## ASX ANNOUNCEMENT

## 7 October 2024

## Positive Crusader-Templar Diamond Results allow for Scoping Study Update

- ✓ Assays returned for Crusader-Templar Deposit diamond program. Program designed to complement Mine Studies at the Wallbrook Gold Project 13 holes completed for 1,473 metres
- ✓ Assay results confirm shallow location and high-grade tenor of the modeled mineralisation, demonstrating high level of confidence in the interpretation of the deposit. Results included,
  - o 1.7m @ 23.50g/t Au (within 11.0m @ 4.04g/t Au) from 24.0 metres
  - o 5.1m @ 4.58g/t Au (within 14.0m @ 2.38g/t Au) from 24.0 metres
  - o 3.3m @ 5.10g/t Au (within 9.4m @ 2.03g/t Au) from 51.8 metres
  - 4.3m @ 2.57g/t Au (within 19.0m @ 1.83g/t Au) from 65.0 metres
  - 3.6m @ 6.27g/t Au (within 4.6m @ 4.93g/t Au) from 98.4 metres
- ✓ Metallurgical, Geotechnical, Waste Rock Characterisation and Water Monitoring studies completed, supporting a low-risk open pit mine
- ✓ Nexus continues to engage with a variety of mining contractors and service providers to establish more accurate costings and low-risk management structures
- ✓ Scoping Study update to commence in the coming weeks

**Nexus Minerals Limited (ASX: NXM) (Nexus or the Company)** is pleased to announce the results of the recently completed diamond program at the Crusader-Templar Gold Deposit, situated at the Wallbrook Gold Project, 140km northeast of Kalgoorlie, WA. This program was designed to complement ongoing mine studies by gaining further insight on metallurgical, geotechnical, waste rock characteristics, and dewatering parameters. These studies are now complete and with positive outcomes received from all aspects of the drill program, an updated scoping study will now be undertaken

Nexus Managing Director Andy Tudor commented "These diamond assay results continue to reinforce our confidence in the Crusader-Templar Gold Deposit and the opportunity it presents. Intercepting the orebody as planned, and returning the shallow high-grade gold assay results that mirror the previous RC drill programs, is a huge vote of confidence in the recent combined Mineral Resource update and the technical team's understanding of the deposit. With detailed mine study components now completed, we will update the scoping study and continue to de-risk the project.

In addition to the ongoing mine studies, the aircore drill rig is in the midst of a 10,000 metre regional exploration program which seeks to materially build on the success at Crusader-Templar Gold Deposit through additional shallow gold discoveries - across the broader Wallbrook Gold Project. We look forward to sharing updates as they become available during an exciting time on the project."

