

ASX ANNOUNCEMENT

26 April 2023

Nexus Wallbrook Crusader-Templar Exploration Target and Open Pit Mineral Resource Estimate

- ✓ A JORC 2012 Exploration Target has been completed for the Crusader-Templar gold deposit
- ✓ The Crusader-Templar Exploration Target is <u>inclusive</u> of the JORC 2012 Crusader-Templar Open Pit combined Mineral Resource Estimate (MRE) of:
 - 2.57 Mt @ 2.12g/t Au for 175,000 ounces contained gold (1g/t cut-off), including:
 - Indicated: 1.02 Mt @ 2.5g/t Au for 81,000 ounces contained gold
 - Inferred: 1.55 Mt @ 1.9g/t Au for 94,000 ounces contained gold
- ✓ The MRE has focused on <u>mine constrained open pit potential only</u> and includes a significant component of indicated material comprising 46% of overall mineral resource
- ✓ The MRE, with reasonable prospect of eventual economic extraction factors applied, is only a small component of the larger Exploration Target delineated by the extensive drilling undertaken
- ✓ Preliminary mine studies have focused on potential for a low-risk, high margin open pit operation
- ✓ The MRE is within the larger deposit that remains open to north and south along strike, down plunge of higher-grade shoots, and has potential for parallel lodes to the east
- ✓ The MRE is supported by critical technical benefits including strong metallurgical recoveries of 98%, clear environmental studies, granted mining tenure and location next to Northern Star Resources mine infrastructure and nearby Carosue Dam mill
- ✓ Systematic exploration of 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

Exploration Target

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

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).



Nexus Minerals Limited (ASX: NXM) (Nexus or the Company) is pleased to announce that it has calculated an Exploration Target for the Crusader-Templar gold deposit. The Exploration Target is detailed above, and ranges from 480,000 to 790,000 ounces of contained gold. Note the Exploration Target is inclusive of the Mineral Resource Estimate (MRE) for the Crusader Templar deposit of 2.57 Mt @ 2.12g/t Au for 175,000 ounces contained gold (1g/t cut-off). This robust shallow mineral resource estimate with stringent economic consideration and favourable grade is strategically located within the Company's Wallbrook project, surrounded by existing Northern Star Resources infrastructure and milling operations.

Nexus Managing Director Andy Tudor commented "This is a significant milestone for the project which has seen a considerable effort from the exploration team to produce a robust mineral resource estimate which now forms a launch pad for mine studies. Pleasingly, and consistent with our exploration strategy, 46% of the MRE is in the indicated category and readily incorporated into mine planning. The scale of the MRE is reflective of the stringent economic considerations in modelling and reporting, which can now drive realistic opportunities towards monetisation.

With stringent rules surrounding MRE reporting - this MRE makes up only a small component of the Crusader-Templar deposit, with significant potential for enlargement utilising a lower gold cut-off grade, increased gold price and continuing exploration drilling success. Preliminary analysis of the deposit has demonstrated the potential for robust returns and has provided the impetus to undertake mine studies. Whilst mine studies are in focus, exploration has already demonstrated gold camp scale opportunity and a number of exciting opportunities to build on this initial MRE and generate a pipeline of high value ounces".

The Crusader-Templar MRE was prepared by independent consultants BM Geological Services (BMGS) using geological modelling and technical input from Nexus geologists. BMGS has a strong background in successfully developing deposits of this nature and has introduced practical constraints on the model upon which mine studies can be reliably based. The MRE has been compiled, reported and classified in accordance with the guidelines provided in the 2012 edition of the JORC Code.

Deposit	Category	Tonnes	Grade (g/t Au)	Au (oz)
Curredon	Indicated	850,000	2.5	68,000
Crusader	Inferred	503,000	1.7	27,000
Tamanlar	Indicated	170,000	2.4	13,000
Templar	Inferred	1,048,000	2.0	67,000
TOTAL	Indicated	1,021,000	2.5	81,000
TOTAL	Inferred	1,551,000	1.9	94,000
GRAND	TOTAL	2.572.000	2.1	175.000

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

The release of the Crusader-Templar MRE marks the first step towards recognising the greater gold camp potential of the Wallbrook Project. The strong technical and commercial foundation of the MRE defines high value ounces, which will form the foundation of mine studies and an opportunity to derive significant value from the discovery.

