

ASX ANNOUNCEMENT

20 January 2022

RRL1804D

ROX RESOURCES LIMITED

ASX: RXL

Rox Resources Limited (ASX: RXL) is an Australian listed Company with advanced gold projects in Western Australia, the Youanmi Gold Project and Mt Fisher Gold project.

DIRECTORS

Mr Stephen Dennis Chairman

Mr Alex Passmore Managing Director

Dr John Mair *Non-Executive Director*

 Shares on Issue
 157.6m

 Share Price
 \$0.36

 Market Cap.
 \$56.7m

 Cash & Receivables
 \$10.7m

 (as at 30 Sept 2021)

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Youanmi Deeps Resource Upgrade Lifts Total Youanmi Resource to 3 Moz Au

Highlights:

- Youanmi Total Mineral Resource increased by 1.34 Moz Au to 3 Moz Au.
- Drilling results to the end of October 2021 included in this current resource update to deliver a 156% increase in the Deeps Resource contained gold.
- Youanmi Deeps very high-grade material increases following seven months of intensive infill and extensional diamond drilling for around 35,000 metres, as well as defining new areas such as Link, Junction, and mineralisation-parallel hanging-wall lodes.
- The Youanmi surface resource was not updated in this estimation round with further updates pending.
- All in exploration costs for the project indicate a \$7 per ounce discovery cost – an exceptional result.
- Significant increase in Au metal ounces per vertical metre paves the way for expected robust conceptual economics, particularly with the recent determination of the Albion process as the preferred method for sulphide ore bodies at Youanmi (92.2% average gold extraction for underground). *

West Australian focused gold exploration and development company, Rox Resources Limited ("Rox" or "the Company") (ASX: RXL), in conjunction with its joint venture partner Venus Metals Corporation Limited (ASX: VMC) is pleased to report a significant increase to the Mineral Resource Estimate ("MRE") for the Youanmi Gold Project near Mt Magnet, WA.

Drilling and exploration work at the Youanmi Gold Project in the OYG JV area (Rox 70% and Manager, VMC 30%) has yielded substantial increases in known and defined tonnages and ounces since the acquisition and commencement of drilling in mid-2019.

^{*} Refer ASX release 23 December 2021



Rox has used in-house expertise to complete the Youanmi Deeps Resource update (Report Youanmi Deeps Mineral Resource Estimate January 2022 – refer Table 1) and engaged CSA Global (who completed the previous update in June 2021) to conduct independent checks of the modelling process. The previous resource for Youanmi Deeps and Near Surface was published in June 2021 (ASX announcement 23rd June 2021).

Managing Director Alex Passmore commented:

"We are delighted to announce this substantial upgrade to the Youanmi Gold Project Mineral Resource Estimate following the successful execution of our targeted infill, extensional, and discovery drilling strategy. The geology team are to be commended for discovering new gold bearing structures with our targeting strategy showing demonstrable returns, especially at Link, and with additional mineralisation-parallel lodes discovered.

This resource update sees a tripling of the 2018 Deeps Resource with more drilling from the last few months of 2021 still to be incorporated in the overall resource. We took the decision to provide an interim updated resource estimate given the very long assay turnaround times being experienced of up to 14 weeks in some cases.

With the recent determination of the Albion process as our preferred processing method for the high-grade sulphide-associated ore bodies at Youanmi, which show we can likely achieve metallurgical recoveries around 95% (92.2% average for underground), we are well positioned to benefit from the increased resource.

Rox continues to trade at very low enterprise value per attributable resource ounce metrics calculated currently at \$22 per ounce.

Youanmi mine feasibility studies continue with early mine planning results feeding back into targeted infill drilling areas for continued conversion of inferred material into indicated categories.

We also continue to work on grass roots exploration activities in areas outside the immediate Youanmi mine area with the intent of making new discoveries in the region."

Table 1 - Summary of Youanmi Mineral Resource January 2022

			Jun	e 2021 Resou	ırce	Change in	Janua	ary 2022 Reso	ource
Area	Classification	on Cut-off	Tonnes (dmt)	Au Grade (g/t)		Tonnes (dmt)	Au Grade (g/t)	Au Metal (oz)	
Near Surface	Indicated	0.5 g/t*	7,470,000	1.81	434,000	na	7,470,000	1.81	434,000
Deeps	Indicated	3.0 g/t	1,097,000	8.23	290,200	up 156%	3,060,000	7.55	744,000
SubTotal	Indicated		8,567,000	2.63	724,200	up 63%	10,530,000	3.48	1,178,000
Near Surface	Inferred	0.5 g/t*	7,240,000	1.57	366,000	na	7,240,000	1.57	366,000
Deeps	Inferred	3.0 g/t	2,279,000	7.73	566,200	up 156%	6,840,000	6.59	1,450,000
SubTotal	Inferred		9,519,000	3.05	932,200	up 95%	14,080,000	4.01	1,816,000
Near Surface	Ind + Inf	0.5 g/t*	14,710,000	1.69	800,000	na	14,710,000	1.69	800,000
Deeps	Ind + Inf	3.0 g/t	3,376,000	7.89	856,300	up 156%	9,900,000	6.89	2,194,000
Near Surface + Deep	s Ind + Inf		18,086,000	2.85	1,656,300	up 81%	24,610,000	3.78	2,994,000

^{*} Grace 1.5 g/t Au Cut-Off



Comparison to June 2021 Deeps Resource Estimate

For the Deeps Resource an increase in total Au metal of 156% has been achieved, both in the Indicated and Inferred categories (refer Figure 1). It is noted that in 2021 a 4.0 g/t Au cut-off grade was applied, which has now been reduced to 3.0 g/t Au based on recent mine planning assumptions, and that on an equal cut-off grade basis, specifically using a 4.0 g/t Au cut-off, the comparison to June 2021 still shows a significant increase in metal of 128%.