## NEXUSMINERALS

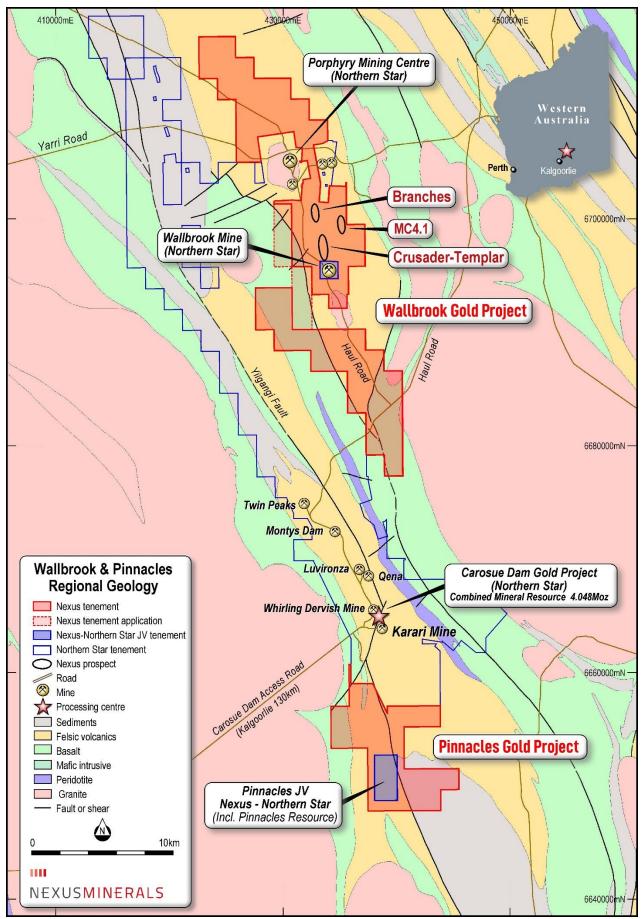


Figure 1: Nexus Eastern Goldfields Exploration Operations Map

### **Diamond Drilling Program Overview**

The Crusader-Templar diamond drilling program was successfully completed in June for 13 holes totaling 1,473 metres. All gold assay results have been received and the technical studies facilitated by the drill program are now completed. Significant intercepts are reported in Table 1 below, representing the metallurgical component of the drill program. Critically, these holes did not target the highest grade portions of the orebody, instead targeting areas where grade and widths which would best reflect mined ore. A full table of results is provided in Table 2, including geotechnical drill holes. Figure 2 illustrates drill hole locations.

The assay results confirm the results received from previous RC drill holes, demonstrating the mineralised lodes were intercepted as planned. This provides further validation of the modelling work completed in the most recent resource update (ASX: NXM 1/5/2024) and continues to de-risk the orebody. The diamond program has been used to facilitate key studies following on from the successful initial Scoping Study (ASX: NXM 4/6/2024). Studies include metallurgical testwork, geotechnical assessment, waste rock characterization, and water monitoring.

Site ID	Location	Purpose	Easting	Northing	Elevation	Dip	Azi	Depth	From	То	Interval	g/t Au
NMWBDD24-027	Crusader	Metallurgical	433447	6696432	378	-61	110	85.9	24.0	38.0	14.0	2.38
								inc.	31.0	36.1	5.1	4.58
									51.8	61.2	9.4	2.03
								inc.	53.0	56.3	3.3	5.10
NMWBDD24-028	Crusader	Metallurgical	433442	6696449	378	-61	105	100.8	49.0	62.8	13.8	1.02
								inc.	50.0	53.9	3.9	2.57
NMWBDD24-030	Crusader	Metallurgical	433420	6696570	377	-72	129	86.0	31.0	59.0	28.0	0.71
								inc.	36.0	44.0	8.0	1.61
NMWBDD24-032	Templar	Metallurgical	433320	6697468	372	-51	243	103.6	50.9	56.0	5.1	1.68
								inc.	50.9	54.1	3.2	2.53
NMWBDD24-037	Templar	Metallurgical	433288	6697745	371	-61	121	106.9	24.0	35.0	11.0	4.04
								inc.	30.4	32.1	1.7	23.50
								and	49.6	54.3	4.7	1.48
								and	65.0	84.0	19.0	1.83
								inc.	66.1	70.4	4.3	2.57
									74.0	80.0	6.0	3.48
								and	98.4	103.0	4.6	4.93
								inc.	98.4	102.0	3.6	6.27
NMWBDD24-038	Templar	Metallurgical	433282	6697771	371	-62	131	108.8	47.0	71.0	24.0	0.78
								inc.	48.3	51.6	3.3	1.68
								inc.	63.0	68.8	5.8	1.21

