NEXUSMINERALS

ASX ANNOUNCEMENT **1 May 2024**

Crusader-Templar Updated MRE Expands to over 300,000 oz Gold
Over 70% Increase in Gold Ounces

- ✓ **Updated JORC 2012 Crusader-Templar combined Mineral Resource Estimate (MRE) of:**

  5.67Mt at 1.7g/t Au for 304,000 ounces of gold (0.4g/t cut-off)

Indicated			Inferred			TOTAL		
Tonnes (kt)	Au grade (g/t)	Au ounces (koz)	Tonnes (kt)	Au grade (g/t)	Au ounces (koz)	Tonnes (kt)	Au grade (g/t)	Au ounces (koz)
2,460	1.8	140	3,210	1.6	164	5,670	1.7	304

Table 1: Crusader-Templar Mineral Resource Summary (0.4g/t cut-off) (rounding errors may occur)

- ✓ **The update has resulted in a 70% increase in contained gold ounces**
- ✓ **Indicated material comprising 46% of the combined MRE**
- ✓ **The MRE has been reported within an optimised open-pit shell with consideration for reasonable prospects for eventual economic extraction (RPEEE)**
- ✓ **The MRE update has been completed in conjunction with ongoing mine studies**
- ✓ **The project continues to highlight characteristics of a low risk open pit operation, supported by strong metallurgical recoveries, favorable environmental studies, granted mining tenure and access to infrastructure**
- ✓ **In line with mine studies a geotechnical, metallurgical, waste rock characterisation and ground water monitoring, diamond drill program is scheduled to commence in early May**
- ✓ **The MRE remains only a component of the larger Exploration Target previously reported (ASX:NXM 26/3/2023). The deposit remains open to the north along strike, down plunge of higher-grade shoots, and has potential for parallel lodes to the east**
- ✓ **Systematic regional exploration of the entire Wallbrook project is ongoing with potential to build the projects ounce portfolio over short, medium, and longer term – target pipeline offering Gold Camp opportunity and potential for operational longevity**

Nexus Minerals Limited (ASX: NXM) (Nexus or the Company) is pleased to announce that it has completed an update of the Crusader-Templar combined Mineral Resource at the Wallbrook Gold Project in the north-eastern goldfields region of WA. The MRE update was completed by leading industry consultants Snowden Optiro, who have delivered a robust open pit resource for the Crusader-Templar deposit of 5.67Mt at 1.7g/t Au for 304,000 ounces of gold (0.4g/t cut-off). This represents a 70%+ increase in contained ounces from the previously reported MRE (refer to ASX: NXM 26/4/2023).

MRE for the Crusader-Templar deposit – April 2024										
Material	Cut-off (Au g/t)	Indicated			Inferred			TOTAL		
		Tonnes (kt)	Au grade (g/t)	Au ounces (koz)	Tonnes (kt)	Au grade (g/t)	Au ounces (koz)	Tonnes (kt)	Au grade (g/t)	Au ounces (koz)
Oxide	0.4	110	1.5	5	240	1.4	11	350	1.4	16
Transitional	0.4	320	1.6	17	430	1.4	19	750	1.5	36
Fresh	0.4	2,030	1.8	118	2,540	1.6	134	4,570	1.7	252
Total	0.4	2,460	1.8	140	3,210	1.6	164	5,670	1.7	304

Table 2: Crusader-Templar Mineral Resources (0.4g/t cut-off) *(rounding errors may occur)*

Nexus Managing Director Andy Tudor commented "*The MRE update has yielded exceptional results with a 70%+ increase to 304,000 ounces of gold. This achievement is underpinned by a more robust geological and mineralisation model, and improved economic constraints using an optimised open pit shell for reporting.*

The modelling exercise has demonstrated the value in orebody understanding and has continued to highlight the ongoing opportunity to build the project through exploration. Pleasingly, in the current market for gold, the optimisation work completed demonstrates the project provides significant scalability with the gold price.

The MRE update serves as a solid foundation for the mine studies currently being undertaken at Crusader-Templar which continue to progress. Testament to our confidence in the project, a diamond drill program will shortly commence to compliment study work and will include geotechnical and further metallurgical test work.

The exploration team will continue to progress regional exploration of the larger Wallbrook project and look forward to achieving some exciting milestones across the Wallbrook project this year."

Crusader-Templar MRE Update

The recent update to the MRE marks a significant milestone in the ongoing development of the Wallbrook Gold Project. The update was completed in support of continuing mine studies, reflecting a concerted effort to refine and expand understanding of the deposit's potential. Leading industry consultants Snowden Optiro were engaged to complete the new model, following on from their technical support during the discovery of the deposit.

In line with the work previously completed by Snowden Optiro, the updated MRE has incorporated a detailed geological and structural appraisal to better model mineralised lodes. The local structural framework has been refined to consist of a regional northwest trending antiform, with the Crusader mineralisation located on the western limb, and the Templar mineralisation on the eastern limb. The mineralisation follows the west dipping porphyry units at Crusader, and east dipping en-echelon arrays of porphyry intrusives at Templar.