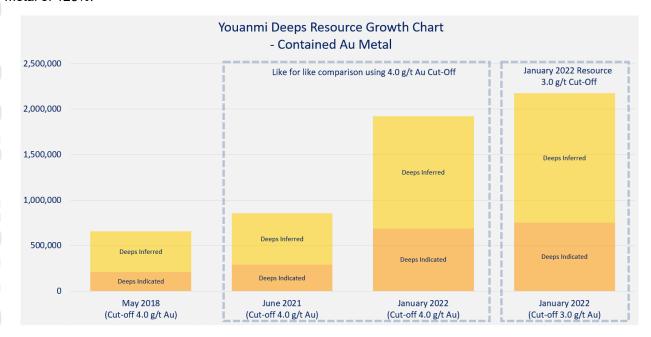


Figure 1 - Chart showing increase in contained metal for Youanmi Deeps Mineral Resource

Despite not updating the Near Surface Resource (planned by end of FY22), the total Youanmi Resource showed a total metal increase of 80% from 1.7 mil ounces to 3.0 million ounces (refer Figure 2).



Figure 2 - Chart showing increase in contained metal for combined Youanmi Mineral Resource



A significant increase in ounces per vertical metre was achieved (Figure 3 below) to an average of 2,900 ounces per vertical metre between surface and 750m below surface. This reflects resource growth mostly being lateral in two aspects. Firstly, to the north including the Link area as can be seen in the long section (Figure 4) and secondly with new lodes discovered in the hanging-wall of the previously interpreted lodes.

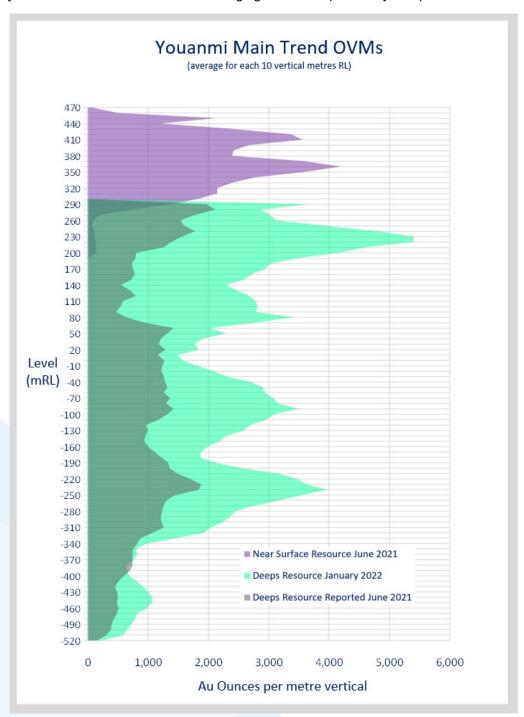


Figure 3 – Chart showing increase in Ounces per Vertical Metre (Deeps Model only <300 mRL)



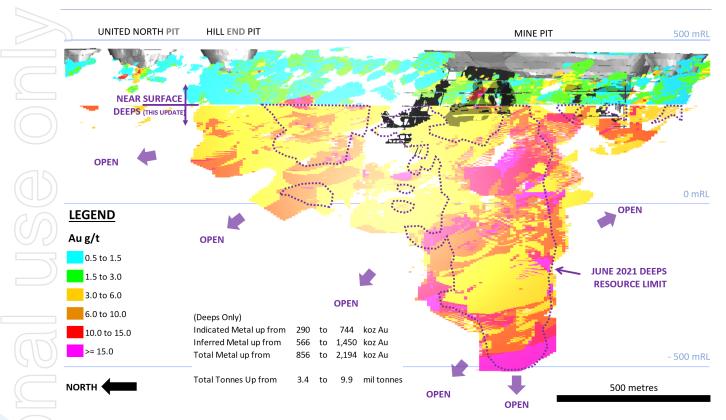


Figure 4 - Deeps Resource and Near Surface Resource Model Au grade distribution in area near pits, showing progression of Deeps Model from June 2021 (Deeps is below 300 mRL).