#### Table 1: Crusader-Templar Diamond Results – Significant Intercepts

## NEXUSMINERALS

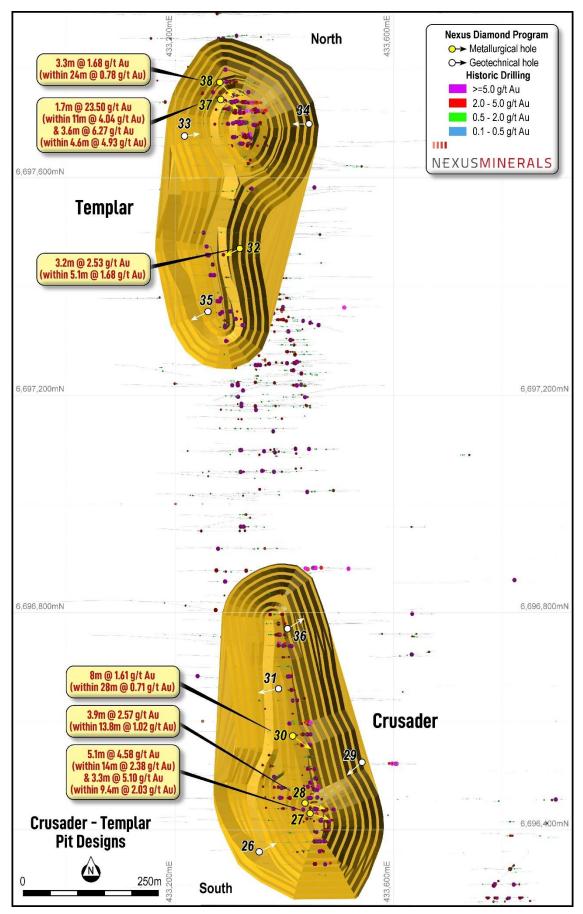


Figure 2: Crusader-Templar Scoping Study Pit Designs with 2024 Diamond Hole Locations

## **Crusader-Templar Mine Study Update**

Nexus has continued to progress mine studies at the Crusader-Templar deposit. Various mining contractors and service providers continue to be engaged to increase accuracy of costs and explore low risk operational management structures. Specific studies undertaken as part of the diamond program are now complete.

Updates are provided below, with all information received to date continuing to support a low-risk open pit gold mining operation. Results will be encorportated into an updated study along with other parameter updates.

### **Metallurgical Study**

This metallurgical study builds upon insights gained from previous metallurgical test work (ASX: NXM 25/1/2022) by incorporating metallurgical parameters commonly requested by toll milling plants for assessing ore for third-party treatment. Six master composite samples were collected from the six metallurgical diamond holes completed, representing the ore from the proposed mine plan, categorised by oxidation state. The test work will also allow for more accurate estimates for gravity recovery, plant recovery, reagent consumptions and leach kinetics. Mill specific information will be gained such as comminution indices (energy required for crushing/milling), abrasion index (wear ore will place on processing plant infrastructure), and rheological testing (ore amenability to pumping and screening).

#### **Geotechnical Study**

A total of eight geotechnical holes were completed as part of the diamond drilling program. Analysis of the drilling is now complete with the report on open pit slope parameters received. The Crusader Pit (southern pit in Figure 2) slope angles compare favourbly to the Scoping Study parameters, supported by a shallower depth of weathering. The Templar Pit (northern pit in Figure 2) has shallower slope anlgles, off-set by a significantly deeper depth of weathering and hence higher portion of free-dig oxide material - resulting in lower drill and blast requirements.

### Waste Rock Characterisation Study

A waste rock characterisation study was completed by MBS Environmental Pty Ltd to assess acid-forming potential, contaminant solubility, and develop waste rock and rehabilitation management strategies. Consistent with neighboring gold deposits currently being mined by Norther Star Resources, there have been no indications of any environmental concerns raised with the analysis.

#### Water Monitoring Study

A dewatering assessment has been completed by Rockwater Pty Ltd to establish dewatering requirements for open pit mining. Work included provision of the necessary reporting to facilitate application for a water extraction license.

The assessment identified hydraulic conductivity and water occurrence in the immediate proposed pit areas and a groundwater model was constructed to predict dewatering rates and resulting drawdown associated with mining the proposed pits. Dewatering requirements were found to be consistent with other Eastern Goldfields deposits with no issues raised.