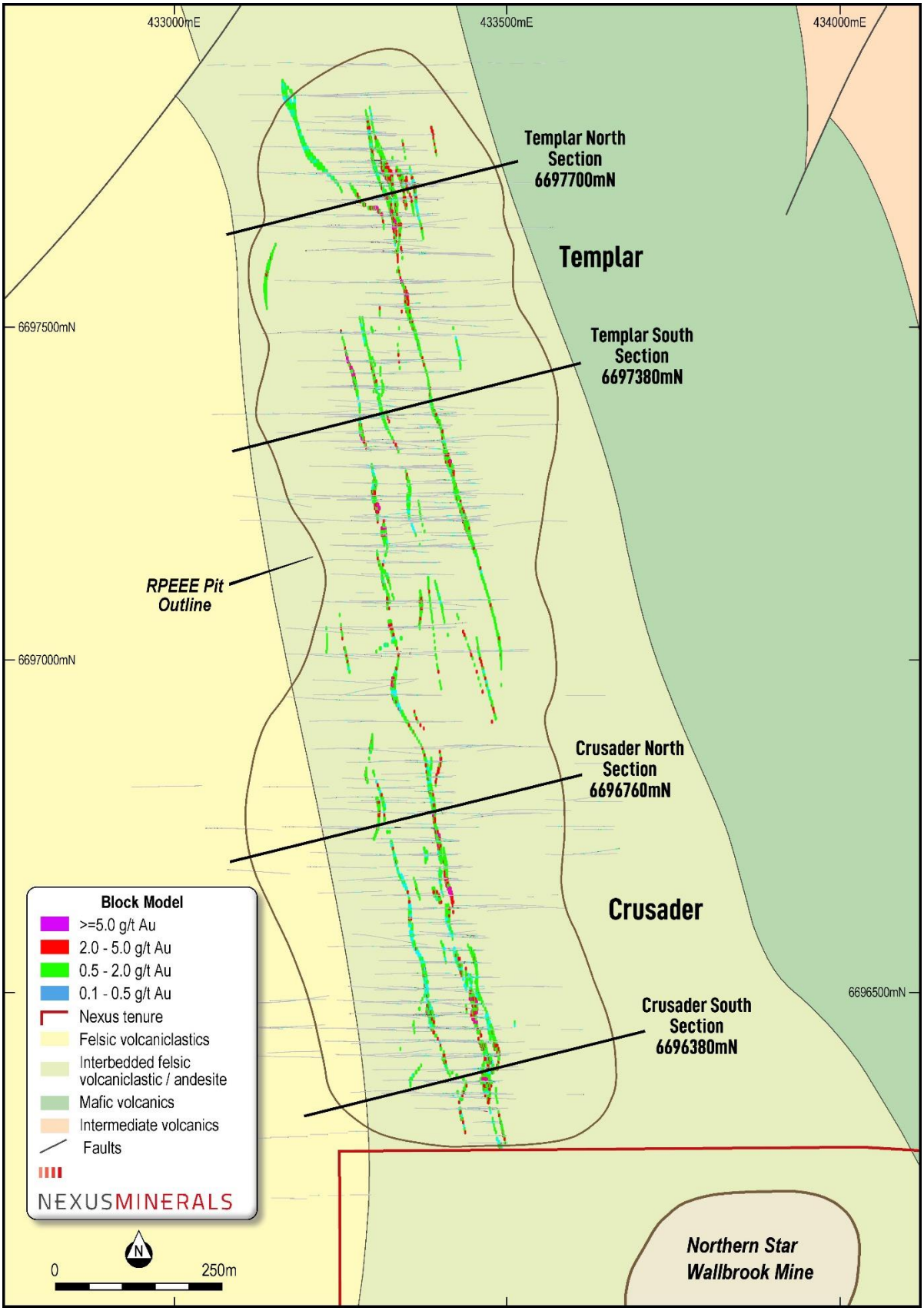

Figure 1: Plan View of Crusader-Templar Block Model

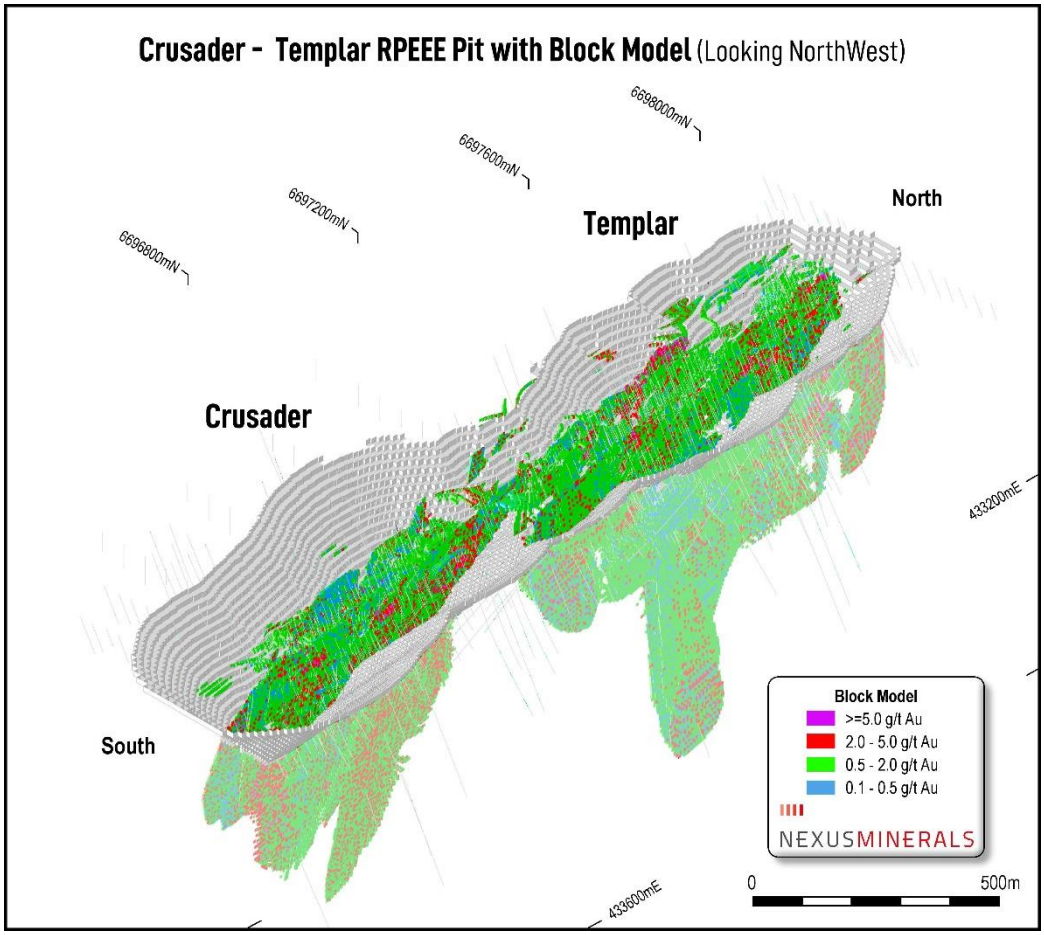

Figure 2: Isometric View of Crusader-Templar Block Model and RPEEE Pit

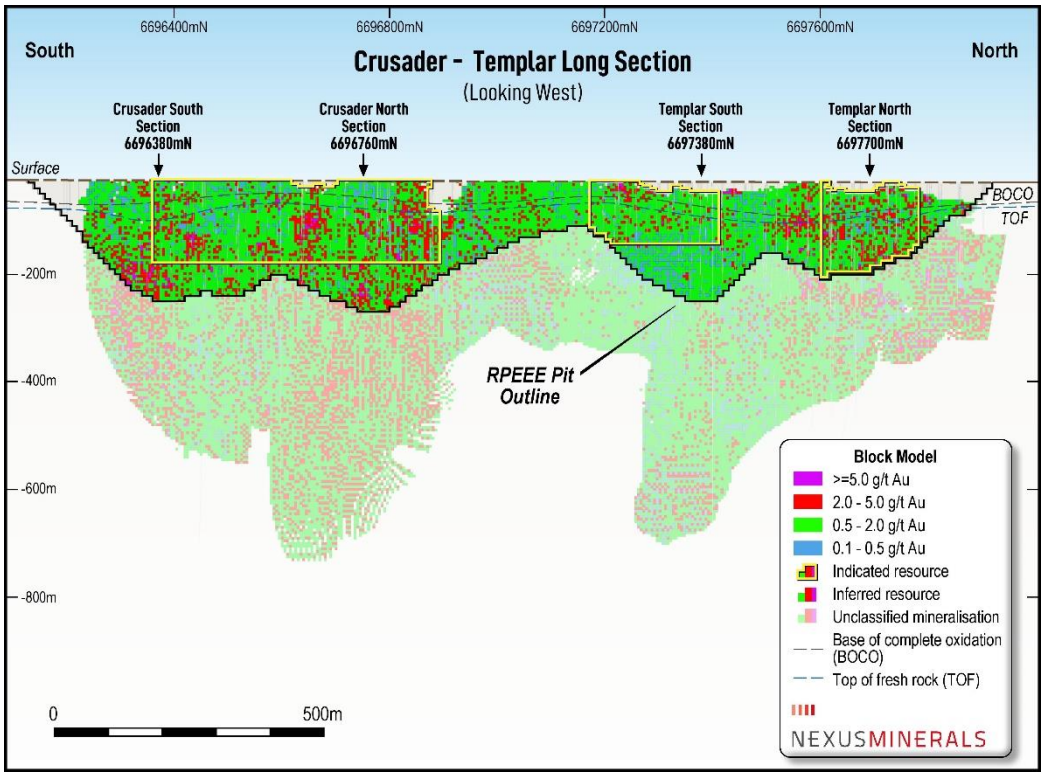

Figure 3: Long Section of Crusader-Templar Block Model

A key highlight of the update is the substantial 70% increase in contained ounces within the deposit - with approximately 46% of the total MRE classified as Indicated Mineral Resource. In addition to the increase in ounces, the MRE has retained a strong grade of 1.7g/t Au (0.4g/t cut-off) and remains robust over a range of cut-offs.

The MRE has been reported within a pit shell based on an AUD$3950/oz gold price (approximately 11% above recent gold price levels of AUD$3500/oz), indicating a clear evaluation of its economic feasibility for eventual economic extraction. Underground opportunities have not been considered, noting that further drilling would be required to adequately define the higher-grade plunging shoots.

The geology at Crusader-Templar has proved the key to determining the continuity and geometry of the mineralised domains. 3D geological models of the porphyry intrusives were used to control the interpretation of the mineralised veins. This process identified that variability in the down dip continuity of the Templar mineralisation was related to pinch and swell en-echelon structures that were modelled in the porphyry arrays. This produced shallow north plunging subvertical shoots which could be followed from section to section. It also explained the reason for low grade intersections below well mineralised drillholes and this was key to constraining the upper and lower extents to the shoots. The correlation of lithology, structure and mineralisation was used to demonstrate continuity during the interpretation process.

Overall, the project exhibits characteristics indicative of a low-risk open-pit operation, supported by strong metallurgical recoveries, favourable environmental studies, secure mining tenure, and access to existing infrastructure. These attributes position the project favourably for future development.

Further Work

A diamond drill program is set to commence in early May, focusing on critical aspects such as geotechnical stability, metallurgical characteristics, waste rock characterisation and groundwater monitoring. This aims to gather essential data to support a mining proposal and operational decision-making.

In addition to the notable progress reflected in the MRE update, the Crusader-Templar deposit remains open for potential extensions along strike, down-plunge of higher-grade zones, and parallel lodes to the east. Future drill campaigns will weigh these opportunities equally with regional targets with opportunities for cost effective discovery of shallow orebodies.

