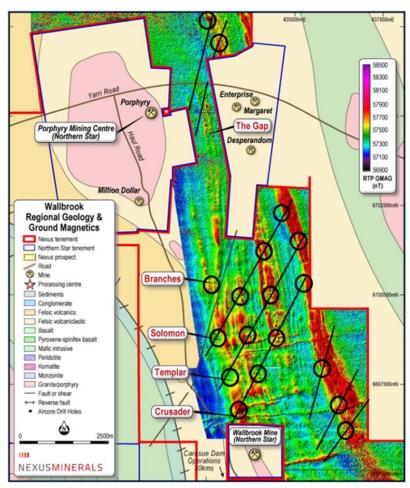


Figure 4: Nexus Wallbrook Regional Targets Location Plan



### **BETHANGA PROJECT**

The Bethanga landholding covers 194km<sup>2</sup> across two granted exploration licenses located in Australia's premier Porphyry Copper Gold geological terrain in northeast Victoria.

During the quarter, Nexus advanced its Porphyry Cu-Au fertility assessment study at the Bethanga Project. The project is now held 100% by Nexus Minerals, with settlement occurring in late January.

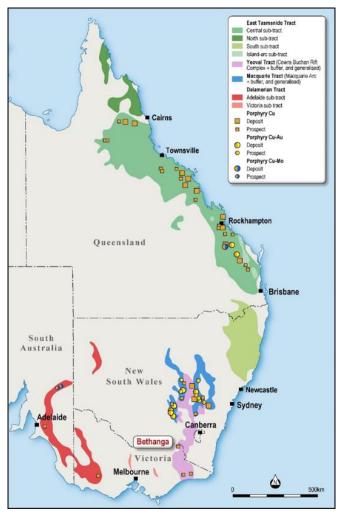


Figure 5: Nexus Minerals Bethanga Project Location

### **PINNACLES PROJECT**

No field work was undertaken during the quarter.

### MT CELIA PROJECT

No field work was undertaken during the quarter.

### June 2022 Quarter - Work Program

During the June 2022 quarter, the Company intends to undertake the following activities:

- Wallbrook Gold Project continue diamond (~6,000m) and RC drilling (~40,000m) programs at the Crusader / Templar prospect, as well as continuing the regional ground magnetic survey, and regional gravity survey. Assess results from drilling at Crusader/Templar, Solomon and Branches prospects.
- Bethanga Copper-Gold advance porphyry fertility assessment, undertake soil sampling and rock chip geochemistry program.

### **Corporate**

Nexus attended the RIU Fremantle Conference, where Adam James (Exploration Manager) presented. Andy Tudor presented at the Euroz-Hartleys conference in February which was well received.

At the end of the March 2022 quarter, the Company held \$17.023 million cash and equivalents.

### **Wallbrook Site Camp**

During the quarter the Wallbrook 48-person camp commenced operations.



Photo 2 – Nexus 48-person exploration camp with core-shed in the background.



### **ASX Additional Information**

### ASX listing rule 5.3.1 and 5.3.2

Exploration and evaluation expenditure during the quarter was \$4,156,000. Details of exploration activity during the March 2022 quarter are set out in this report. There were no substantive mining production or development activities during the quarter.

### ASX listing rule 5.3.5 - Payments to related parties of the entity and their associates

Appendix 5B, Section 6.1 – description of payments:

Total Directors remuneration \$135,000 (Including applicable superannuation)

for the quarter

Payments to Mining Gurus for \$511,000 Services provided on an arm's length basis on

the provision of contract normal commercial terms by a company

geological personnel associated with Mr Tudor

### SUMMARY OF NEXUS MINERALS LIMITED TENEMENTS

AUSTRALIA	Interest at beginning of Quarter	Interest at end of Quarter				
Wallbrook (Gold)						
E31/1160	100%	100%				
M31/157	100%	100%				
M31/188	100%	100%				
M31/190	100%	100%				
M31/191	100%	100%				
M31/231	100%	100%				
M31/251	100%	100%				
E31/1107	100%	100%				
E31/1108	100%	100%				
E31/1118	100%	100%				
Pinnacles (Gold)						
M28/243	90% Contributing JV	90% Contributing JV				
E28/2526	90%	90%				
E28/2487	100%	100%				
Mt Celia (Gold)						
E39/2025	100%	100%				
E39/2185 (Under Application)	0%	0%				

This announcement is authorised for release by Mr Andy Tudor, Managing Director, Nexus Minerals Limited.