## NEXUSMINERALS

## Table 2: Crusader-Templar Diamond Results (> 0.1g/t Au)

Site ID	Location	Purpose	Easting	Northing	Elevation	Dip	Azi	Depth	From	То	Interval	g/t Au
NMWBDD24-026			433357	6696360	378	-49	68	194.9	39.0	43.0	4.0	0.31
									46.0	52.9	6.9	0.13
									66.8	67.5	0.7	0.43
									84.0	85.5	1.5	0.16
									93.2	96.0	2.8	0.62
									101.0	102.1	1.1	0.72
									170.0	173.2	3.2	1.54
									184.0	193.2	9.2	1.96
								inc.	186.7	192.0	5.3	3.22
								inc.	188	190.3	2.3	6.33
NMWBDD24-027	Crusader	Metallurgical	433447	6696432	378	-61	110	85.9	0.0	1.0	1.0	0.12
									20.0	21.0	1.0	0.14
									24.0	38.0	14.0	2.38
								inc.	31.0	36.1	5.1	4.58
									40.9	43.0	2.1	0.41
									47.7	48.7	1.0	0.56
									51.8	61.2	9.4	2.03
								inc.	53.0	56.3	3.3	5.10
									79.2	84.0	4.8	2.24
NMWBDD24-028	Crusader	Metallurgical	433442	6696449	378	-61	105	100.8	23.0	44.0	21.0	0.28
								inc.	34.0	36.0	2.0	1.67
									49.0	62.8	13.8	1.02
								inc.	50.0	53.9	3.9	2.57
									67.0	68.0	1.0	0.11
									85.1	100.3	15.2	0.76
								inc.	86.0	91.0	5.0	1.05
NMWBDD24-029	Crucador	Contachnical	433545	6696525	378	-50	226	inc. 145.1	93.7	95.7	2.1 NSI	2.09
NMWBDD24-029				6696570	377	-72	129	86.0	31.0	59.0	28.0	0.71
1110100 00024-030	Clusauel	Wetallurgical	433420	0090370	577	-72	129	inc.	36.0	44.0	8.0	1.61
								inc.	64.5	79.6	15.1	0.53
								inc.	71.0	74.0	3.0	1.34
NMWBDD24-031	Crusader	Geotechnical	433391	6696659	377	-78	257	79.5	18.5	19.0	0.5	0.10
					-				29.0	31.0	2.0	1.27
									40.0	41.0	1.0	0.11
									52.0	55.0	3.0	0.13
NMWBDD24-032	Templar	Metallurgical	433320	6697468	372	-51	243	103.6	50.9	56	5.1	1.68
	•							inc.	50.9	54.1	3.2	2.53
									61.1	62	0.9	0.18
									91.8	94	2.2	1.63
									99.0	99.4	0.4	0.21
NMWBDD24-033	Templar	Geotechnical	433214	6697676	371	-52	84	190.0	103.1	104.4	1.3	3.19
									128.1	131	2.9	1.72
									171.3	180.3	9.0	1.28
								inc.	171.3	173	1.7	2.68
									182.1	187	4.9	0.16

## NEXUSMINERALS

Site ID	Location	Purpose	Easting	Northing	Elevation	Dip	Azi	Depth	From	То	Interval	g/t Au
NMWBDD24-034	Templar	Geotechnical	433450	6697698	372	-50	270	141.2	139.0	139.7	0.7	0.15
NMWBDD24-035	Templar	Geotechnical	433264	6697351	372	-81	240	60.1			NSI	
NMWBDD24-036	Crusader	Geotechnical	433408	6696769	376	-76	59	70.0	16.0	17.0	1.0	0.18
									22.0	25.0	3.0	0.23
									27.0	28.0	1.0	0.86
									32.0	38.0	6.0	0.30
									42.0	44.0	2.0	0.30
NMWBDD24-037	Templar	Metallurgical	433288	6697745	371	-61	121	106.9	13.0	18.0	5.0	0.83
									24.0	35.0	11.0	4.04
								inc.	30.4	32.1	1.7	23.50
									42.0	59.0	17.0	0.74
								inc.	49.6	54.3	4.7	1.48
									65.0	84.0	19.0	1.83
								inc.	66.1	70.4	4.3	2.57
								and	74.0	80.0	6.0	3.48
									98.4	103.0	4.6	4.93
								inc.	98.4	102.0	3.6	6.27
NMWBDD24-038	Templar	Metallurgical	433282	6697771	371	-62	131	108.8	16.0	17.0	1.0	0.14
									24.5	33.0	8.5	0.46
									41.1	43.4	2.3	1.18
									47.0	71.0	24.0	0.78
								inc.	48.3	51.6	3.3	1.68
								and	63.0	68.8	5.8	1.21
									90.1	97.0	7.0	0.91
								inc.	90.1	95.0	5.0	1.15