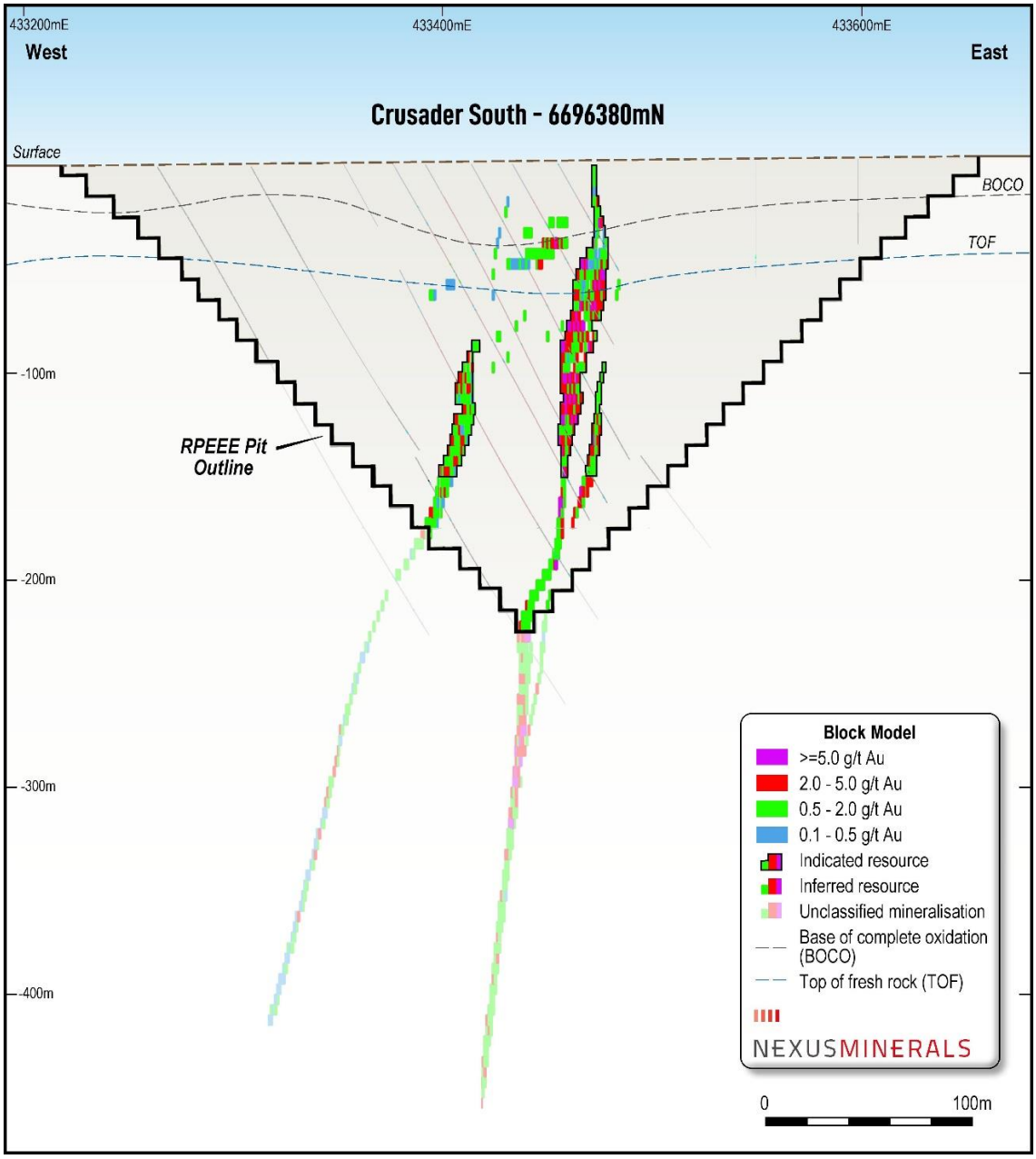

Figure 4: Crusader South Cross Section of Crusader-Templar Block Model

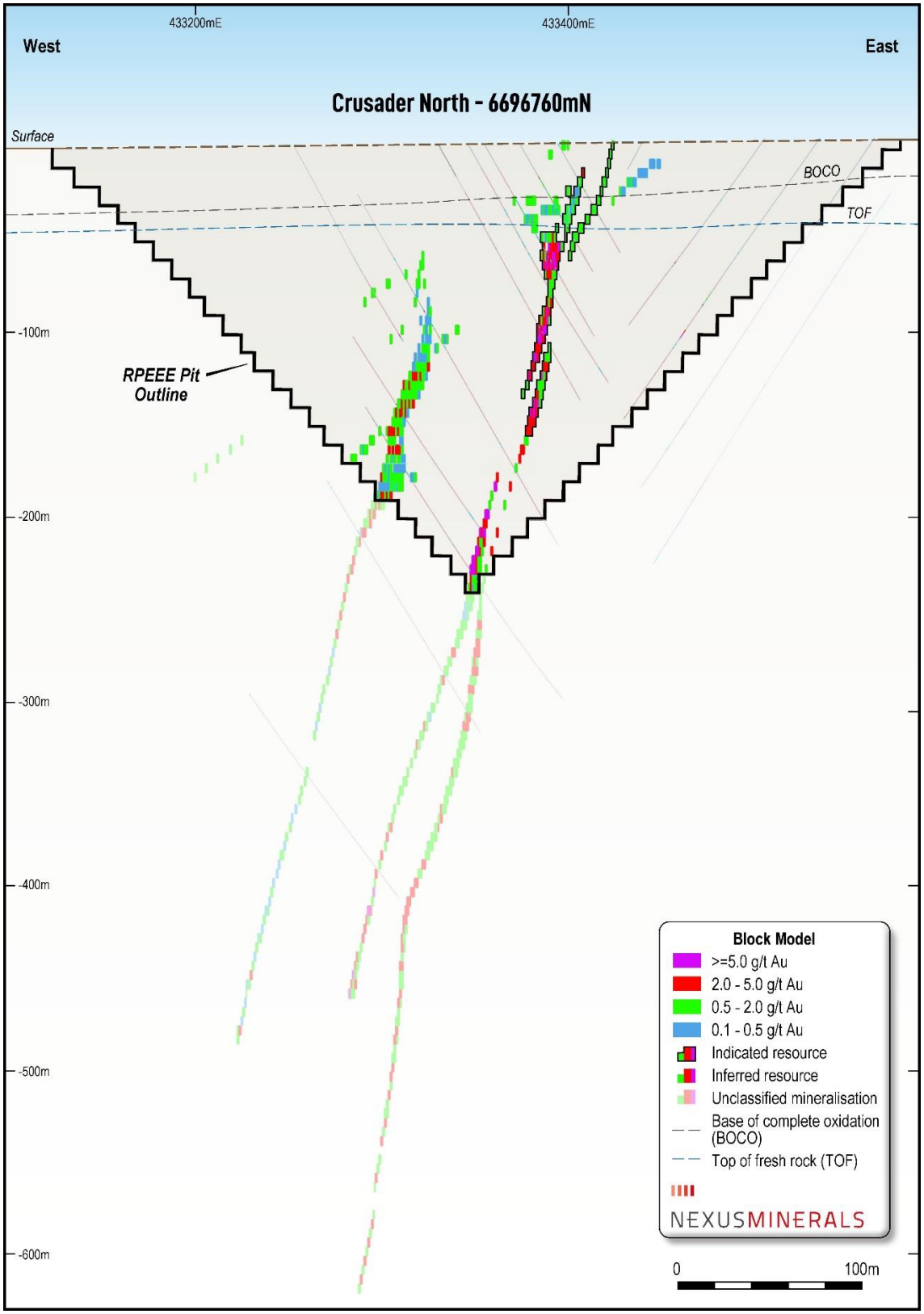

Figure 5: Crusader North Cross Section of Crusader-Templar Block Model

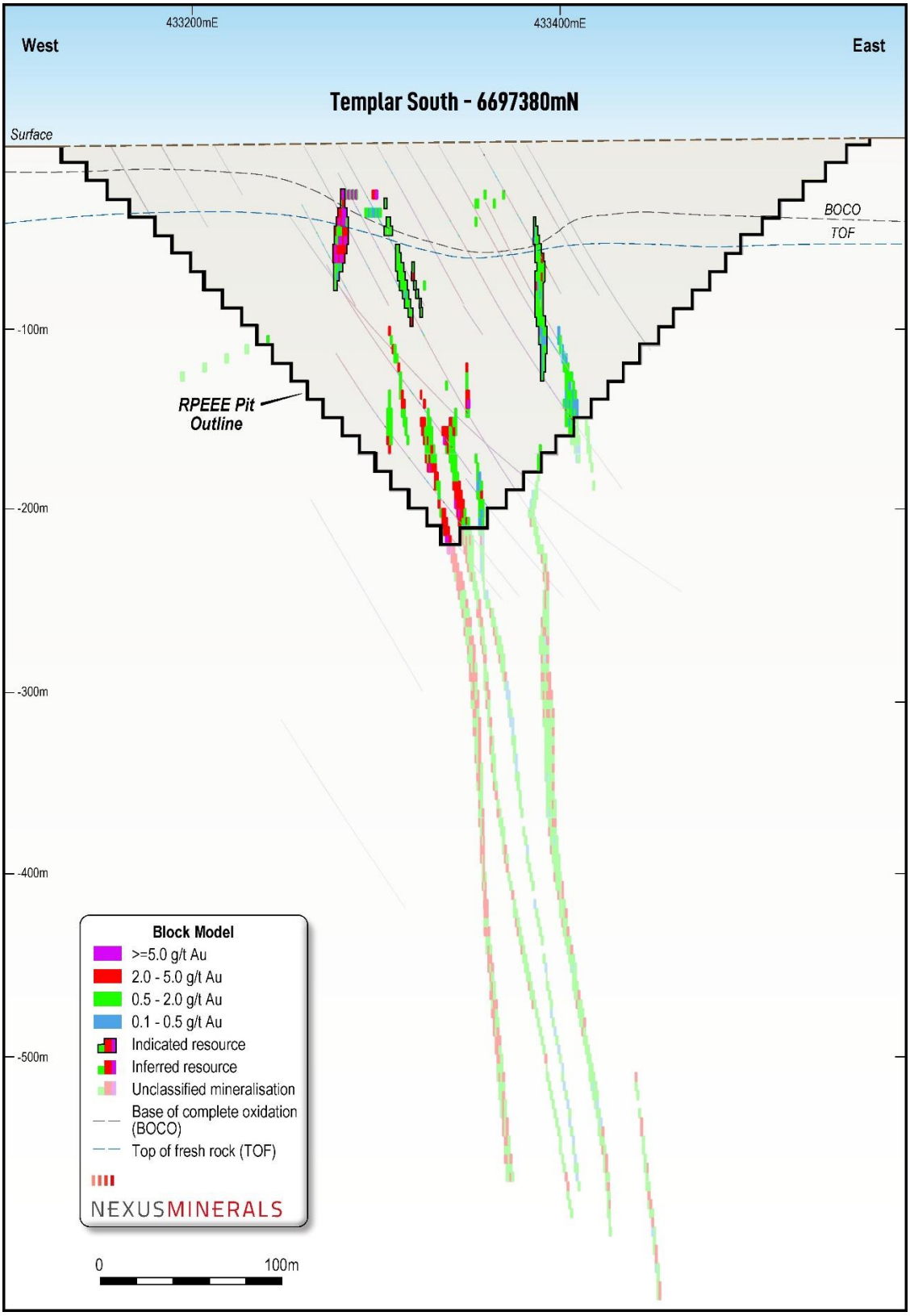

Figure 6: Templar South Cross Section of Crusader-Templar Block Model

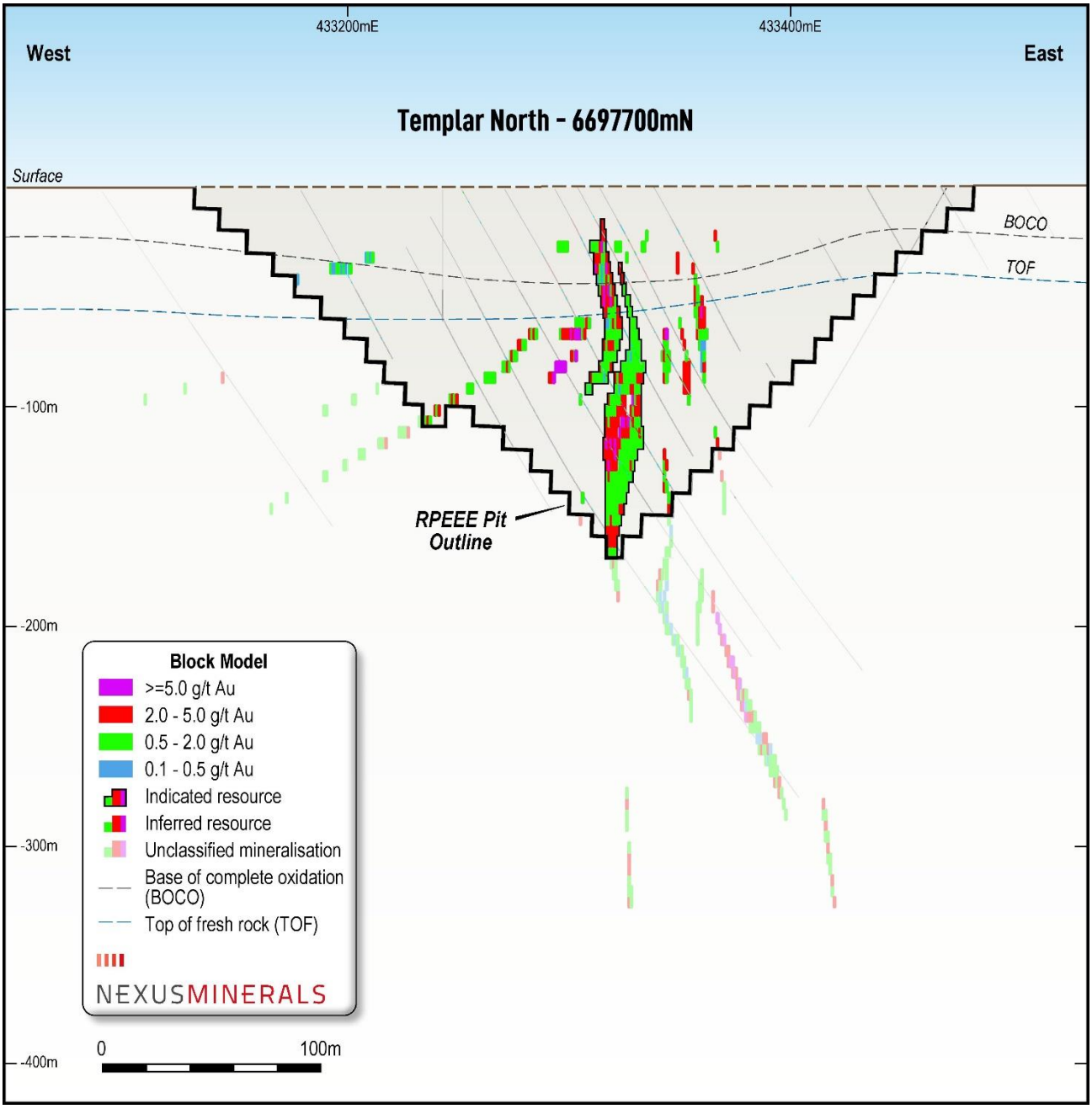

Figure 7: Templar South Cross Section of Crusader-Templar Block Model

Exploration Target Context

The Crusader-Templar JORC (2012) Exploration Target previously reported remains unchanged (ASX:NXM 26/3/2023). The Exploration Target is therefore inclusive of the updated MRE for the Crusader Templar deposit of 5.67Mt @ 1.7g/t Au for 304,000 ounces contained gold (0.4g/t cut-off).

The Exploration Target has been modelled assuming continuity of the anastomosing porphyry dykes and associated structure down-dip to approximately 400 metres below surface and south along strike of the Templar Main Lode where the company has had exploration success.

Tonnes Low	Tonnes High	Grade (g/t Au) Low	Grade (g/t Au) High	Contained Gold Ounces Low	Contained Gold Ounces High
10,000,000	14,000,000	1.50	1.75	480,000	790,000

Table 3: Crusader-Templar Exploration Target (refer to ASX: NXM 26/3/2023)

Note: The potential quantity and grade of the Exploration Target is conceptual in nature and as such there has been insufficient exploration drilling conducted to estimate a mineral resource. At this stage it is uncertain if further exploration drilling will result in the estimation of a mineral resource. The Exploration Target has been prepared in accordance with the JORC Code (2012).

Comparison of 2024 MRE to 2023 BM Geological Services (BMGS) MRE

The primary cause of the contrasting outcomes is the interpreted mineralised domains. The different grade thresholds used to define the mineralisation and resulting continuity assumed during the interpretation process, allowed for a more refined model which better honoured observed geology. Snowden Optiro mineralisation indicator grade threshold of 0.35g/t is based on observed geological and statistical patterns in the drillhole data and is lower than that applied by BMGS (0.5g/t) (refer to ASX: NXM 26/4/2023).

A consequence of the lower grade threshold is that greater mineralisation continuity is observed between drill section lines and down dip between drillhole intersections. Additional differences can be attributed to the different reporting cut-off grades (2023 - 1.0g/t; 2024 - 0.4g/t) and the different approaches to applying reasonable prospects for eventual economic extraction (RPEEE) constraints to the reporting of the Mineral Resource. RPEEE reporting in the 2023 MRE focused on a depth below surface constraint (200m below surface), whereas the updated 2024 MRE has used a more detailed optimised pit shell limit (which is sometimes deeper and sometimes shallower than the depth below surface method used in 2023).

The previous public release MRE for Crusader-Templar was estimated in 2023 by BMGS and reported in accordance with the 2012 Edition of the JORC Code. The two Mineral Resources were reported at different grade cut-offs, so a direct comparison is not valid, however the relevant statistics are provided in Table 4 below.