The MRE is characterised by a series of anastomosing porphyry dykes within a volcanic / volcaniclastic host sequence along a strike length of 1.6km. Highest grade mineralisation is situated at the southern and northern ends of the deposit in the Crusader component and Templar components respectively. The MRE has focused on accurately defining these highest-grade areas to ensure economic potential is maximised.



The deposit has a favourable average grade of 2.12 g/t Au, surpassing that of neighbouring open pits, and has several critical technical and financial benefits, including strategic location, clear environmental studies, granted mining tenure, and a strong metallurgical recovery rate of 98%.

The MRE only considers material above 200 meters vertical depth with a 0.5 g/t Au lower cut off used for delineating mineralisation during modelling, and a greater than 1g/t Au cut off for reporting. Whilst the MRE and mine studies will focus on the open pitable potential of deposit this does not preclude the possibility of underground mining in the future, which would further increase the resource base of the project.

The immediate focus of technical team will now see the successful completion of mine studies. While exploration opportunities exist to expand the scale of the Crusader-Templar MRE, including strike extensions, down plunge of higher-grade shoots, and potential parallel lodes to the east, the future exploration priority moves to discovering additional shallow orebodies elsewhere on the project which can build a high value deposit pipeline. Exploration success to date demonstrates the potential for a more extensive mineralised system and highlights the significant opportunity for further discoveries. Drilling has yielded impressive results, with a number of high-grade gold intercepts proximal to the Crusader-Templar resource and within the broader Wallbrook Project.

As mine studies are progressed with an aim towards entering commercial production, safety, environmental stewardship, and community engagement will continue to be addressed. The project has the potential to be a significant source of value for Nexus stakeholders.

Exploration Target Basis

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).

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 recent exploration success.

Drilling, logging and interpretation work undertaken at Crusader-Templar to date shows no indication that the identified lodes could be structurally affected or interrupted at this stage. The volume of the projected Crusader-Templar system has been modelled as controlled by the anastomosing porphyry dykes and associated structures, which has been subject to detailed interpretation work and external review in the last 6 months. The upside is in part reflective of the non-reportable 'unclassified material' which include downdip and well constrained strike extensions confirmed by drilling and reasonable extensions. The Exploration Target does not place an upper limit on the Crusader-Templar system with further exploration retaining significant potential for further discovery of ounces.

The gold grade range applied assumes a lower cut off threshold compared to the reported MRE, which is supported by existing drill hole intercepts, and is considered conservative in nature. The overall Exploration Target is well supported by numerous drill intercepts throughout the deposit. Further drilling will be considered upon conclusion of the mine studies, which will see focus on resolving and de-risking highest value ounces.



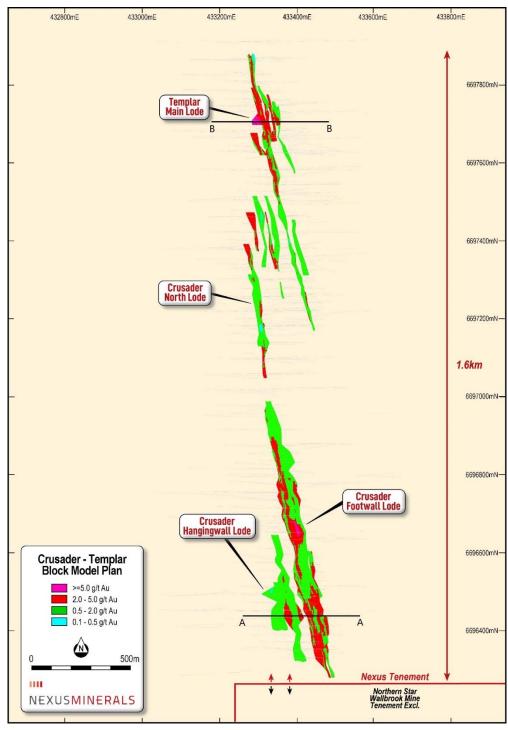


Figure 1: Plan View of Block Model

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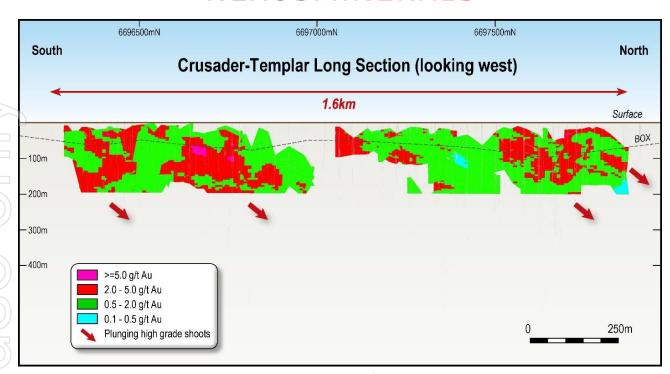