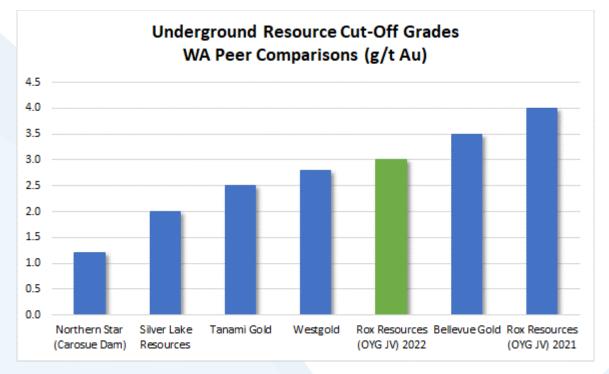


Figure 5 - Cut-Off Grade Comparison to WA Underground Gold Peers (support in Appendix A)



Youanmi Deeps Resource Modelling Parameters Discussion:

A total of 21 mineralised lodes have been modelled, along 2.8 km of strike length, comprising the Mine Lode and associated footwall and hanging wall lodes along the main trend corridor. The maximum depth of the Mine Lode interpretation is to approximately -600mRL, 1,060m below the natural surface. The Mine Lode is continuous down-dip for this length; other lodes have much more restricted down-dip extents. The hanging wall and footwall lodes are predominantly 0.5m-2m thick, while the Mine Lode is generally in the order of 1m-3m thick, but locally exceeds 10m. No minimum or maximum thickness values were applied for interpretation of the lodes.

A series of grade shells separating lower grade from higher grade parts of each lode were interpreted using Leapfrog Geo to allow reasonable modelling of the higher-grade shoots within the lodes.

Composites were extracted for each lode to have a length of 1m with a minimum length of 0.5m. Grade shell wireframes for each lode were then used to isolate only sample composites inside each grade shell. Statistical distributions of grades inside each lode and grade shell were reviewed individually to determine high grade cuts (top cuts) that should be applied prior to grade estimation. High grade cuts were applied that ranged from 4 g/t Au to 70 g/t Au and were applied to 7 grade shell wireframe objects and 11 lode wireframe objects.

The grade estimate was conducted using Ordinary Kriging with four estimation passes with a grade limited search utilized for passes 1 and 2. Check estimates using the Inverse Distance Weighted squared and the Nearest Neighbour methods were also completed for all blocks within the mineralized lodes.

Next Steps

Additional drilling results from November and December 2021 will be incorporated into the next Mineral Resource Estimate update expected in the June 2022 quarter.

Following the substantial upgrade to the Youanmi Mineral Resource Estimate announced in this release, the Company expects concept level project economics to be very robust and is hence continuing to rapidly pursue its investigation of development pathways for the Youanmi Gold Project.

The Company is undertaking open pit and underground mining studies including detailed mine design and optimisation. Detailed metallurgical testwork also continues which is being utilised in plant design work (scoping study level) that is also being undertaken.

Exploration programs in 2022 will include resource conversion in addition to extensional drilling, noting that the resource remains open down dip and along strike.

The Company looks forward to updating the market on these developments in due course.

Authorised for release to the ASX by the Board of Rox Resources Limited

*** ENDS ***

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For more information:

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Competent Person's Statement

The information in this release that relates to the Youanmi Near Surface Deposits is based on information compiled by Mr Lynn Widenbar, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Widenbar is a full time employee of Widenbar and Associates Pty Ltd. Mr Widenbar visited site on 9th and 10th May 2018 and reviewed the general site layout, open pit exposures, diamond drill core and the detailed paper data available in the map room and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr Widenbar consents to the inclusion in the release of the matters based on his information in the form and context that the information appears.

The information in this release that relates to the Youanmi Deeps Mineral Resource is based on information compiled by Mr David Allmark MAusIMM (CP), who is a full-time employee of Rox Resources Limited and who visited the Youanmi site from the 22nd to 23rd of September 2021, and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr Allmark consents to the inclusion in the release of the matters based on his information in the form and context that the information appears.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Rox Resources Limited planned exploration program(s) and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward looking statements.

About Rox Resources

Rox Resources (ASX:RXL) is a West Australian focused gold exploration and development company. It is 70 per cent owner and operator of the historic Youanmi Gold Project near Mt Magnet, approximately 480 kilometres northeast of Perth, and wholly-owns the Mt Fisher Gold project approximately 140 kilometres southeast of Wiluna. Youanmi has a Total Mineral Resource of 2,994 koz of contained gold, with potential for further expansion with the integration of existing prospects into the Resource and further drilling. Youanmi was a high-grade gold mine and produced 667,000ozof gold (at 5.47 g/t Au) before it closed in 1997. Youanmi is classified as a disturbed site and is on existing mining leases which has significant existing infrastructure to support a return to mining operations.



Appendix A – Supporting Information for Figure 5 (Cut-Off Grade Comparison to WA Undergound Gold Peers)

	Au Cut-Of	f
Company	(g/t)	Document Reference
Northern Star (Carosue Dam)	1.2	ASX NST Release - 3rd May 2021 Resource Update - page 86.
Silver Lake Resources	2.0	ASX SLR - 15th Sep 2021 Mineral Resource and Ore Reserve Statement and Outlook to FY24 - page 24
Tanami Gold	2.5	ASX TAM - 2021 Annual Report - page 3
Westgold	2.8	ASX WGX - Annual Update of Mineral Resource and Ore Reserves - page 26.
Rox Resources (Youanmi) 2022	3.0	ASX RXL - January 2022 Resource Update
Bellevue Gold	3.5	ASX BGL - 2021 Annual Report - page 38
Rox Resources (Youanmi) 2021	4.0	ASX RXL - 23 Jun 2021 Substantial 39% increase to Youanmi Gold Resource to 1.7Moz - page 2



Summary of the Resource Parameters:

A summary of JORC Table 1 for the "Youanmi Near Surface Deposits – June 2021" was provided in an ASX announcement on 23rd June 2021 (RXL: Substantial 39% increase to Youanmi Gold Project Resource to 1.7Moz, 23rd June 2021) while a summary of JORC Table 1 is provided below for the "Youanmi Deeps Mineral Resource Estimate – January 2022", and the compliance regarding the Mineral Resource reported within and in-line with requirements of ASX Listing Rule 5.8.1.