	Reporting cut-off (g/t)	Tonnes (kt)	Grade Au (g/t)	Contained Au ounces
2023 MRE	**1.0**	**2,572**	**2.1**	**175,000**
2024 MRE	**0.4**	**5,670**	**1.7**	**304,000**
Difference	**0.6**	**3,098**	**-0.4**	**129,000**

Table 4: MRE Comparison Table

A summary of the main causes of the reporting differences between the two generations of Mineral Resource estimation is:

- Different reporting cut-off grades (2023 - 1.0g/t : 2024 - 0.4g/t);
- Mineralisation domains defined by a 0.5g/t grade threshold in 2023 and a 0.35g/t grade threshold in 2024 and the related interpretational differences;
- Different approaches to applying RPEEE constraints to the reporting of the Mineral Resource; depth below surface (200m below surface) applied in 2023 and an optimised pit shell limit in 2024 (which is sometimes deeper and sometimes shallower than the depth below surface used in 2023);
- Exclusion of smaller mineralised volumes with less drillhole support in 2023 while all mineralised volume was retained as at least Inferred Mineral Resource in 2024; and
- Application of change of support methods during the 2024 estimation process.

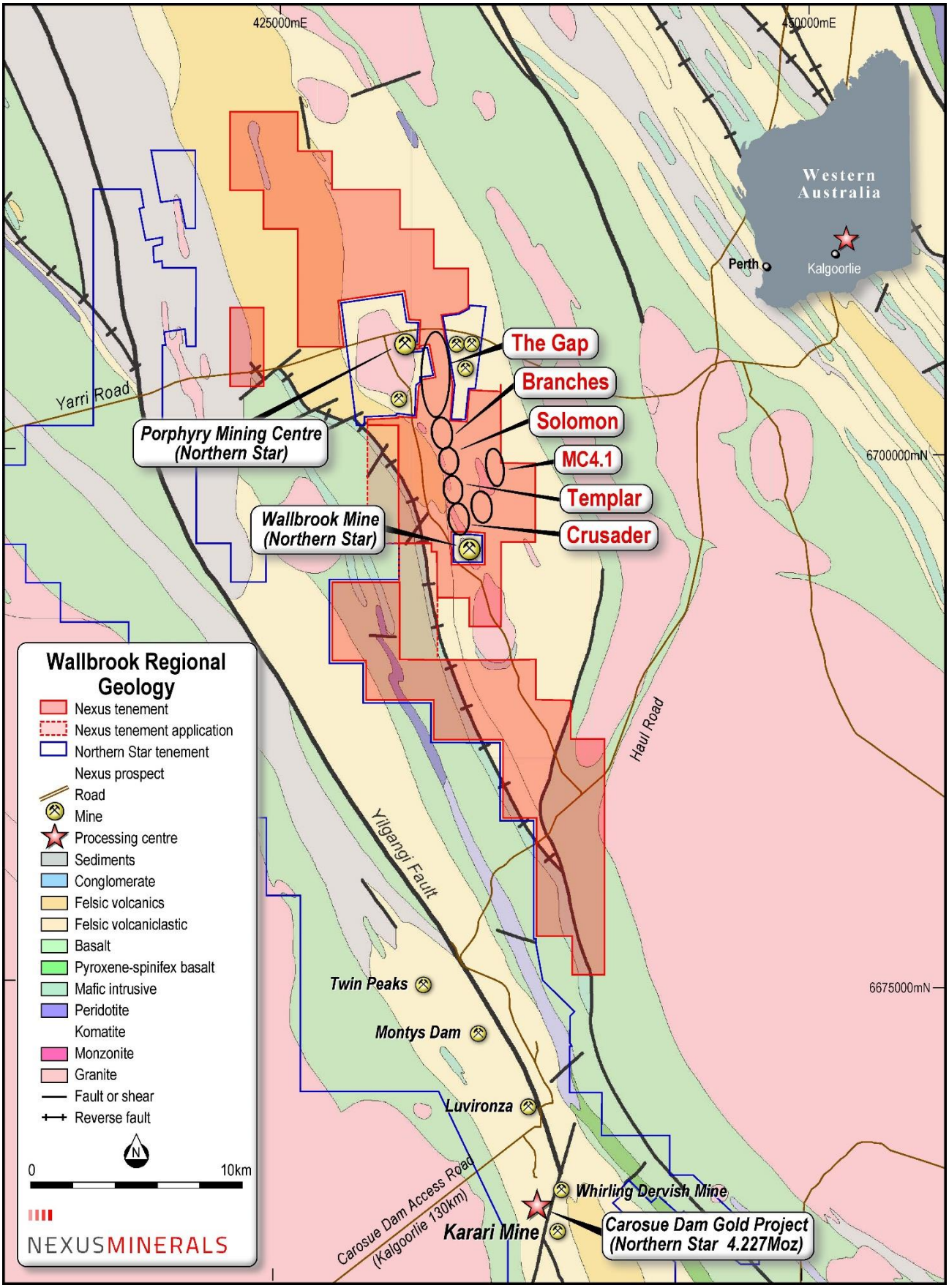

Figure 8: Nexus Wallbrook Project

MINERAL RESOURCE ESTIMATE

PROJECT LOCATION

The Crusader-Templar deposit is a part of the Wallbrook Gold Project which is located approximately 140 km northeast of Kalgoorlie in the Eastern Goldfields of Western Australia, in a typical greenstone belt geological setting within the prolific Archaean Yilgarn Craton. The Eastern Goldfields is a world-class gold district, serviced by the City of Kalgoorlie-Boulder, a significant mining and infrastructure hub. The Project comprises 192km^2 of prospective exploration tenure that is 100% owned by Nexus Minerals.

REGIONAL GEOLOGY

The Wallbrook Project occurs within the Norseman - Wiluna Archaean Greenstone belt in the Eastern Goldfields province of the Yilgarn Craton. The Project is located within the Edjudina Region in the Laverton Tectonic Zone, centrally between Kalgoorlie and Laverton, and sits 35km north of Northern Star Limited's Carosue Dam Gold Mining Operation.

The granite-greenstone belt is approximately 600 kilometres in length and is characterised by thick, possibly rift controlled accumulations of ultramafic, mafic, felsic volcanic, intrusives and sedimentary rocks. Greenstone successions of the southern Eastern Goldfields have been segregated into elongate structural terranes bounded by regional NNW-trending faults (Swager, 1995). These terranes include the Kalgoorlie Terrane, Gindalbie Terrane, Kurnalpi Terrane and the Edjudina Terrane. These terranes contain distinct similarities, including timing of the deposition of volcano-sedimentary sequences (2720-2675 Ma) and regional deformation and plutonism (2675-2620 Ma). The terranes differ only in lithostratigraphic development and early tectonic history (Swager, 1995).

LOCAL GEOLOGY AND MINERALISATION

The Wallbrook Project area is located between two major converging tectonic features, the Laverton and Keith-Kilkenny tectonic zones. The Laverton Tectonic Zone (LTZ) forms the central portion of the Laverton Greenstone Belt, running north-south in the eastern parts of the Wallbrook Project. The LTZ is recognised as a world class gold province, with a mineral endowment (production + resources) of over 20Moz of gold. Major deposits include Sunrise Dam (8.0Moz), Wallaby (8.0Moz) and Granny Smith (3.6Moz). The Keith-Kilkenny Tectonic Zone (KKTZ) has a northwest-southeast orientation and is an important vector to mineralisation in the region between Leonora and Leinster. The southern extension of the KKTZ intersects the Carosue Dam Operation (4.275Moz).

The lithologies at Wallbrook are dominated by intermediate (andesitic) volcanics, intrusive felsic porphyries and granite. The dominant feature in the project area is the Wallbrook Monzonite. North of the monzonite are relatively smaller granitic intrusions and related narrow felsic porphyry dykes/sills which run predominantly parallel to the regional trend.

The project area covers the convergence of two major trends wrapping around the northern end of the tear shaped Wallbrook Monzonite. There are several phases of alteration observed, including:

- chlorite + magnetite (associated with regional deformation);
- hematite + silica + sulphides (+ associated felsic intrusives); and
- sericite + silica + carbonate + pyrite + gold (late tectonic + mineralising event).

As with many of the gold deposits within the Eastern Goldfields, gold mineralisation occurred relatively late in the deformational history of the area. Within the felsic lithologies there is a relationship between the hematite/silica alteration and gold mineralisation. Arnold (1999) suggests gold mineralisation is related to hematite bearing oxidized alteration assemblages, with deposition occurring where gold bearing fluids have come into contact with earlier magnetite-hematite assemblages.

DRILLING SUMMARY

The April 2024 Crusader-Templar MRE is based on 759 drillholes that were available as at September 2022. No drilling has been completed subsequent to this date which impact the modelled mineralisation and geology. A summary of drill holes is provided in Table 5. All drillhole data was employed for the interpretation and grade estimation processes with validation checks undertaken by Snowden Optiro.

Hole type	Number of holes	Metres
AC	53	2,918
DD	36	15,910
RAB	156	7,830
RC	514	94,433
Total	**759**	**121,091**

Table 5: Summary of Crusader-Templar drill holes

SAMPLING AND ASSAY SUMMARY

Key information around sampling and assaying procedure include:

- Collection of 1m samples through a rig mounted cone splitter for RC and the collection of HQ core for DD.
- The inspection of drill samples and core to check recovery, moisture, and contamination.
- The assaying of samples using the fire assay and photon assay method
- The inclusion of certified reference standards (standards) for a range of gold grades to test the accuracy of the laboratory.
- The inclusion of both coarse and fine blanks as appropriate to test for contamination at the sample preparation stage and the assaying stage.
- The collection of field duplicate samples by collecting 2 samples at the same time from the cone splitter to test the repeatability of the samples.

RC holes were drilled with a 143 mm face sampling bit, with samples returned through a hose into a cyclone and cone splitter producing a 2-3 kg.

Diamond holes were drilled at HQ diameter. Sampling of diamond core was based on regular one metre intervals other than where geological boundaries dictated otherwise. Samples could not be less than 0.10m and not more than 1.2m. The core was cut in half to produce a sample weight of three to four kilograms per sample.

All RC samples were visually checked for recovery and moisture content. No issues were reported with moisture or with sample recoveries.

Drill core recovery and ground conditions were good, with no significant core loss noted during the diamond drilling program.

RC and DD samples were primarily prepared at ALS Laboratories in Kalgoorlie and Perth (other labs used include SGS, Intertek, Ultratrace, Amdel and Ammtek) where samples were dried, and the whole sample pulverised to 85% passing 75 micron and a sub-sample of approximately 250 grams retained. A 50 gram sample was fire assayed with AAS finish.

A significant number of RC and Diamond samples were submitted for photon assaying in addition to fire assaying to assess the compatibility of the alternative analytical technique. All photon assaying was undertaken by ALS at its Canning Vale or Kalgoorlie laboratories. Photon assay samples were taken from the Fire Assay bulk reject sample at ALS to produce a 500g sample for analysis.

GEOLOGICAL AND MINERALISATION MODELLING

The modelling process applied included geological and structural interpretation to define weathering and oxidation, host lithologies, and mineralised lodes. The mineralisation interpretation defines north-northwest to south-southeast striking sub-vertical and shallow west dipping narrow lode structures within the Crusader and Templar areas of the deposit, all based on a nominal 0.35g/t Au grade threshold (Figure 9 and Figure 10).

The Crusader and Templar deposits are the southern and northern sections of the deposit area (respectively) and are interpreted to be on the western and eastern sides of a regional antiform. They are structurally controlled, with mineralisation related to felsic porphyry intrusions, fluid flow and alteration.

The structural framework suggests isoclinal folding of the porphyry units. At Crusader, these are present as linear dykes with a possible recumbent fold nose in the southwestern part of the deposit (Figure 11). At Templar, Snowden Optiro observed the correlation of en-echelon arrays of felsic porphyry intrusives to the mineralised domains (Figure 12). Mineralisation was also interpreted in other mineralised structures such as the shallow west dipping arrays and deeper possible feeder zones within the mafic host rock. Most of the mineralisation follows the porphyry dykes. Some of the oblique cross-cutting mineralisation is related to the flat west dipping set of shears.