Figure 2: Long Section of Block Model

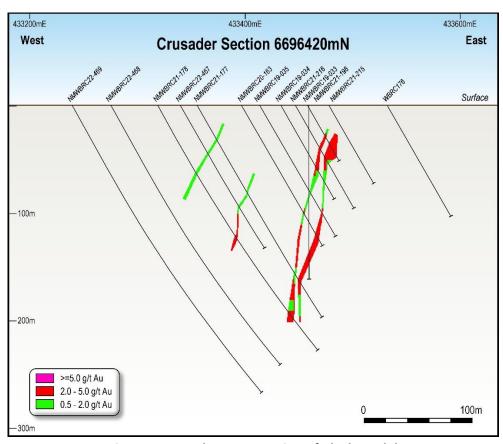


Figure 3: Crusader Cross Section of Block Model

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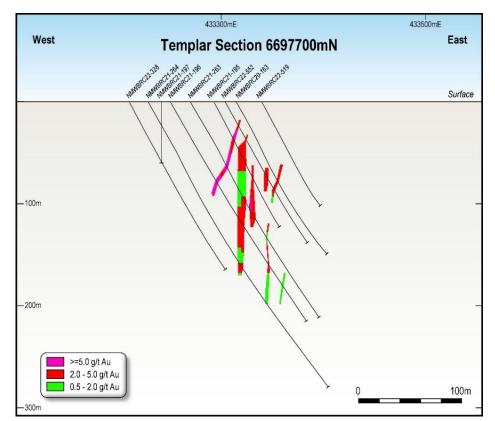


Figure 4: Templar Cross Section of Block Model

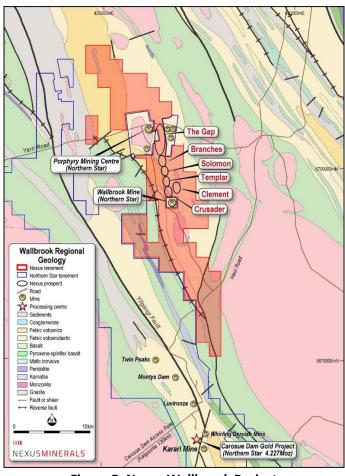


Figure 5: Nexus Wallbrook Project



MINERAL RESOURCE ESTIMATE

PROJECT LOCATION

The Crusader-Templar deposit is a part of the Wallbrook Project which is located approximately 130 km northeast of Kalgoorlie in the Eastern Goldfields of WA, 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 204km² of prospective ground 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 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 20 Moz of gold. Major deposits include Sunrise Dam (8.0 Moz), Wallaby (8.0 Moz) and Granny Smith (3.6 Moz). 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 (4.275 Moz).

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 Crusader-Templar MRE was comprised of a total of 360 reverse circulation (RC) holes and 17 diamond (DD) drill holes. This is separated into 180 RC and 4 DD drill holes for the Crusader component of the MRE and 180 RC holes and 13 DD holes for the Templar component of the MRE. The database was imported into Surpac and validation checks were carried out on collar locations, downhole surveys and sample intervals, to ensure they were suitable for use in MRE.

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 method.
- The inclusion of certified reference standards (standards) for a range of gold grades to test the accuracy of the laboratory.
- The inclusion of fine blanks 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.



GEOLOGICAL MODELLING

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.

Wire frames were completed in Micromine on 25-40m sections using available geological logging and photography captured in Imago imaging software.

MINERAL RESOURCE ESTIMATION

The approach to mineralisation domain modelling at Crusader - Templar was grounded by the characteristics and orientations of the geological domains. The key considerations underpinning the mineralisation domaining approach included:

- Mineralisation at Crusader Templar is primarily contained within the porphyry dykes but can also appear in the intermediate and volcaniclastic host rocks (especially in Templar prospect).
- Structurally, primary mineralisation strikes northwest (345°-350°) and dips steeply (85°) to the west.
- To preserve mineralisation continuity, during interpretation where the intercept gold value was below the nominal cut-off of 0.5 g/t and the host lithology supported continuity, the intercept was included in the domain due to the commodity and the style of deposit.
- A minimum downhole width of 2m downhole was used.