Rox Resources Limited – Youanmi Deeps Mineral Resource Estimate – January 2022

JORC Code, 2012 Edition - Table 1

Section 1 Sampling Techniques and Data

7	Criteria	JORC Code explanation	Commentary
	Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Sampling consisted of reverse circulation (RC) and half-core NQ3 sized diamond samples.
		Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The entire RC and diamond (DD) drilling sample was extracted prior to subsampling at surface next to the rig. Diamond and RC field duplicates were taken on selected samples to measure representativity of sample splits.
		Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems.	Industry sampling, preparation and assaying techniques have been used to acquire the current dataset. Sample preparation consisted of coarse crushing a maximum of 3 kg of the submitted sample, pulverising to >85% passing 75 microns and homogenising the pulp. 50 g sample sizes were chosen for analysis of gold, with fire assay fusion and detection by atomic absorption spectrometry (AAS).



Criteria	JORC Code explanation	Commentary					
)	Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information						
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	different estimate.	operators. (Only RC an	has been built ud DD holes have bulated below. Number of Record 1,996 5 764 1,630 10,231 5,378 5 34 20,043	e been used in	decades by seve the resource
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.	logging and on noming recorded Limited rehave been	nd sampling aal run lengt intervals ha ecords relati n identified,	. Core reconstance of the core reconstance of the core reconstance of the core reconstance of the core		vailable were of hof recovered mond core samed, sampling ar	calculated based core. 96% of the ple recoveries and recovery
	samples. 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 relatio	onship betw	een sampl	e recovery and	grade has beer	n analysed.
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.	appropria photogra The Com	ate for the n phed.	nineralisat on conside	eologically loggo ion present at t ers that the level	he project. DD	core was
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	the quant logging. The Compappropries	titative geod petent Persontely informately	themical a on conside ed the geo	nalyses and geo	physical loggin ability of qualing, including m	vere compared to g to validate the tative logging ha ineralisation,
	The total length and percentage of the relevant intersections logged.	The total	length of al	drilling w	as geologically l	ogged.	



	Criteria	JORC Code explanation	Commenta	rry				
	Subsampling techniques and sample	If core, whether cut or sawn and whether quarter, half or all core taken.	Mineralised intercepts from diamond drillcore were cut using a diamond saw into half-core and sampled on either a 1m basis or over geological intervals to a maximum of 1m.					
	preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled	RC samples were collected every metre on the drill rig using a cone splitter. A 1.5-3kg sample split was collected into a calico bag for laboratory submission. In some cases, composite samples of up to 5m were collected via spear sampling.					
		wet or dry.				assayed at 1m intervals where ob or 250ppb depending on the		
		For all sample types, the nature, quality and appropriateness of the sample preparation technique.	crushing, p	ulverising to >85% etent Person consi	passing 75 microns	tting samples >3 kg, coarse and homogenising the pulp. appropriate for this style of		
		Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	range of Au Campaign-	ı values, as well as	s blanks. I reporting of quality	aterials (CRMs), covering a control data was undertaken		
		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.	Limited field duplicate data is available, for post-mining drilling. The precision of the field duplicates is moderate, with 10% of sample pairs having an Average mean difference of >30%; no bias between the paired samples was noted. The precision is accounted for in the variography. Rox took field duplicates at a frequency of 1 in 25 samples since the start of drilling in 2019. Generally, results were reasonably precise and accurate indicating the sampling was representative of the in-situ material collected					
		Whether sample sizes are appropriate to the grain size of the material being sampled.	are Sample sizes are considered to be appropriate to the grain size of the					
	Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory	All samples were assayed by Fire Assay or Aqua Regia digest. Both of these are total methods. The range of methods is tabulated below.					
		procedures used and	Company	Туре	Laboratory	Method		
)		whether the technique is considered partial or total.	Eastmet / GMA	Surface drillholes	Metana Lab Perth	30g or 50g Fire Assay, or AquaRegia AAS* with re-assay via Fire Assay on samples returning preliminary results >1g/t.		
1				Some early surface drillholes	Australian Assay Laboratories Group	50g Fire Assay, AAS* finish.		
1				Underground drillholes)	Analabs Pty Ltd	50g Fire Assay, AAS* finish.		
				Early surface drillholes and some of underground drillholes	Youanmi Mine Laboratory	50g Fire Assay, AAS* finish. Aqua Regia – AAS*.		
			Aquila		Genalysis, Perth	Fire Assay, AAS* Finish		
			Goldcrest		Genalysis, Perth	Composite RC samples using Aqua Regia digest and single metre RC and core samples using Fire Assay, AAS* finish		
			Rox	Surface drillholes	Genalysis, Perth	Single metre RC and core samples using Fire Assay, AAS* finish		
		For geophysical tools, spectrometers, handheld	na					