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

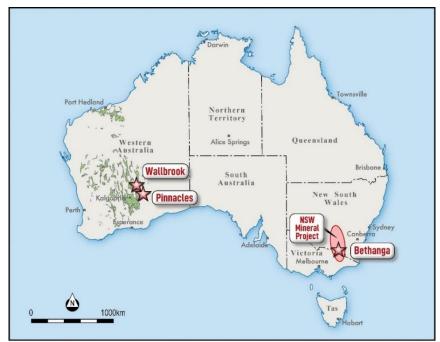


Figure 4: Nexus Project Locations, Australia

### About Nexus

Nexus is actively exploring for gold deposits on its highly prospective tenement package in the Eastern Goldfields of Western Australia. In 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 (CDO), and current operating Karari and Whirling Dervish underground gold mines. The Company's Pinnacles Gold Project is located immediately to the south of CDO and comprises Nexus 100% owned tenure and Nexus-Northern Star Resources JV tenure. This Pinnacles JV tenure hosts the JORC 2012 combined Mineral Resource Estimate of 550,000t @ 4.6g/t Au for 82,000 ounces.

In addition to this, the Company has expanded its existing project portfolio with the addition of the granted tenure over 15,000km<sup>2</sup> of Gold, Copper and Critical Mineral prospective tenure in NSW, and the Bethanga Porphyry Copper-Gold project in Victoria.

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 Mr Paul Blackney, a Competent Person who is a member of 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 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 forwardlooking 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.

	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	

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

		Measured	ed Indicated			Inferred			Total				
	Tonnes (t)	Grade (g/t Au)	Ounce (oz)	Cut Off Grade g/tAu									
Pinnacles Oxide	-			75,900	3.5	9,000				75,900	3.5	9,000	0.7
Pinnacles Tran/Fresh	-		-	184,300	5.6	31,000	290,700	4.7	42,000	474,900	5.1	74,000	2
Pinnacles Total	-		-		-				-	551,200	4.6	82,000	

Pinnacles Mineral Resource Summary (OP & UG gold g/t cut-off) (rounding errors may occur)

## NEXUSMINERALS

### Northern Star Ltd Carosue Dam Resource Table as at 31/3/2024

	Ν	<b>Aeasure</b>	d	h	ndicated		1	nferred		Tota	l Resour	ces
NST Attributable	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
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												
Surface	2,489	1.6	129	17,061	1.8	998	6,559	1.7	356	26,109	1.8	1,483
Underground	6,992	2.9	656	14,752	2.6	1,222	6,282	3.0	514	28,026	2.8	2,392
Stockpiles	6,996	1.5	167	-	-	-	-	-	-	6,996	1.5	167
Gold in Circuit	-	-	6	-	-	-		-	-	-	-	6
Sub-total Carosue Dam	16,476	1.8	958	31,814	2.2	2,220	2,841	2.4	870	61,131	2.1	4,048

#### Northern Star Ltd Carosue Dam Reserve Table as at 31/3/2024

		Proved			Probable	1	Тс	tal Reserve	e
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									
Surface	-	-	-	6,535	1.8	381	6,535	1.8	381
Underground	3,407	3.0	333	2,870	3.1	283	6,277	3.1	616
Stockpiles	6,996	1.5	167	-		-	6,996	0.7	167
Gold in Circuit	-	-	6	-	-	-	-	-	6
Sub-total Carosue Dam	10,403	1.5	506	9,405	2.2	663	19,809	1.8	1,170