Interpretations of domain volume and continuity were undertaken in Geovia Surpac 3D modelling software. Lode outlines were manually digitised on cross section using all RC and DD drilling (Figure 3), the outlines were then joined together across sections to create individual 3D solid shapes. Each 3D shape was assigned a domain number between 1 and 99.

Base of transported (BOTR), base of complete oxidation (BOCO) and top of fresh rock (TOFR) surfaces were modelled based on drill hole logging and photographs.

Variography was carried out in Snowden's Supervisor software. Experimental variograms were generated for the lodes with sufficient samples to assess the continuity and allow for generation of a variogram model.

The parent block sizes of 10m NS by 10m EW by 5m vertical and sub cell size of 1m by 0.625m by 0.625m were selected based on the drill and sample spacings available for estimation. The block model was rotated at -10° to align with the strike of mineralisation.

The model was estimated using both Ordinary Kriging (OK) and Inverse Distance Squared (ID²). Domains were estimated separately using the wireframe as hard boundaries to prevent smearing of grades. Variograms for domain 1 were used in the estimation for all other domains for each deposit as these were the largest domains and gave characterisation of the spatial continuity of gold grades. Only the top cut OK estimation has been reported.

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 66 samples taken from 16 holes in the MRE area covering both Crusader and Templar. BD measurements were separated by weathering zone and averaged to be flagged to both blockmodels in the density attribute by weathering profile. A mineralised oxide density of 2.20 t/m³, transitional density of 2.6 t/m³, and fresh rock density of 2.8 t/m³ have been used.



CLASSIFICATION

The Crusader - Templar MRE has been classified as indicated and inferred based on the density of drill data, geological/grade continuity, the performance of the QAQC data, and the economic potential for mining.

The indicated component of the MRE consists of areas that have been drilled to an approximate drill spacing of 25m by 25m and have a grade above 1 g/t.

The inferred component of the MRE is defined by areas that have been drilled to roughly 40m by 40m, sit within 200m of the surface (within a feasible depth for open pit mining) and has continuity greater than single intercepts or more than 2 sections.

All other material has been left as unclassified due to the lack of confidence associated with drilling drill spacing, lack of continuity or being too deep to be considered for an open pit MRE.

REPORTING AND CUT-OFF GRADES

The tonnes and grade for the April 2023 Crusader-Templar MRE were calculated using a 1 g/t cut-off grade. All reporting uses the ordinary kriged values, which include top cut gold assays.

MINING AND OTHER MATERIAL MODIFYING FACTORS

No modifying factors were applied to the estimated block values.



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

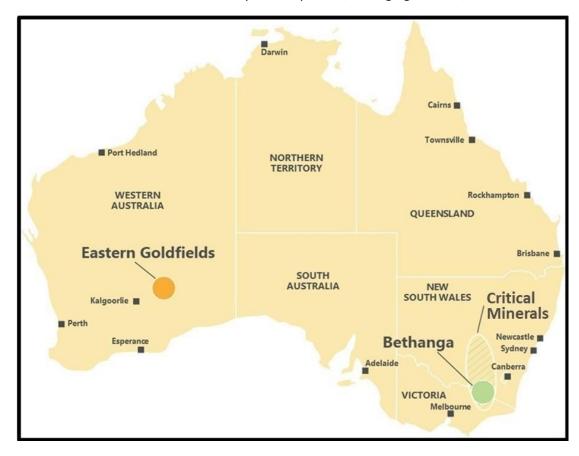


Figure 6: Nexus Project Locations, Australia

About Nexus

Nexus principal activity is exploring for gold deposits on its highly prospective Wallbrook 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.

In Western Australia, the consolidation of the highly prospective Wallbrook Gold Project (204km2) 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

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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 Mr Andrew Bewsher, a Competent Person who is a member of the Australian Institute of Geoscientists. Mr Bewsher is a full-time employee of BM Geological Services Pty Ltd, consultants to Nexus Minerals Limited. Mr Bewsher 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 Bewsher 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	4,22