The Templar mineralised domains show en-echelon arrays of porphyry dykes that spatially correlate with the mineralised domains. This explains the apparent down dip variability of mineralisation in the drilling. The mineralisation manifests as moderately south plunging arrays of steeply dipping narrow zones, with vertical extents ranging from 60m to 110m. Down dip separation of the arrays varies from 30m to 60m. This pinch and swell geometry explains the variable results in drilling on section and was used to control the upper and lower extents of the shallow north plunging mineralised shoots (Figure 13).

Geological modelling focused on differentiating the intrusive porphyry units, mafic Proterozoic dykes, and delineating faults and shears. The interpretation leveraged any clear relationship with structures identified through detailed geophysics.

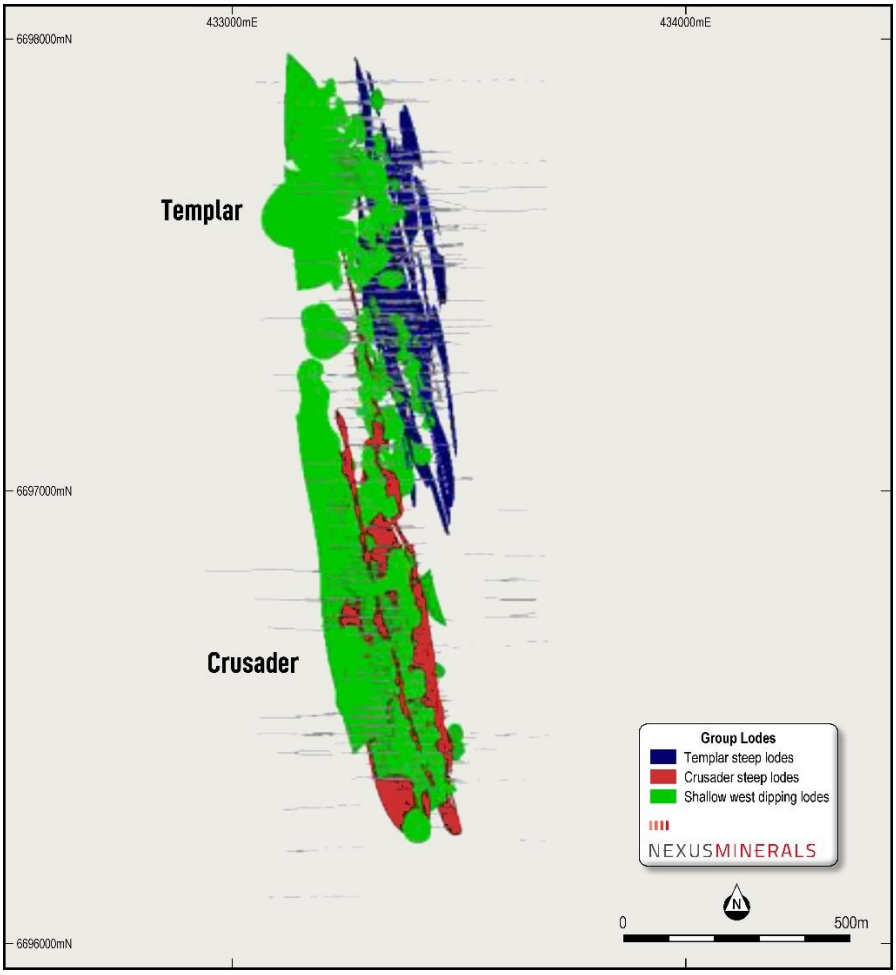

Figure 9: Crusader-Templar plan displaying mineralised domains

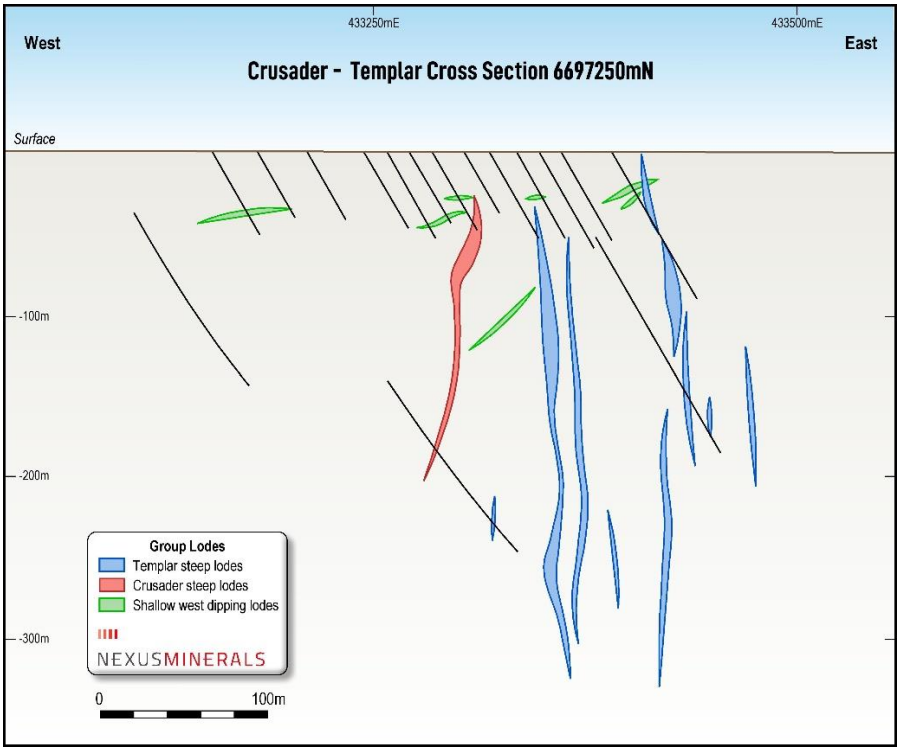

Figure 10: Crusader-Templar cross-section displaying mineralised domains

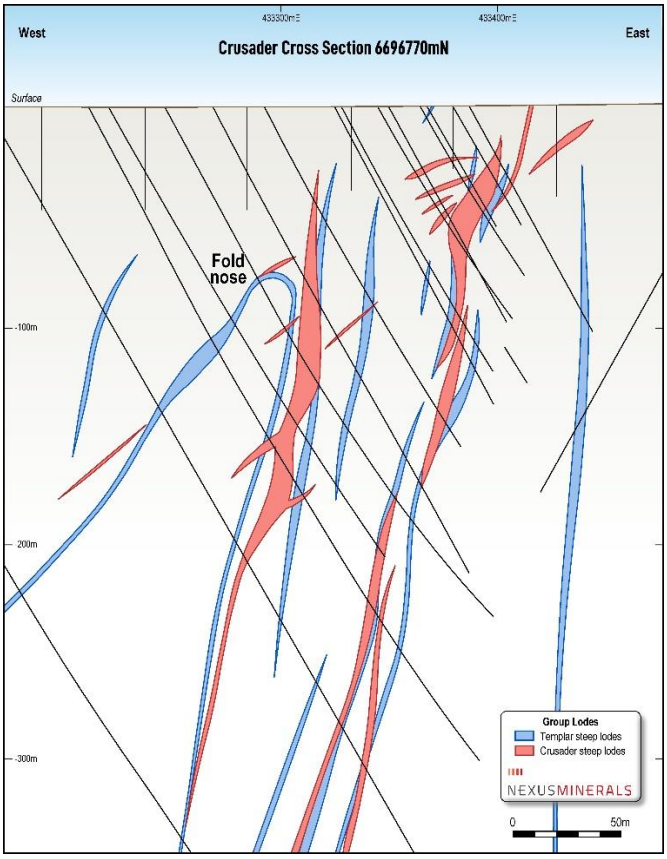

Figure 11: Crusader cross-section displaying mineralised domains

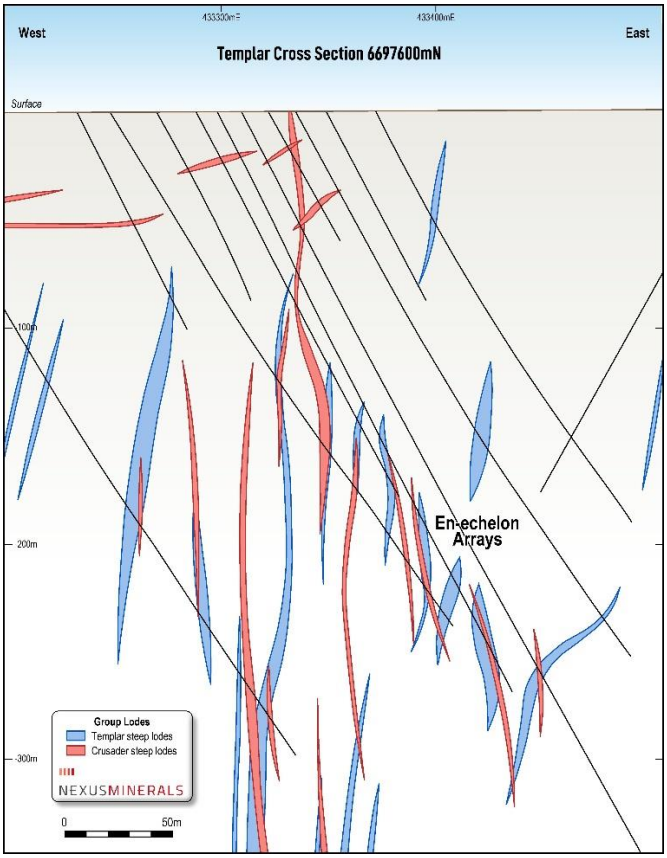

Figure 12: Templar cross-section displaying mineralised domains

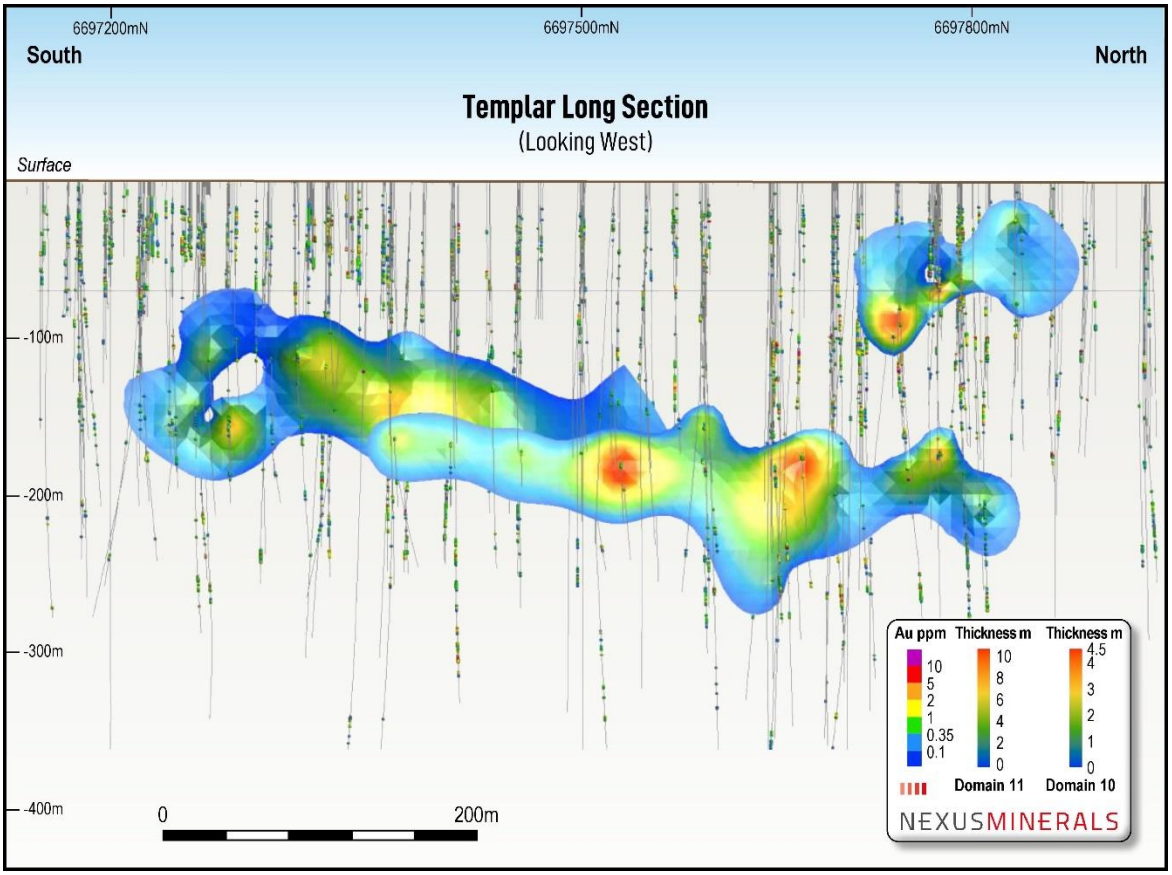

Figure 13: Templar long-section displaying north plunging shoot

Weathering surfaces representing the oxide, transitional and fresh contacts were developed by Nexus using drill hole logs and Imago imagery.