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## **NEXUSMINERALS**

### **About Nexus**

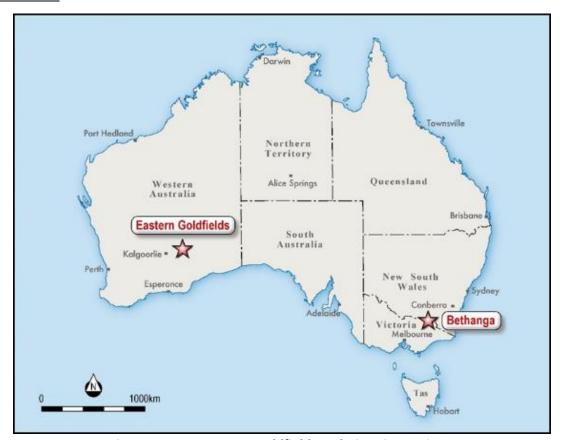


Figure 6: Nexus Eastern Goldfields and Victorian projects

Nexus is actively exploring for gold deposits on its highly prospective tenement package in the Eastern Goldfields of Western Australia. In addition to this, the company has recently expanded its existing project portfolio with the addition of the Bethanga Porphyry Copper-Gold project in Victoria.

In Western Australia, the consolidation of the highly prospective Wallbrook Gold Project (250km2) by the amalgamation of existing Nexus tenements with others acquired, will advance these gold exploration efforts.

Nexus Minerals' tenement package at the Wallbrook Gold Project commences immediately to the north of Northern Star's multi-million-ounce Carosue Dam mining operations, and current operating Karari and Whirling Dervish underground gold mines. Nexus holds a significant land package of highly prospective geological terrane within a major regional structural corridor and is exploring for gold deposits.

Nexus is actively investing in new exploration techniques to refine the targeting approach for their current and future tenements.

- Ends -

**Enquiries** Mr Andy Tudor, Managing Director

Mr Paul Boyatzis, Non-Executive Chairman

Contact Phone: 08 9481 1749
Website <u>www.nexus-minerals.com</u>

ASX Code NXM



### **Northern Star Ltd Carosue Dam Resource Table**

	MEASURED			INDICATED		INFERRED			TOTAL RESOURCES			
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ouncer
NST ATTRIBUTABLE INCLUSIVE OF RESERVE	(000's)	(gpt)	(000's)	(000's)	(gpt)	(000's)	(000's)	(gpt)	(000's)	(2'000)	(gpt)	(000%)
Surface	3,123	1.5	149		1.6							
Surface	3,123	1.5	149	24,270	1.6	1,278	9,670	1.4	429	37,062	1.6	1,85
Underground	6,522	2.9	602	13,968	2.6	1,184	6,583	2.9	546	27,074	2.8	2,332
	6,522 3,212	2.9	602 81	13,968	2.6	1,184	6,583	2.9	546	3,212	2.8	
Underground Stockpiles Gold in Circuit					2.6	1,184	6,583	2.9	~ 1			2,332

Source: Northern Star website (www.nsrltd.com) Northern Star Ltd Annual Report 2021 Mineral Resources as at 31 March 2021

The information in this release that relates to Exploration Results, Mineral Resources or Ore Reserves is based on, and fairly represents, information and supporting documentation, prepared, compiled or reviewed by Mr Andy Tudor, who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Tudor is the Managing Director and full-time employee of Nexus Minerals Limited. Mr Tudor has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Tudor consents to the inclusion in the release of the matters based on his information in the form and context in which it appears. The results are available to be viewed on the Company website www.nexusminerals.com. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcements of 8/9/2021, 11/10/2021, 25/10/2021, 8/11/2021, 9/11/2021, 15/11/2021, 21/12/2021, 24/12/2021, 18/1/2022, 25/1/2022, 3/03/2022, 31/3/2022 and 11/4/2022.

The information in this release that relates to the Crusader Mineral Resource Estimate is based upon information compiled by Mr Adam James, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr James is a full-time employee and the Exploration Manager of Nexus Minerals Limited. Mr James has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr James consents to the inclusion in the release of matters based on his information in the form and context in which it appears.

No Ore Reserves have currently been defined on the Pinnacles or Wallbrook tenements. There has been insufficient exploration and technical studies to estimate an Ore Reserve and it is uncertain if further exploration and/or technical studies will result in the estimation of an Ore Reserve. The potential for the development of a mining operation and sale of ore from the Pinnacles or Wallbrook tenements has yet to be established.

FORWARD LOOKING AND CAUTIONARY STATEMENTS. Some statements in this announcement regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. 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", "predict", "foresee", "proposed", "aim", "target", "opportunity", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this report 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. 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 and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. So, there can be no assurance that actual outcomes will not materially differ from these forward-looking statements.