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

	Proved			Probable			Total Reserve		
NST ATTRIBUTABLE RESERVE	Tonnes (000's)	Grade (gpt)	Ounces (000's)	Tonnes (000's)	Grade (gpt)	Ounces (000's)	Tonnes (000's)	Grade (gpt)	Ounces (000's)
CAROSUE DAM PROJECT									
Surface	588	1.2	23	15,996	1.5	768	16,584	1.5	79
Underground	4,019	3.0	392	6,124	2.7	527	10,143	2.8	91
Stockpiles	2,526	1.8	58	-	-		2,526	1.8	5
Gold in Circuit			7		1.0				1
Sub-Total Carosue Dam	7,133	2.1	481	22,120	1.8	1,295	29,252	1.9	1,77

Appendix A 26/04/2023

JORC Code, 2012 Edition – Table 1

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 (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to	The sampling was carried out using Diamond Drilling (DDH) and Reverse Circulation Drilling (RC)
		the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	RC chips and diamond core provide high quality representative samples for analysis.
		Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sampling was carried out in accordance with Nexus Minerals protocols and QAQC procedures which are considered to be industry best practice.
		Aspects of the determination of mineralisation that are Material to the Public Report.	RC
7		In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual	RC holes were drilled with a 5.5inch face sampling bit, with 1m samples collected through a cyclone and cone splitter producing a 2-3kg sample. 4m composite samples and individual 1m samples were sent to the laboratory for analysis. 1m samples were sent to the laboratory for analysis.
		commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	All samples were pulverized at the laboratory to -75um, to produce a 50g charge for gold Fire Assay with ICP finish.
			Sample pulps were also subjected to additional laboratory XRF analysis – this was undertaken as part of the companies R&D project.
			DDH
			Diamond core is HQ or NQ, sampled at 1m intervals or geological boundaries and cut into half core for analysis. All samples were pulverized at the laboratory to -75um, to produce a 50g charge for gold Fire Assay with ICP finish.

	Criteria	JORC Code explanation	Commentary
	Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or	An 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 (140mm).
		standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	A Diamond Drill rig was used to undertake the diamond drilling. Diamond core was oriented using Reflex Act 111 tool.
	Drill sample	Method of recording and assessing core and chip sample recoveries and	All samples were dry with no significant ground water encountered.
	recovery	results assessed. Measures taken to maximise sample recovery and ensure representative	RC face sampling bits and dust suppression were used to minimise sample loss. Average RC metre sample weight recovered was 25kg with minimal variation between samples.
		nature of the samples.	No sample bias is believed to have occurred during the sampling process.
		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.	Diamond core recovery percentages calculated from measured core versus drilled intervals are logged and recorded in database. Recoveries averaged >95%.
			Diamond 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	All RC chip samples were geologically logged by Nexus Minerals Geologists, using the approved Nexus Minerals logging code.
		Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips: Lithology, mineralogy, alteration, mineralisation, colour, weathering and other characteristics as observed. All RC samples were wet sieved.
90		The total length and percentage of the relevant intersections logged.	All holes and all meters were geologically logged.
			All diamond core samples were geologically logged by Nexus Minerals Geologists, using the approved Nexus Minerals logging code.
			Logging of diamond core recorded: Lithology, mineralogy, alteration, mineralisation, colour, weathering, structure and other characteristics as observed. All diamond core was photographed.
			All holes and all meters were geologically logged.
		2	