## **Appendix A 7/10/2024**

## 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	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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 commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The sampling was carried out using diamond (DD) drilling.</li> <li>DD core provides high quality representative samples for analysis.</li> <li>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.</li> <li>Diamond core is HQ, selectively sampled at 1m intervals or geological boundaries and cut into half core for analysis. Given the advanced stage of exploration selective sampling targeted known mineralisation indicators including lithology, alteration, veining, and sulphide abundance.</li> <li>All samples were pulverized at Intertek Genalysis laboratory to -75um, to produce a 50g charge for fire assay with an ICP-OES finish.</li> </ul>
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 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 owned by Raglan Drilling was used to undertake the Diamond drilling. Diamond core was oriented using Reflex Act 111 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.	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.

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.	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.	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.
	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample	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.	All drill core is cut in half, using an automatic core saw. Samples were always collected from the same side. Samples were submitted to Intertek Genalysis in Kalgoorlie.
preparation	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were dried, and the whole sample pulverised to 85% passing 75 $\mu$ m, with a subsample of ~200 g retained. A nominal 50 g charge was used for analysis. Nexus considers this to be best industry practice.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in	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
	situ material collected, including for instance results for field duplicate/second-half sampling.	this style of deposit.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
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 pulverised at Intertek Genalysis laboratory in Kalgoorlie and transported Intertek Genalysis laboratory in Perth for analysis.
and laboratory tests	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument	All samples were analysed for gold by 50g fire assay with an ICP-OES finish. This method is considered appropriate for the material being assayed. The method provides a near total digestion of the material.
	make and model, reading times, calibrations factors applied and their derivation, etc.	No other geophysical tools, spectrometers etc were used in this drill program.
		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

Criteria	JORC Code explanation	Commentary
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	samples. 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.	Significant intersections were verified by the Exploration Manager. No twin holes were drilled as part of this program
uoouying	The use of twinned holes. 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 a handheld GPS, with an accuracy of 3m. 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 handheld GPS.
		Accuracy is +/- 3m.
Data spacing and	Data spacing for reporting of Exploration Results.	Drilling took place at the Crusader-Templar Deposit, situated at the Wallbrook Gold Project (Western Australia).
distribution	Whether the data spacing and distribution is sufficient to establish the	This release refers to results from this project only.
	degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Drillhole spacing is variable through the Crusader-Templar Deposit, ranging from a 20 m x 20 m grid to 40 m x 60 m. Some previous exploratory holes have stepped out up to 100 m.
	Whether sample compositing has been 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 - refer to Crusader-Templar Mineral Resource Update (ASX: NXM 1/5/2024).
		No sample compositing has been applied.
Orientation of data in relation to	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The orientation of the metallurgical drill holes is considered to be approximately perpendicular to the mineralised target zones. Geotechnical holes did not target mineralisation. Holes were drilled -50 to -80 degrees at variable azimuths.

Criteria	JORC Code explanation	Commentary
geological structure	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 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 a shipping contractor to the Intertek Genalysis laboratory 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). The current program adopts the same sampling, logging, assaying and data handling techniques.

## **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 tenements M31/231 and M31/251. Nexus 100% 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 tenements have been subject to minimal prior exploration activities prior to Nexus Minerals ownership.

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>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.</li> <li>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.</li> <li>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 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.</li> </ul>
Drill hole Information	<ul> <li>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: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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</li> </ul>	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.

Criteria	JORC Code explanation	Commentary
	understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.	No top cuts have been applied to the reported assay results. No aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results. No metal equivalent values were reported.
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 drill hole 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 (eg 'down hole length, true width not known').	The orientation of the metallurgical drill holes is considered to be roughly perpendicular to the strike of the regional structures controlling the mineralisation. Geotechncial holes did not target mineralisation. Holes were drilled -50 to -80 degrees at variable azimuths.
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Post full assessment of recent drill results and integration with existing data sets, future work programs may include infill RC or DD drilling (including grade control programs) to increase confidence level of critical components of the Mineral Resource. Further AC, RC, and/or DD drill programs may be planned to assess extensions to the existing Mineral Resource.