Wireframes representing the lithological units were created by Snowden Optiro and were constructed based on downhole logging and surface mapping (see Figure 13 above).

Mineralisation wireframes were constructed by Snowden Optiro and comprised 26 mineralised lodes, split into three groups; Templar steeply dipping lodes, Crusader steeply dipping lodes, and shallow west dipping lodes. Templar lodes are situated in the northern portion of the deposit, with Crusader lodes in the southern portion. Shallow west dipping lodes are modelled across the full strike of the deposit.

MINERAL RESOURCE ESTIMATION

Samples were composited to 1m lengths within the mineralisation and weathering domains to ensure no composited intervals crossed any domain boundaries. Statistical analysis revealed mixed grade populations, and as such categorical indicator kriging (CIK) was implemented to further refine the mineralised volume within the lodes into mineralised and un-mineralised subdivisions.

Top cuts were applied to reduce the influence of outlier grades during grade estimation and were determined after reviewing the domain statistics in combination with a population disintegration technique. Where applied, un-mineralised top cuts varied from 0.35g/t to 3.50g/t Au and mineralised top cuts varied from 4.90g/t to 21.00g/t Au.

Grade continuity models were developed to inform variography separately for the:

- combined steep dipping Crusader lodes,
- the combined steep dipping Templar lodes and
- the combined shallow west dipping lodes.

Continuity models were derived using a median indicator approach. The grade continuity models were used to separately estimate grades within the mineralised and un mineralised component of each lode.

A block model was constructed using a parent block size of 2 m(E) by 10 m(N) by 10 m(RL) based on the nominal drillhole spacing over the best part of the deposit. The block model developed for grade estimation was constructed from the lithological, oxidation and mineralised lode interpretations. All boundaries, including topography, were represented at a best resolution of 1 mE by 5 mN by 5 mRL. The CIK model was used to code the mineralised and un-mineralised portions of each mineralised lode at a scale of 1 mE by 5 mN by 5 mRL. A waste model was created outside of the mineralisation wireframes to provide sufficient area around the mineralisation for pit optimisation.

Grades were estimated using ordinary kriging (OK) of top cut one metre downhole composites into 2 mE by 10 mN by 10 mRL panels. All lode and mineralisation boundaries were treated as hard boundaries or abrupt grade transitions during the estimation process. Dynamic anisotropy (DA) was used for each domain.

A Local Uniform Conditioning (LUC) process was run on the OK model. The discretisation for the LUC was set to 1 by 2 by 2 in X, Y and Z respectively. LUC was used to estimate the distribution of 1 mE by 5 mN by 5 mRL SMU grades from the panel grades estimated within the lodes to reflect potential production operational parameters.

The panel grade estimates were validated using whole-of-domain statistical analysis, swath profile plots and visual appraisal.

BULK DENSITY

Diamond core was used to calculate bulk density (BD) using the Archimedes principal of weighing the core in air then weighing it again under water and using the difference between the weights to calculate the BD. A total of 160 samples were used to inform bulk density at Crusader-Templar. BD measurements were separated by weathering zone, rock type, and grade before being averaged to reflect density conditions across the deposit in each weathering zone. An oxide density of 1.70 t/m^3, transitional density of 2.20 t/m^3, and fresh rock density of 2.75 t/m^3 have been used.

CLASSIFICATION

Classification of the combined Crusader-Templar MRE was completed in accordance with the “Australasian Code for Reporting of Mineral Resources and Ore Reserves” (the JORC Code as prepared by the Joint Ore Reserve Committee of the Australasian Institute of Mining and Metallurgy (AusIMM), Australian Institute of Geoscientists (AIG) and Minerals Council of Australia (MCA) and updated in December 2012).

The resource classification has been applied to the MRE based on the demonstrated geological and grade continuity relative to local drillhole spacing and mineralised lode thickness.

The resource has been classified on the following basis:

A) **Measured**: No areas of the in-situ Mineral Resource were classified as Measured Resources.

B) **Indicated:** The Mineral Resource has been classified as Indicated Resource, where confidence in the Mineral Resource was considered to be moderate, based on confidence in the geological interpretation, geological and grade continuity and local drillhole support. Three geographic regions were defined in which selected domains were classified as Indicated Resource (Figure 3).

C) **Inferred:** The Mineral Resource has been classified as Inferred Resource, where confidence in the Mineral Resource estimate was considered to be low, based on geological and grade continuity, and drillhole support. This includes all shallow west dipping lodes based on both geological and grade continuity considerations. All other mineralised domains and the portions of domains not classified as Indicated (Figure 3).

REPORTING AND CUT-OFF GRADES

To satisfy the requirements of reasonable prospects for eventual economic extraction (RPEEE) by open pit mining, a pit optimisation was undertaken to report the MRE within a pit shell. The cost and recovery assumptions were benchmarked against deposits of a similar scale and geological nature. A gold price of A$3,950 per ounce was used.

The Crusader-Templar Mineral Resources are reported within the optimised pit shell, above a cut-off grade of 0.4g/t Au and constrained to the boundaries of the Nexus tenure. A grade-tonnage report for the in-situ mineralised blocks within the pit shell, including only Indicated and Inferred Mineral Resources.

Cut-off	Tonnes	Au g/t	Au Oz
0.1	6,121,599	1.57	308,072
0.2	6,057,218	1.58	307,743
0.3	5,916,430	1.61	306,582
0.4	5,669,331	1.67	303,764
0.5	5,316,301	1.75	298,637
0.6	4,884,306	1.85	290,999
0.7	4,468,724	1.97	282,319
0.8	4,084,651	2.08	273,072
0.9	3,724,568	2.20	263,235
1.0	3,406,461	2.31	253,533
1.1	3,115,801	2.43	243,733
1.2	2,857,165	2.55	234,168
1.3	2,613,768	2.67	224,387
1.4	2,387,606	2.80	214,583
1.5	2,193,571	2.91	205,544
1.6	2,027,014	3.03	197,247
1.7	1,867,999	3.14	188,811
1.8	1,726,643	3.26	180,863
1.9	1,596,166	3.37	173,103
2.0	1,473,845	3.49	165,437

Table 6: Crusader-Templar grade-tonnage report

MINING AND OTHER MATERIAL MODIFYING FACTORS

To satisfy the requirements of reasonable prospects for eventual economic extraction (RPEEE) by open pit mining, a pit optimisation was undertaken to report the MRE within a pit shell. Nexus provided the price, cost and recovery assumptions based on benchmarking against deposits of a similar scale and geological nature and are summarised in Table 7. Metallurgical test work completed by Nexus established a recovery of 98% for gold across the Crusader-Templar Prospect (oxide and fresh). A gold recovery of 98% has been adopted for RPEEE considerations.

Item	Unit	Value	Comment
MODIFYING FACTORS			
Overall wall angle - Oxide	Degrees	40	*Client Sourced*
Overall wall angle - Trans	Degrees	42	*Client Sourced*
Overall wall angle - Fresh	Degrees	47	*Client Sourced*
Mining Dilution - Oxide	%	13%	*Client Sourced*
Mining Dilution - Trans	%	16%	*Client Sourced*
Mining Dilution - Fresh	%	20%	*Client Sourced*
Mining Loss	%	Nil	*Client Sourced*
Metallurgical Recovery	%	98.00%	*Client Sourced*
Processing Rate	Mtpa	4.00	
REVENUE			
Gold price - RPEEE	(AUD/oz)	3,950	*Client Sourced*
Gold price - RPEEE	(AUD/g)	122.17	*Client Sourced*
Royalty	%	2.5%	*Client Sourced*
COST CALCULATIONS			
Mining Costs	AUD/bcm	4.5 to 14.51	Client Sourced, 5% escalation from base level at
Blasting Costs - Oxide	AUD/bcm	1.80	*Client Sourced*
Blasting Costs - Trans	AUD/bcm	2.10	*Client Sourced*
Blasting Costs - Fresh	AUD/bcm	2.40	*Client Sourced*
Mining Services	AUD/t ore	5.00	*Client Sourced*
Grade Control	AUD/t ore	3.00	*Client Sourced*
Sustaining CAPEX	AUD/t ore	0.20	*Client Sourced*
Processing Cost - Scenario 1	AUD/t ore	27.30	*Client Sourced. Includes $6.30/t haulage.*

Table 7: RPEEE Pit Optimisation price, cost and recovery assumptions

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

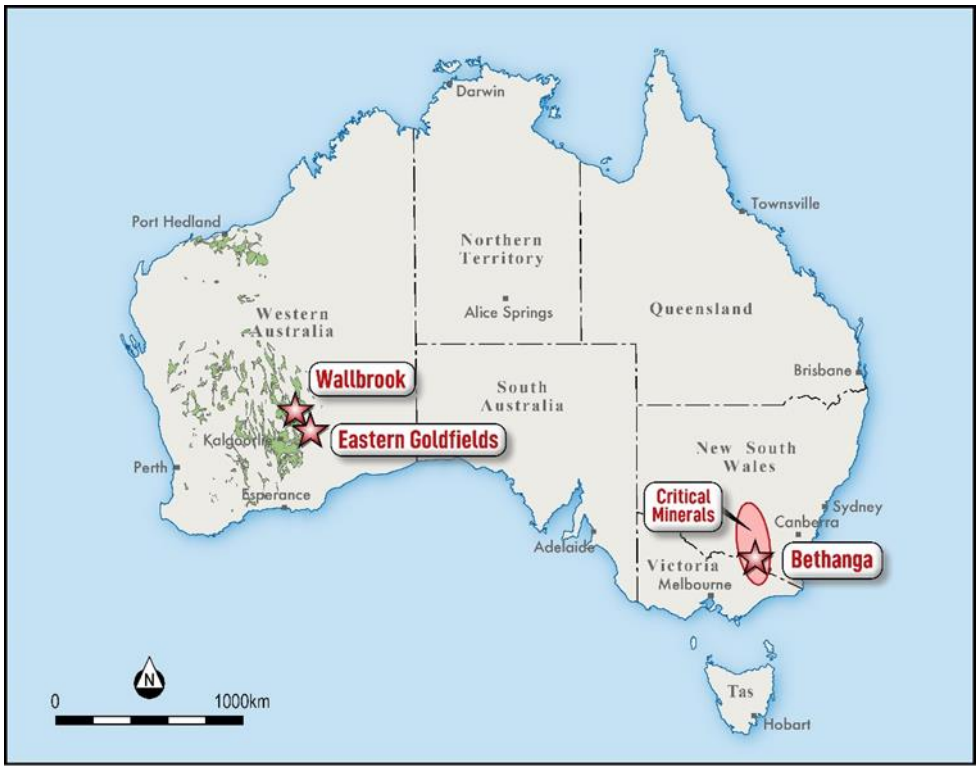

Figure 14: Nexus Project Locations, Australia

About Nexus

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 expanded its existing project portfolio with the addition of the Bethanga Porphyry Copper-Gold project in Victoria, and has recently been granted over 15,000km^2 of Gold, Copper and Critical Mineral prospective tenure in NSW.