Criteria	JORC Code explanation	Commentary
Sub-sampling 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.	One metre RC drill samples pass through a cone splitter, installed directly beneath a rig mounted cyclone, and two 2-3kg samples collected in a numbered calico bags. The balance of the 1m sample ~25kg is collected in a green plastic bag. The green bags are placed in rows of 20 and the corresponding calico bag placed on top of the green bag.
		4m composite samples are collected by scooping ~500g from 4 consecutive green bags.
	or all sample types, the nature, quality and appropriateness of the	All samples submitted for analysis were dry.
	sample preparation technique. Quality control procedures adopted for all sub-sampling stages to	Samples were prepared at the Intertek Laboratory in Kalgoorlie. Samples were dried, and the whole sample pulverized to 85% passing 75um, with a sub-sample of ~200g retained. A nominal 50g was used for analysis. This is best industry practice.
	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.	Duplicate field samples are taken from the cone splitter at 1:25 samples.
		Sampling methods and company QAQC protocols are best industry practice.
		Sample sizes are considered appropriate for the material being sampled and the sample size being submitted for analysis.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	All drill core is cut in half, using an automatic core saw. Samples always collected from the same side.
		Sampling methods and company QAQC protocols are best industry practice. Sample sizes are considered appropriate for the material being sampled and the sample size being submitted for analysis.
Quality of assay data	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples were analysed at multiple laboratories including ALS and Intertek Genalysis.
and laboratory tests		All samples were analysed for gold only using Fire Assay technique with ICP finish. This method is considered appropriate for the material being assayed. The method provides a near total digestion of the material.
		This method is considered appropriate for the material being assayed. The method provides a near total digestion of the material.
	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.	Magnetic Susceptibility readings were taken on all meter diamond drill core samples.
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	Criteria	JORC Code explanation	Commentary
		Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of	Selected samples were submitted from oxide / transition / fresh material for bulk density measurement determination.
		accuracy (ie lack of bias) and precision have been established.	Nexus Minerals protocol provides for Certified Reference Material (Standards and Blanks) to be inserted at a rate of 4 standards and 4 blank per 100 samples. Field duplicates are inserted at a rate of 1 per 25 samples. Industry acceptable levels of accuracy and precision have been returned.
	Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections were verified by the Exploration Manager.
	assaying	The use of twinned holes.	No twin holes were drilled as part of this program
		Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All field logging is carried out on a Toughbook computer. Data is submitted electronically to the database geologist in Perth. Assay files are received electronically from the laboratory and added to the database. All data is managed by the database geologist.
		Discuss any adjustment to assay data.	No adjustment to assay data has occurred.
	Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill hole locations were determined using either a handheld GPS with an accuracy of 3m or a DGPS with an accuracy of 0.2m. Down hole surveys were taken using a Gyro survey tool with readings taken every 10m.
		Specification of the grid system used.	Grid projection is GDA94 Zone51.
		Quality and adequacy of topographic control.	The drill hole collar RL is allocated from a detailed DTM.
(OD)			Accuracy is +/- 2m.
	Data spacing and	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the	Drilling took place at the Crusader Templar Prospect. Line spacing was 20-60m.
	distribution	degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	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.
		Whether sample compositing has been applied.	Yes as stated above.
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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 degrees). Holes were drilled -60 degrees towards 090 degrees or -60 towards 270 degrees. 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 to the Intertek laboratory in Kalgoorlie by company personnel.
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 industry best practice.
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Section 2 Reporting of Exploration Results

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

	Criteria	JORC Code explanation	Commentary
Ī	Mineral	Type, reference name/number, location and ownership including	Drilling was undertaken on tenement M31/231 and M31/251.
	tenement and land tenure	agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites,	Nexus has 100% ownership of the tenements.
	status	wilderness or national park and environmental settings.	There are no other known material issues with the tenements.
		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.	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.	Gold mineralisation in the Wallbrook area is known to be closely associated with quartz +/- pyrite and brick-red coloured haematitic alteration of high level porphyry intrusives and their volcanic / sedimentary host rocks.
	Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Refer to ASX announcements for full tables.
		 easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole 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.	

Criteria	JORC Code explanation	Commentary		
Data aggregation	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades)	No top cuts have been applied to the reported assay results. No aggregate intercepts incorporate short lengths of high grade results		
methods	and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade	and longer lengths of low grade results.		
	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.	No metal equivalent values were reported.		
	The assumptions used for any reporting of metal equivalent values should be clearly stated.			
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	The orientation of the drill lines is considered to be perpendicular to the strike of the regional structures controlling the mineralisation (0 degrees).		
mineralisation widths and intercept	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Holes were drilled -60 degrees towards 090 degrees or -60 degrees towards 270 degrees.		
lengths	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	All reported intersections are down-hole length – true width not known.		
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 drill hole collar locations and appropriate sectional views.	Refer to the maps included in the text.		
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.	Clearly stated in body of release		
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.		