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1	Criteria	JORC Code explanation	Commentary
		XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	
		Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of	Historical assay quality control measures are largely unknown. Regular duplicates with satisfactory results were reported from some programmes. The Metana (bulk of historical samples) laboratory appears to have systematically undertaken a 10% duplicate fire assay analysis. No system of submission of standard reference material and blank samples is believed to have been in place at the time of this drilling, in line with local industry practice at that time
		accuracy (i.e. lack of bias) and precision have been established.	Goldcrest took field duplicates, standards and blanks on an approximate 1 in 20 basis (5%) and all Goldcrest drill samples were submitted for assay. Goldcrest twin drilling in shallower areas has verified the drill results of previous explorers.
			Historical quality assurance and quality control data relating to the remaining resources is either no longer available or is inconsistently reported. Given the long time period over which the data was generated it was not possible to independently verify the quality of the data.
			Rox took field duplicates at a frequency of 1 in 26 samples and inserted external standards and blanks at a frequency of 1 in 26 samples. Laboratory introduced QAQC samples included coarse reject and pulp repeats and internal standards. Generally, results were precise and accurate with only a few inconsistencies identified in a small number of batches due to mis-labelling or sample swaps
	Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Intersections selected by Rox were reviewed by the Competent person and considered appropriate for the Mineral Resource estimate.
		The use of twinned holes.	There are no twinned holes in the resource area.
		Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The data entry, storage and documentation of primary data was completed on Microsoft Excel spreadsheets and local hard drives, then imported into a central database.
		Discuss any adjustment to assay data.	No adjustments or calibrations have been made to any assay data.
	Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys),	Recent drillholes (Goldcrest, Rox) have been surveyed using differential GPS tools. Older holes (largely Eastmet or GMA) do not have records of the survey methods, although typically these are expected to be by total station tools.
		trenches, mine workings and other locations used in Mineral Resource estimation.	Approximately 90% of drillholes longer than 100m have been down-hole surveyed, mainly with gyroscopic tools; a minority of older holes were surveyed with multi-shot or single-shot tools. Drillholes less than 100 m long typically do not show any material downhole deviation
		Specification of the grid system used.	Topographic data were captured in GDA94 MGA Zone 50 grid system.
		Quality and adequacy of topographic control.	A topographic surface was built from end of month pickups of pits, dumps, infrastructure and surfaces by the mine survey team. The Competent Person considers that the surface is suitable for this MRE.



Criteria	JORC Code explanation	Commentary
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Average drill hole density is highly variable, ranging from $10m \times 10m$ to $160m \times 160m$, and generally decreasing with depth.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The Competent Person considers the mineralised lodes have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern.
	Whether sample compositing has been applied.	Assay samples were composited to 1m lengths within the mineralised intersection with a minimum of 0.5m samples at the boundaries of the intersection
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.	No grade effect of the relationship between sample direction and mineralised structures has been identified.
	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.	No relationship has been noted between drillhole inclination and mineralisation.
Sample security	The measures taken to ensure sample security.	No details are available on the historic sample security measures, however sufficient security measures were taken by Rox prior to delivery of the samples to the laboratory. Samples were kept in a locked core storage area until transport by truck to the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	A high level review of sampling techniques and data has been undertaken by an independent third party consultant.

Section 2: Reporting of Exploration Results

1	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 Youanmi mining centre is covered by a Joint Venture agreement with Venus Metals Corporation Limited known as the 'OYG JV'. This comprises ten granted Mining Leases, with a beneficial interest of Rox 70% and Venus 30%. The leases are M57/51, M57/75, M57/97, M57/109, M57/135, M57/160A, M57/164, M57/165, M57/166 and M57/167



Criteria	JORC Code explanation	Commentary
	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.	There are no impediments preventing the operation of the lease.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Gold was first discovered at Golden Crown, just to the south of Youanmi in 1894. Some ore from the area was carted to the government battery at Mount Magnet for treatment.
		Further prospecting led to the discovery of further deposits in 1905, and production commenced from the United and Hill End mines. The Main Lode was discovered in 1908, and the townsite of Youanmi was gazetted in 1910.
		Youanmi Gold Mine Limited was floated in 1911 and commenced operations based on the Main Lode. Further discoveries led to the development of the Pollard Lodes and Currans to the south, where a small treatment battery was established.
		The mine struggled during World War One with a shortage of labour and high costs, and finally closed in 1922. It employed around 100 men.
		In 1934, the Youanmi Gold Mining Limited was floated in London with the intention of restarting underground mining. Production started in August 1936 and continued until 1942, when a shortage of skilled labour due to World War II, resulted in a second closure. About 200 men were employed in this phase. The maximum vertical depth reached by the workings was about 300m below the natural surface; the average stope width was 1.5m. After 1942 the townsite was abandoned; the only remaining infrastructure is the town cemetery.
		Eastmet Limited, an 80% owned subsidiary of Metana Minerals NL, entered into a JV agreement with Tantalex Ltd and Franmere Holdings Pty Ltd to earn 50% of a group of tenements at Youanmi. Open mining began in October 1986 and the 600,000 tpa conventional Carbon-In-Pulp plant was commissioned on 31 December 1986, by which time Eastmet had acquired the remaining 50% of the project. The original tenements covered the Main, Hill End, and Western Laterite open pits; additional tenements acquired covered the United North, Kathleen, Rebel-Kurrajong and Bunker open pits and the unmined Commonwealth and Connemara resources.
		Ore and waste were mined on 2.5m flitches by backhoe excavators and hauled by 50t offroad dump trucks. Exploration and development drilling was completed on a 320m by 10m grid, with the holes inclined -60 to the east and sampled at 1m intervals. Grade control during mining used Ditchwitch trenches cut from west to east spaced 5m apart and sampled at 1m intervals along the trench. Additional RC drilling was used in new areas and at the transition from oxide to fresh ore.
		After completion of the Main Lode pit in 1989, satellite pits were mined including the high-grade Penny West pit, 28 km to the south. The maximum production rate was 187,000 tonnes per quarter. The peak quarterly gold production was 37,900 oz in September 1991. The plant ceased treatment in October 1992 and mill cleanup continued into January 1993.
		Between 1990 and 1993 Eastmet completed a programme of deep diamond drilling to test the extensions of Main Lode to a maximum of 750m vertical depth. Gold Mines of Australia Limited (GMA) was created in 1993 when Eastmet, Metana and Paragon Resources NL were merged. In October 1993, the GMA board approved development of the Youanmi Deeps underground mine. The ore was processed through a new 220 ktpa flotation and bacterial oxidation circuit, however the operation ultimately failed to achieve production targets, and the underground mine was closed in November 1997.



Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological	The Youanmi gold deposits are hosted in the Youanmi Terrane.
	setting and style of mineralisation.	They were formed where a N-striking sequence of high-Fe tholeiitic mafic rocks an BIFs intersects a NNW-striking, variably WSW-dipping high-strain zone interpreted t be a sinistral-normal shear system.
		The foliation is axial planar to a S-plunging isoclinal synform. Mined deposits lie a various positions on this structure:
		 Western limb: Bunker, United North (E-dipping stratigraphy) Hinge: Rebel, Kathleen (S-dipping stratigraphy) Eastern limb: Hill End, Main Pit (W-dipping stratigraphy)
		The east limb of the folded mafic sequence is stoped out by the irregular intrusion contact of a large monzogranite intrusion. The exposed monzogranite-mafic contain has low strain, suggesting the intrusion of the monzogranite is late in the folding ar formation of the foliation.
		Interflow sediments are altered chlorite-quartz-magnetite rocks up to several metrothick. These sediments have focussed much of the strain and frequently ho auriferous shears.
		The mafics and monzogranite are intruded by intermediate porphyry bodies wi complex geometric and timing characteristics.
		Gold mineralisation and alteration are localised in N- to NNW-striking, and moderate to steeply W-dipping anastomosing shear zones 1m to 20 m thick, averaging 3 to 4m. The mineralogy of the shear zones is sericite-quartz mylonites with abunda sulphides, chlorite and carbonate, with accessory biotite, rutile and apatite. The go occurs within the pyrite and arsenopyrite, which may be up to 15% of the volume the mylonite. They are interpreted to have formed relatively late in the geologic history of the area, as they crosscut the foliation and the monzogranite.
		A lesser mineralisation style is quartz vein stockwork lodes within the monzogranit These trend NNE and are the brittle equivalent of the ductile shear zones in the maf The quartz veins are usually steeply dipping and a few centimetres wide, with very higgrades; coarse visible gold has been noted in drilling in the Grace prospect. Weathering has reached more than 80m below the natural surface. Previous open princing was almost entirely within the oxide zone.
Drillhole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: • Easting and northing of the drillhole collar • Elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar • Dip and azimuth of the hole • Downhole length and	Exploration Results are not being reported.
	interception depth Hole length.	



Criteria	JORC Code explanation	Commentary
	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.	Exploration Results are not being reported.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cutoff grades are usually Material and should be stated.	Exploration Results are not being reported.
	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.	Exploration Results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration Results are not being reported.
Relationship between mineralisation widths and intercept	These relationships are particularly important in the reporting of Exploration Results.	The mineralisation lodes dip at minus 45° to minus 60° to the southwest. Surface drillholes were angled at minus 60° to minus 70° and with an azimuth perpendicular to the lodes strike to provide as near a true. intercept thickness as realistically possibly. Underground drillholes were drilled in fans at a limited number of drill locations; their intersections are highly variable with respect to true widths
lengths	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.	Exploration Results are not being reported.
	If it is not known and only the downhole lengths are reported, there should be a clear	Exploration Results are not being reported.

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Criteria	JORC Code explanation	Commentary
n	statement to this effect (e.g. 'downhole 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 drillhole collar locations and appropriate sectional views.	Relevant maps and diagrams are included in the body of this announcement.
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.	Exploration Results are not being reported.
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.	na
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	 Work planned is as follows: Digitisation of the limited historical underground mapping Cutting of unsampled historical core to add additional intersections to the interpretation. The use of the historic stope pickups to refine the interpretation locally. Additional infill and extensional drilling in Inferred Resource areas to upgrade resources to Indicated and target high grade zones identified in resource model.



Criteria	JORC Code explanation	Commentary
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially	Relevant maps and diagrams are included in the body of this report.
\	sensitive.	