In Western Australia, the consolidation of the highly prospective Wallbrook Gold Project by the amalgamation of existing Nexus tenements with others acquired, will advance these gold exploration efforts. Nexus holds a significant land package of highly prospective geological terrane within a major regional structural corridor and is exploring for gold deposits.

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 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	**www.nexus-minerals.com**
ASX Code	**NXM**

The information in the report to which this statement is attached that relates to Mineral Resources based upon information compiled by Paul Blackney, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Blackney is a full-time employee of Snowden Optiro, consultants to Nexus Minerals Limited. Mr Blackney 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 Blackney consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

The Exploration Target estimate has been prepared 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 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 Adam James, who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr James is the Exploration Manager and full-time employee of Nexus Minerals Limited. Mr James 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 James 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.nexus-minerals.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.

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.

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.

Northern Star Ltd Carosue Dam Resource Table as at 29/8/2022

	Measured			Indicated			Inferred			Total Resources		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
NST ATTRIBUTABLE INCLUSIVE OF RESERVE	(000's)	(gpt)	(000's)	(000's)	(gpt)	(000's)	(000's)	(gpt)	(000's)	(000's)	(gpt)	(000's)
CAROSUE DAM GOLD PROJECT												
Surface	3,794	1.6	195	22,687	1.7	1,217	10,467	1.6	522	36,947	1.6	1,934
Underground	7,583	3.0	727	12,685	2.5	1,036	5,977	2.9	473	26,244	2.7	2,235
Stockpiles	2,526	1.8	58	-	-	-	-	-	-	2,526	1.8	58
Gold in Circuit	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Carosue Dam	13,903	2.2	980	35,371	2.0	2,253	16,444	2.1	995	65,718	2.1	4,227

Northern Star Ltd Carosue Dam Reserve Table as at 29/8/2022

	Proved			Probable			Total Reserve		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
NST ATTRIBUTABLE RESERVE	(000's)	(gpt)	(000's)	(000's)	(gpt)	(000's)	(000's)	(gpt)	(000's)
CAROSUE DAM PROJECT									
Surface	588	1.2	23	15,996	1.5	768	16,584	1.5	791
Underground	4,019	3.0	392	6,124	2.7	527	10,143	2.8	919
Stockpiles	2,526	1.8	58	-	-	-	2,526	1.8	58
Gold in Circuit	-	-	7	-	-	-	-	-	7
Sub-Total Carosue Dam	7,133	2.1	481	22,120	1.8	1,295	29,252	1.9	1,776

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	The sampling was carried out using diamond (DD) drilling and reverse circulation (RC) drilling. RC chips and DD core provide high quality representative samples for analysis. Sampling was carried out in accordance with Nexus Minerals Limited (Nexus) protocols and quality assurance/quality control (QAQC) procedures which Nexus considers to be appropriate for this style of exploration. **RC** RC holes were drilled with a 5.5-inch face sampling bit, with 1 m samples collected through a cyclone and cone splitter producing a 2–3 kg sample. 4 m composite samples and individual 1 m samples were sent to the laboratory for analysis. 1 m, cone split samples were submitted for all mineralised zones. All samples were pulverised at the laboratory to -75 µm, to produce a 50 g charge for gold fire assay with inductively coupled plasma (ICP) finish. Sample pulps were also subjected to additional laboratory x-ray fluorescence (XRF) analysis – this was undertaken as part of the company's research and development project. **DD** DD core is HQ or NQ, sampled at 1 m intervals or geological boundaries and cut into half core for analysis. All samples were pulverised at the laboratory to -75 µm, to produce a 50 g charge for gold fire assay with ICP finish.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	A RC drilling rig was used to undertake the RC drilling and collect the samples. The face sampling bit had a diameter of 5.5 inches (140 mm). A DD drill rig was used to undertake the DD drilling. DD core was oriented using Reflex Act III tool.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	All samples were dry with no significant groundwater encountered. RC face sampling bits and dust suppression were used to minimise sample loss. Average RC metre sample weight recovered was 25 kg with minimal variation between samples. No sample bias is believed to have occurred during the sampling process. DD core recovery percentages calculated from measured core vs drilled intervals are logged and recorded in database. Recoveries averaged >95%.

Criteria	JORC Code explanation	Commentary
	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.	DD core is reconstructed into continuous runs on an angle iron cradle for orientation marking. No sample bias is believed to have occurred during the sampling process.
Logging	*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.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* *The total length and percentage of the relevant intersections logged.*	All RC chip samples were geologically logged by Nexus geologists, using the approved Nexus logging code. Logging of RC chips: Lithology, mineralogy, alteration, mineralisation, colour, weathering and other characteristics as observed. All RC samples were wet sieved. All holes and all metres were geologically logged. All DD core samples were geologically logged by Nexus geologists, using the approved Nexus logging code. Logging of DD core recorded: Lithology, mineralogy, alteration, mineralisation, colour, weathering, structure and other characteristics as observed. All DD core was photographed. All holes and all meters were geologically logged.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* *or all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* *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.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	1 m RC drill samples pass through a cone splitter, installed directly beneath a rig mounted cyclone, and two 2–3 kg samples collected in numbered calico bags. The balance of the 1 m sample (~25 kg) was captured in either a green plastic bag or bucket and placed in neat rows of 20 with the corresponding calico bags. 4 m composite samples are collected by scooping ~500 g from four consecutive green bags. All samples submitted for analysis were dry. Samples were prepared at either the ALS laboratory in Kalgoorlie or the Intertek Laboratory in Kalgoorlie. Samples were dried, and the whole sample pulverised to 85% passing 75 µm, with a subsample of ~200 g retained. A nominal 50 g charge was used for analysis. Nexus considers this to be best industry practice. Duplicate field samples were taken from the cone splitter at either 1:25 samples or for every metre sample. Sampling methods and company QAQC protocols are considered by Nexus to be appropriate for this style of exploration. Nexus considers the nature, quality and size of the subsamples collected are appropriate for this style of deposit. All drill core is cut in half, using an automatic core saw. Samples are always collected from the same side. Sampling methods and company QAQC protocols are considered by Nexus to be appropriate for this style of exploration. Nexus considers the nature, quality and size of the subsamples collected are appropriate for this style of deposit.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *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.* *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	Samples were analysed at multiple laboratories including ALS and Intertek Genalysis. All samples were analysed for gold using fire assay with an ICP finish. This method is considered appropriate for the material being assayed. The method provides a near total digestion of the material. A substantial number of samples were also analysed for gold using photon assay to assess the compatibility of the alternative analytical technique. Analysis of results suggested that photon analysis is a suitable alternative to fire assaying, however, only the fire assay data was used for resource estimation. The methods of analysis are considered appropriate for the material being assayed. Fire assay is used as industry standard practice with the method providing a near total digestion of the material. Magnetic susceptibility readings were taken on all metre DD drill core and RC samples. Selected samples were submitted from oxide/transition/fresh material for bulk density measurement determination. Nexus protocol provides for certified reference material (CRM) (Standards and Blanks) to be inserted at a rate of 4 standards and 4 blanks per 100 samples. Field duplicates are inserted at a rate of either 1 per 25 samples, or 1:1 through mineralised zones. Industry acceptable levels of accuracy and precision have been returned.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	Significant intersections were verified by the Exploration Manager. No twin holes were drilled as part of this program All field logging is carried out on a Toughbook computer. Data is submitted electronically to the database manager in Perth. Assay files are received electronically from the laboratory and added to the database. All data is managed by the database manager. No adjustment to assay data has occurred.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	Drillhole locations were determined using either a handheld global positioning system (GPS) with an accuracy of 3 m or a differential GPS with an accuracy of 0.2 m. Downhole surveys were taken using a Gyro survey tool with readings taken every 5–10 m. Grid projection is GDA94 Zone51. The drillhole collar RL is allocated from a detailed digital terrain model (DTM). Accuracy is ±2 m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *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.* *Whether sample compositing has been applied.*	Drilling took place at the Crusader-Templar prospect. Drillhole spacing was variable through the program area, ranging from a 20 m x 20 m grid to 40 m x 60 m. Some exploratory holes within the program area stepped out up to 100 m. The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedure and classifications applied. Sample compositing was constrained to RC samples returning a grade of less than 0.1 g/t Au.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *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.*	The orientation of the drill lines is considered to be perpendicular to the strike of the regional structures controlling the mineralisation (0°). Holes were drilled -60° towards 090° or -60° towards 270° and intersect largely sub-vertical mineralised structures. The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.
Sample security	*The measures taken to ensure sample security.*	Pre-numbered calico bags were placed into green plastic bags, sealed and transported by company personnel to either the ALS or the Intertek laboratories in Kalgoorlie.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	All sampling, logging, assaying and data handling techniques are considered to be appropriate for this style of deposit. An independent review of quality control data was completed by Snowden Optiro on all available data at the end of September 2022. The review found sampling and assaying at the project to be of suitable quality to support a Mineral Resource estimate (MRE).

Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*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.* *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.*	Drilling was undertaken on tenement M31/231, M31/251, and E31/1108 (application tenement M31/502). Nexus has 100% ownership of the tenements. There are no other known material issues with the tenements. The tenements are in good standing with the Western Australian Mines Department (DMP).
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	The tenement has been subject to minimal prior exploration activities.
Geology	*Deposit type, geological setting and style of mineralisation.*	The geology across Crusader-Templar consists of a thick sequence of intermediate (basaltic andesite-dacite) volcanic and associated volcaniclastic host rocks, intruded by a series of elongate feldspar-quartz porphyry dykes noted as rhyolitic-felsic in composition. Two geochemically related porphyry units have been identified which are variably altered by silica-sericite-haematite-albite-carbonate-chlorite.