Criteria	JORC Code explanation	Commentary	
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Post full assessment of recent drill results and integration with existing data sets, future work programs may include Aircore drilling and/or	
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	RC/Diamond drilling to follow up on the results received from this drill program.	
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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 electronically at the drill site. The collar metrics, assay, lithology and down-hole survey interval tables have been checked and validated by BMGS staff. The database was checked for duplicate values, from and to depth errors and EOH collar depths. A 3D review of collars and hole surveys was completed in Surpac to ensure that there were no obvious errors in collar locations, general orientation of dip and azimuths of drill holes.
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. 	No sites visits were undertaken by the Competent Person; however, the geological team for Nexus Minerals adequately described the geological processes used for the collection of geological and assay data.
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. 	 Wireframes have been created for weathering surfaces including base of complete oxidation and top of fresh rock and mineralised domains. RC and DD drilling data has been used to inform the wireframes as well as geophysical data to interpret large scale faults truncating the deposit. Mineralisation domains were created using a lower cut-off of 0.5 g/t gold.
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.	The Crusader and Templar deposits 720m and 890m long respectively, striking 345-350°. Mineralisation is defined by a series of porphyry dykes that dip steeply to the west, each ranging from 2-6m wide.
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. 	 Using parameters derived from modelled variograms, Ordinary Kriging ("OK") and Inverse Distance (ID) methods were used to estimate block grades in up to three passes using Surpac software. Linear grade estimation was deemed to be suitable for the Crusader and Templar MREs due to the geological control on mineralisation. Hard boundaries were used for all estimations. During the estimation, ellipsoidal searches orientated along the approximate strike and dip of the mineralisation were used. The Y axis was orientated along strike, the X axis across strike in the plane

Criteria	JORC Code explanation	Commentary
	 The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg 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 drill hole data, and use of reconciliation data if available. 	 of mineralisation, and the Z axis perpendicular to the plane of mineralisation. Composites were created at a length of 1 meter. Based on statistical analysis of the dataset it was decided that top cuts should be applied to the dataset. Each domain was analysed separately, and top cuts applied to the composite file prior to estimation. The blockmodels were built for each deposit with 10m North 10m East and 5m elevation parent block cells with sub blocks of 1.25m North 0.625m East and 0.625m elevation. The block model extents have been extended to allow for a minimum of 50m in all directions past the extent of known mineralisation. No estimation has been completed for other minerals or deleterious elements. The model has been checked by comparing composite data with block model grades in swath plots (north/East/elevation) on each estimated domain. The block model visually and statistically reflects the input data.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are reported on a dry basis with sampling and analysis having been conducted to avoid water content density issues. Currently there is no data on the natural moisture content and no insitu density determinations.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	 The mineral resource has been quoted using a lower cut-off grade of 1 g/t gold. This lower cut grade is in line with the assumption of extraction of material using Open pit mining methodology. A variety of other cut-off grades were also presented to highlight to the viability of a potential underground resource and financial analysis
Mining factors or assumptions	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.	 The mineral resource has been reported based on utilising open pit mining methodologies. Open pit parameters of min 2m downhole mineralisation width, and a lower cut grade of 0.5 g/t has been used for interpretation. The deepest mineralisation is reported at 200m vertical depth.
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Criteria	JORC Code explanation	Commentary
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 test work has been carried out on 4 composite samples, 2 oxide samples and 2 fresh samples. The test work did not suggest that there are any metallurgical issues that impact mineral extraction.
Environmen- tal 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. 	It is considered that there are no significant environmental factors, which would prevent the eventual extraction of gold from the Crusader and Templar deposits. Environmental surveys and assessments will form a part of future pre-feasibility.
Bulk density	 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. 	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 66 samples taken from 16 holes in the MRE area covering both Crusader and Templar. BD measurements were separated by weathering zone and averaged to be flagged to both blockmodels in the density attribute by weathering profile.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie 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. 	 The Mineral Resource is classified as an Indicated and Inferred Resource under the JORC 2012 code. This classification is considered appropriate given the confidence that can be gained from the existing data density and geological and grade continuity. The inferred portion of each MRE is defined by areas that have been drilled to roughly 40m by 40m, sit within 200m of the surface (within a feasible depth for open pit mining) and must have more continuity than single intercepts or more the 2 sections. The indicated portion of the MRE consists of areas that have been drilled to an approximate drill spacing of 25m by 25m and have a grade above 1 g/t.
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	Criteria	JORC Code explanation	Commentary
)		 All other material has been left as unclassified due to the lack of confidence associated with far spaced drilling, lack of continuity or being too deep to be considered for an open pit MRE. The classifications are based on drill-hole and sample density, grade continuity and quality of data. The Mineral Resource classification and results appropriately reflect the Competent Person's view of the deposits and the current level of risk associated with the project to date.
	Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits have been previously completed on Mineral Resource Estimates.
O BSM [FUOSJB(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. 	 There is good confidence in the data quality, drilling methods and analytical results. The available geology and assay data correlate well, and the geological continuity has been demonstrated. The Mineral Resource statement relates to global estimates of tonnes and grade. No mining by Nexus Minerals has occurred at Crusader or Templar, therefore reconciliation could not be conducted.
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