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been	The database is maintained by external service provider Geobase using the Azeva.XDB Database Management System.
	corrupted by, for example, transcription or keying errors, between its initial collection and its use for	The database is stored using the Microsoft's SQL Server 2019 database engine on a Secure Network server running the latest SBS Administrative access to the database is restricted to Geobase Personnel only who have been trained in database management.
	Mineral Resource estimation purposes.	All appropriate and valid changes requested from site are made only by Geobase. Site personnel do not have the ability to edit the database, which allows the integrity of the data to be maintained.
		Geobase generates a backup of the database and associated data on a regular basis.
		The database is configured to store assay quality control measures undertaken on the assaying.
		Historical data validation and recent data merging is undertaken using Azeva.X software and a number of additional third-party software suites.
	Data validation procedures used.	The data is subject to several validation procedures including code, multi-table and spatial. The database contains validation scripts which prevent non-standard character codes being used and checks numeric values against a minimum and maximum range.
		Historic codes have been made consistent with the new standardized coding system.
		Multi table validations have been conducted on all drill hole tables.
		All field generated data is checked for validity and completeness by Rox staff prior to being supplied to Geobase for compilation, additional validation and loading into the database.
		The Competent Person found no material errors and deemed the database was fit for the purpose of Mineral Resource estimation.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person visited the site from the 22 nd to 23 rd of September 2021, and inspected open pits, geological exposures, diamond core, RC drilling, core and sample handling facilities, historic plans and sections and site infrastructure, as well as having discussions with Rox staff
	If no site visits have been undertaken, indicate why this is the case.	na
	Confidence in (or conversely, the uncertainty of) the	The interpretation is based on the resource drilling dataset, and a selection of intervals based on geology and assay data. This interpretation is supported by



Criteria	JORC Code explanation	Commentary
Geological interpretation	geological interpretation of the mineral deposit.	the long history of open pit and underground mining. Uncertainties will arise from the quantity and distribution of data.
	Nature of the data used and of any assumptions made.	No material assumptions have been made which affect the Mineral Resource reported herein.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Uncertainties in the interpretations are due to the wide spacing of some of the drilling data. The interpretations are consistent with the previously mined stopes and are not likely to be materially deficient.
	The use of geology in guiding and controlling Mineral Resource estimation. The factors	Modelling of mineralised lode wireframes used the Interval Selection function in Leapfrog Geo software. No minimum or maximum thickness parameters were used, and lodes generally cross-cut, except against the Mine Lode Shear, where there is evidence of truncation of minor structures.
	affecting continuity both of grade and geology.	Merged tables were created in Leapfrog Geo, combining lithology and assay tables. The lode intersections were interpreted based on several characteristics, such as grade, shearing, degree of mylonitisation, veining, sulphide content, or alteration and bleaching. Intervals were generally selected using the assay tables, verified using core photographs and logging, except where historic core was unsampled, in which case lithology tables were used.
		Pinch-outs were applied manually around the peripheries and at roughly half of the average data-spacing, up to 40m. Drill intercepts were snapped to the wireframes.
		Core photography was utilised where available, for historical core, to determine hanging wall and footwall contacts, as well as to validate historical logging. Geological contacts were snapped to, with priority, over grade contacts, as some lower grade disseminated gold tends to be found outside of the visible shear contacts. So, in these cases the visible contacts were treated as hard boundaries.
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	Twenty one mineralised lodes have been modelled, along 2.8 km of strike length, comprising the Mine Lode and associated footwall and hanging wall lodes along the main trend corridor. The maximum depth of the main Lode interpretation is to approximately -600mRL, 1,060m below the natural surface. The Mine Lode is continuous down the dip for this length; other lodes have much more restricted down-dip extents.
	lower limits of the Mineral Resource.	The hanging wall and footwall lodes are predominantly 0.5m-2m thick, while the Mine Lode is generally in the order of 1m-3m thick, but locally exceeds 10m.
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	Existing wireframes were updated with additional assays since the previous resource also using Leapfrog Geo mining software. Some minor changes to the interpretation of the lodes were made based on additional assays with some lodes also deleted. A total of 21 mineralized lode wireframes were modelled comprising the Mine Lode and associated footwall and hanging wall lodes. No minimum or maximum thickness values were applied for interpretation of the lodes. A series of grade shells separating lower grade from higher grade parts of each
	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	lode were interpreted using Leapfrog Geo to allow reasonable modelling of the higher grade shoots within the lodes. The grade shells were created using an interpolation process in Leapfrog Geo involving a spherical structure with a nugget of 50% and base ranges ranging from 200 m to 500 m for each lode. Grade shells were interpreted at a range of different cut-offs for each lode ranging from 0.5 g/t Au to 2.0 g/t Au. The grade shell with the lowest cut-off grade and reasonable grade continuity was chosen for each lode; in most cases the 1.0 g/t Au shell was chosen. The grade shells and the lode wireframes were then exported out of Leapfrog Geo and imported into Geovia Surpac 2021 mining software. The wireframes were edited in Surpac if required to remove