Criteria	JORC Code explanation	Commentary
		The mineralisation at Crusader-Templar is hosted within multiple mineralised structures along a sheared corridor broadly trending 350 north-northwest with a southerly plunge. Along this corridor, there is increasing evidence that the host rock package has been compressed, forming tight folds and concentrating mineralisation on the hinge and limbs. At Crusader, mineralisation is hosted in two parallel zones forming an isoclinal antiform with mineralisation present on each limb. Mineralisation at Templar is also hosted in an antiform, with significant concentration of mineralisation at the hinge. Gold mineralisation in the Crusader prospect is much more confined to the porphyry units and lack the extensive alteration selvages displayed in Templar. The host sequence in Templar may also be dominated by volcaniclastic material rather than coherent volcanics in Crusader. Mineralisation is generally dependent on the alteration/veining within the intrusive units and is not confined to one type of porphyry.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *easting and northing of the drillhole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* • *dip and azimuth of the hole* • *downhole length and interception depth* • *hole length.* *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.*	Refer to ASX announcements for full tables. Announcements of note include ASX:NXM 9 September 2022, 24 August 2022, 16 August 2022, 8 August 2022, 26 July 2022, 28 June 2022, 24 May 2022, 9 May 2022, 21 April 2022, 11 April 2022, 31 March 2022, 3 March 2022, 25 January 2022, 21 December 2021, 8 November 2021, 11 October 2021, 5 October 2021, 8 August 2021, 2 August 2021, 23 August 2021, 16 August 2021, 13 July 2021, 28 April 2021, and 7 December 2020.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* *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.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Not applicable as not reporting Exploration Results.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	Not applicable as not reporting Exploration Results.
Diagrams	*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 drillhole collar locations and appropriate sectional views.*	Refer to the maps included in the report.
Balanced reporting	*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.*	Not applicable as not reporting Exploration Results.
Other substantive exploration data	*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.*	No other exploration data to be reported.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Further work at the Crusader-Templar prospect may include aircore drilling for lateral extensions of the mineralised system, infill/extensional RC drilling, and additional DD drilling to support geotechnical, metallurgical and waste rock characterisation studies. Infill RC drilling may include grade control programs to increase confidence level of critical components of the Mineral Resource.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	Database inputs were logged digitally at the drill site. The collar metrics, assay, lithology and downhole survey interval tables have been checked and validated. Snowden Optiro conducted standard database integrity checks, including: • Location plot of drillholes and collar elevation checks against topographic surface • Number of drillholes, hole type used • Overlaps and duplicate records • Review of geological fields • Treatment of below detection limit data and missing values • Survey method and visual validation for drillhole traces.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	A two-day site visit was undertaken by the Snowden Optiro Competent Persons in late March 2022.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	Confidence in the interpretation is based on the detailed geological analysis of the relationship of the lithology, structure and alteration to mineralisation. The demonstration of continuity is based on the association of mineralisation to felsic porphyry intrusives, and the structural setting of Crusader and Templar. The geological and structural interpretation is based on drilling data available as at early September 2022. For the estimation, all available drillholes were used. No assumptions have been made that will materially affect the MRE reported. Alternative interpretations such as crosscutting feeder systems were reviewed in the interpretation process. This determined that a set of shallow west-dipping mineralised shears are present on the upper zone of the western (Crusader) side of the deposit. These are narrow and do not contain significant mineralisation but have been included to show the relationship of a secondary set of mineralised structures. Geological modelling of the mineralisation at Wallbrook was completed using grade, structural and geological inputs. Mineralisation domains have a minimum thickness of 1 m, controlled by the RC hole sample length, and have been modelled at a nominal 0.35 g/t Au cut-off grade. Oxidation domains were used to control the assignment of zone density values to the resource estimate. The key factors affecting the grade and geological continuity are: • Pinch and swell geometry of the Templar vein arrays • Continuity and extent of the narrow vein-style mineralisation • Broader spaced drilling at depth and the projection of mineralisation.

Criteria	JORC Code explanation	Commentary
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Mineralisation at Wallbrook (Templar and Crusader) strikes 345° over a strike length of 1,700 m, with a plan width across the deposit of approximately 200 m. The depth of the reported Mineral Resource is a maximum of 250 m below surface.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	Geological modelling of mineralised domains was undertaken by Snowden Optiro using Leapfrog software. Resource estimation was conducted using Datamine Studio RM Pro software and Snowden Supervisor. Wallbrook comprises 26 mineralised lodes split into three groups based on deposit and orientation. Wireframes were imported into Datamine Studio RM Pro software for the purposes of data coding and estimation. Samples were composited to 1 m within domained wireframes (weathering and domain boundaries). Weathering domains were coded to the mineralised domain intercepts comprising oxide, transitional and fresh. For the purposes of estimation, all weathering domains were combined, based upon contact boundary analysis. Exploratory data analysis (EDA) was undertaken on coded drillholes using Snowden Supervisor software to understand boundary analysis for weathering relationships and mineralisation domains. As a result of the EDA statistical analysis, categorical indicator kriging was implemented to further refine the defined mineralised volume within the lodes into mineralised and unmineralised subdivisions (AU_DOM = 1 and AU_DOM = 0) respectively. Top cutting was reviewed on individual domains and applied to composited samples, on a domain-by-domain basis. Approximately half of the lode subdivisions required top cutting. Where applied, unmineralised top cuts varied from 0.35 g/t Au to 3.50 g/t Au and mineralised top cuts varied from 4.90 g/t Au to 21.00 g/t Au. Grade continuity models were developed separately for the combined steep dipping Crusader lodes, the combined steep dipping Templar lodes and the combined shallow west dipping lodes. Definition of grade continuity proved difficult. Several approaches were tested before continuity models were finally derived using a median indicator approach. All grade data within each of the lode sets were used for continuity definition, irrespective of whether it was classified as mineralised or unmineralised. A block model was constructed using a parent block size of 2 m(E) by 10 m(N) by 10 m(RL) based on the nominal drillhole spacing over the best part of the deposit. The block model developed for grade estimation was constructed from the lithological, oxidation and mineralised lode interpretations with codes assigned to represent each of these conditions. All boundaries, including topography, were represented at a best resolution of 1 mE by 5 mN by 5 mRL. The final block model is “221025_wlb_re_mod_class.dm”. Nexus undertook density analysis on 160 bulk density samples, reviewing the data by mineralisation, oxidation and rock type to calculate average density. Based on this data, Nexus recommended that average zone density values be applied to the oxidised, transitional and fresh rock. Density was hard coded based on weathering surface.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>Grade estimation was based on a three-pass search strategy. The primary search pass used in-plane ranges of 40 m and an across plane range of 10 m. These ranges were doubled for a second search pass and multiplied by a factor of 20 for the third pass search. Between 10 and 25 composites were required to satisfy the primary and secondary searches. The third search required between 1 and 20 composites to be satisfied. No more than five composites could be sourced from any individual drillhole during any of the search passes.
Estimation of the panel model was 3D ordinary kriging (OK) using dynamic anisotropy, followed by local uniform conditioning (LUC).
LUC processes were run on the OK Panel model using the declustered dataset, variograms and panel grades generated for each lode.
The panel grade estimates were validated using whole-of-domain statistical analysis, swath profile plots and visual appraisal.
No check estimates were completed.</td></tr>
<tr><td>Moisture</td><td>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</td><td>Tonnages were estimated on a dry basis.</td></tr>
<tr><td>Cut-off parameters</td><td>The basis of the adopted cut-off grade(s) or quality parameters applied.</td><td>Mineral Resources were reported inside an optimised open pit using a cut-off of 0.4 g/t Au. The cut-off grade was determined considering mining costs and processing costs – refer to the next section for detail of inputs.</td></tr>
<tr><td>Mining factors or assumptions</td><td>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</td><td>Potential mining of the Wallbrook deposit will be by surface mining methods involving standard truck and haul mining techniques.
The price, cost and recovery assumptions were provided by Nexus based on their benchmarking against deposits of a similar scale and geological nature and have been summarised in the table below.
<table>
<tr><th>Item</th><th>Unit</th><th>Value</th><th>Comment</th></tr>
<tr><td>Modifying factors</td><td></td><td></td><td></td></tr>
<tr><td>Overall wall angle – Oxide</td><td>°</td><td>40</td><td>Client sourced.</td></tr>
<tr><td>Overall wall angle – Trans</td><td>°</td><td>42</td><td>Client sourced.</td></tr>
<tr><td>Overall wall angle – Fresh</td><td>°</td><td>47</td><td>Client sourced.</td></tr>
<tr><td>Mining dilution – Oxide</td><td>%</td><td>13%</td><td>Client sourced.</td></tr>
<tr><td>Mining dilution – Trans</td><td>%</td><td>16%</td><td>Client sourced.</td></tr>
<tr><td>Mining dilution – Fresh</td><td>%</td><td>20%</td><td>Client sourced.</td></tr>
<tr><td>Mining loss</td><td>%</td><td>Nil</td><td>Client sourced.</td></tr>
<tr><td>Metallurgical recovery</td><td>%</td><td>98%</td><td>Client sourced.</td></tr>
<tr><td>Processing rate</td><td>Mtpa</td><td>4.00</td><td></td></tr>
<tr><td>Revenue</td><td></td><td></td><td></td></tr>
<tr><td>Gold price – RPEEE</td><td>A$/oz</td><td>3,800</td><td>Client sourced.</td></tr>
<tr><td>Gold price – RPEEE</td><td>A$/g</td><td>122.17</td><td>Client sourced.</td></tr>
</table></td></tr>
</table>

Criteria	JORC Code explanation	Commentary			
		Royalty	%	2.5%	Client sourced.
		Cost calculations			
		Mining costs	A$/bcm	4.5 to 14.51	Client sourced, 5% escalation from base level at surface (370RL) in 10 m increments.
		Blasting costs – Oxide	A$/bcm	1.80	Client sourced.
		Blasting costs – Trans	A$/bcm	2.10	Client sourced.
		Blasting costs – Fresh	A$/bcm	2.40	Client sourced.
		Mining services	A$/t ore	5.00	Client sourced.
		Grade control	A$/t ore	3.00	Client sourced.
		Sustaining CAPEX	A$/t ore	0.20	Client sourced.
		Processing cost – Scenario 1	A$/t ore	27.30	Client sourced. Includes $6.30/t haulage. No tenement boundary constraint scenario.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Metallurgical testwork completed by Nexus established a recovery of 98% for gold across the Crusader-Templar prospect (oxide and fresh). A gold recovery of 98% has been adopted for reasonable prospects for eventual economic extraction (RPEEE) considerations.			
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	The Wallbrook Project is located in a gold mining district with mining occurring in the area over the past 100 years. There are no major water courses in the project area, although ephemeral streams do exist throughout the tenements. The mineralisation in the area has no history of acid forming potential, though no studies have been completed on the project. It is assumed that surface waste rock landforms will be used to store waste material and conventional tailings storage facilities will be used for the management of process plant tailings. A baseline flora and fauna study has been completed and there is no threatened or priority flora, vegetation and fauna within the project area.			

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Bulk density</td><td>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.

The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.

Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>Nexus undertook density analysis on 160 bulk density samples, reviewing the data by mineralisation, oxidation and rock type to calculate average density. Based on this data, Nexus recommended that average zone density values be applied to the oxidised, transitional and fresh rock. Density was hard coded based on weathering surface.

Assigned bulk density values are provided below.
<table><tr><th></th><th></th><th></th></tr><tr><td>1</td><td>Oxidised material</td><td>1.7</td></tr><tr><td>2</td><td>Transitional material</td><td>2.2</td></tr><tr><td>3</td><td>Fresh rock</td><td>2.75</td></tr></table>
Density was measured by ALS laboratories using a standard well-documented procedure: the immersion or Archimedes method. Fresh rock core was competent with no evidence for void spaces. Oxide samples were wrapped in glad wrap for measurements.

Average density values were assigned relative to oxidation conditions. The density values assigned are considered by the Competent Person to be acceptable considering the stage of the project and the commensurate resource classification. Snowden Optiro recommends the collection of more bulk density measurements.</td></tr>
<tr><td>Classification</td><td>The basis for the classification of the Mineral Resources into varying confidence categories.

Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).

Whether the result appropriately reflects the Competent Person’s view of the deposit.</td><td>The resource classification has been applied to the MRE based on the geological and grade continuity relative to local drillhole spacing and mineralised lode thickness.

The Mineral Resource has been classified as Indicated Resource, where confidence in the Mineral Resource was considered to be moderate, based on confidence in the geological interpretation, geological and grade continuity and drillhole support. Three geographic regions were defined by wireframes and specific lodes coded as Indicated Resource.

The Mineral Resource has been classified as Inferred Resource, where confidence in the MRE was considered to be less, based on geological and grade continuity and drillhole support:
• All shallow west-dipping lodes (group 3) were classified as Inferred based on both geological and grade considerations
• All other lodes and the portions of the above listed lodes outside the geographical regions were assigned a low confidence and classified as Inferred.

The resource classification reflects the overall confidence in the Wallbrook deposit and is considered to have appropriately accounted for all known factors.

The Mineral Resource classification appropriately reflects the view of the Competent Persons. The Mineral Resources have been reported within an optimised pit shell indicating RPEEE.</td></tr>
<tr><td>Audits or reviews</td><td>The results of any audits or reviews of Mineral Resource estimates.</td><td>Snowden Optiro are not aware of any audits undertaken on the 2024 MRE.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The relative accuracy of the MRE is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code (2012 Edition). No attempt has been made to quantify relative accuracy and confidence at this stage of analysis. The Mineral Resource statement relates to global estimates of in-situ tonnes and grade. No mining has taken place, no production data is available.