/	Criteria	JORC Code explanation	Commentary
	D		anomalous artefacts and small volume, single intersection shapes. The resulting grade shell and lode wireframes were then used to code the drill hole database with the intersections.
			Fixed length sample composites were extracted for each lode according to the lode intersection coding. Composites were extracted for each lode to have a length of 1m with a minimum length of 0.5m. Grade shell wireframes for each lode were then used to isolate only sample composites inside each grade shell. Statistical distributions of grades inside each lode and corresponding grade shell were reviewed individually to determine high grade cuts (top cuts) that should be applied prior to grade estimation. Histograms and probability plots of grade distributions were analysed using Micromine mining software. A top cut analysis was also conducted for each lode in Micromine software. High grade cuts were applied that ranged from 4 g/t Au to 70 g/t Au and were applied to 7 grade shell wireframe objects and 11 lode wireframe objects.
			Variography was conducted using Snowden Supervisor mining software and using samples from the grade shell for object 1 (Mine Lode) – total of 1,606 samples, as this was the domain with the most samples and best continuity. Variograms were modelled for the down hole and all 3 orthogonal directions. The main direction of continuity was determined to be -20 towards 320 degrees with a maximum range of 150m and a nugget of 0.34. Three structures were modelled for each variogram direction. The variogram model for object 101 (grade shell for the Mine Lode) was applied to all other objects and adjusted for the local orientation.
			A block model rotated -30 degrees in azimuth only was created with parent block sizes 10m Y by 5m X by 5m Z and sub-block sizes 10m Y by 1.25m X by 1.25m Z, as per previous model. Lode wireframes and associated grade shells were coded into the block model and estimation zones were used to allocate differing orientations within the same lode. Three different rock material types were coded within the block model: oxide, transition and fresh rock. Densities were assigned for each of the rock material types: 2.2 t/m3 for oxide, 2.6 t/m3 for transition and 2.9 t/m3 for fresh rock, as per the previous resource model. The majority of the material for the Youanmi Deeps was fresh rock.
			The grade estimate was conducted using Ordinary Kriging with 4 estimation passes with a grade limited search utilized for Passes 1 and 2. Gold grades with a top cut applied and Au grades without a top cut applied were estimated. The first pass utilized a search ellipsoid of 50m radius, with a minimum of 8 samples, maximum of 32 samples and maximum of 4 samples per hole. The second pass utilized a search ellipsoid of 100m radius, with a minimum of 6 samples, maximum of 32 samples and maximum of 4 samples per hole. The third pass utilized a search ellipsoid of 200m radius, with a minimum of 4 samples, maximum of 32 samples and maximum of 4 samples per hole. The final pass utilized a search ellipsoid of 500m radius, with a minimum of 2 samples,
			maximum of 32 samples and maximum of 4 samples per hole. Search ellipsoids were aligned with the orientation of the individual lode wireframes, with a semi-major ratio of 1:2, and a minor ratio of 1:3. A hard boundary was used to estimate blocks within each grade shell, while a soft boundary between the lode and the respective grade shell was used to estimate blocks inside the lode but outside the grade shell to retain some grade continuity. Check estimates using the Inverse Distance Weighted squared and the Nearest Neighbour methods were also completed for all blocks with the mineralized lodes.
			Estimation parameters applied to all lodes are tabulated below:



	Criteria	JORC Code explanation	Commentary							
	D		Parameter		Pass 1	Pass 2	Pass 3	Pass 4		
_			Major search dista	ance	50m	100m	200m	500m		
_			Semi-major search		25m	50m	100m	250m		
					17m	33m	67m	167m		
			Minor search dista		8	6	4	2		
			Minimum compos		32	32	32	32		
			Maximum compo	sites	4	4	4	4		
\			Maximum compo	sites per hole	7	7	-			
/			Variogram type			Nested	spherical			
١			C0 Nugget			0.	34			
/			C1 Partial sill			0.	43			
7			A1 Major direction	n range		9.	3m			
			A1 Semi-major rai	nge		9.	3m			
			A1 Minor direction	n range		9.	3m			
			C2 Partial Sill			0.:	173			
1			A2 Major direction	n range		30)m			
)			A2 Semi-major rai	nge		20)m			
			A2 Minor direction	n range		20)m			
-			C3 Partial sill			0.0	057			
			A3 Major direction	n range		15	0m			
			A3 Semi-major rai	nge		60)m			
			A3 Minor direction	n range		60)m			
)		The availability of check	The curren	t resource	has b	een co	mpare	d to b	oth the	previous
_		estimates, previous	production	and prev	ious re	source	e estim	ates.		•
		estimates and/or mine production records and	The project	t has beer	n mine	d by b	oth un	dergro	und and	d open pit
)		whether the Mineral	methods in	itermitter	itly ove	er a pe	riod of	about	90 yea	rs. Previous
		Resource estimate takes appropriate account of such	production	recorded	from	Youan	mi are	tabula	ted belo	ow.
)		data.	Years	Tonnes	Head	i	Recovered	d R	ecovery	Au produced
			1908 to 1921	Milled 339,000	Grad		Grade 15.2			(oz) 166,000
			1908 to 1921 1937 to 1942	365,000			8.1			95,000
1			Other	46,000			10.2			15,000
			1987 to 1993 ¹	2,665,535	3.43		3.07	89	9.4%	262,717
			1995 to 1997	411,858	11.3	6	9.69	8:	5.3%	128,278
			3,827,393				5.42			666,995
			1. Inclu	des 154,000t @ 18	8.0g/t Au fo	r 89.000oz	from the sate	ellite Penny	West Project.	
			- mora	, 🕾 10		,		 y	5,000.	
			The previou	us resourd	ce estii	mates	were c	reated	l by con	sultants
			CSA Global	, and repo	orted a	t a 4 g	/t cuto	ff:		
			Creator Date	Indicated			Inferred			
				Tonnes Mt	Au g/t	Au '000 oz	Tonnes Mt	Au g/t	Au '000 oz	
			CSA							
			Global 2021	1.1	8.2	290	2.3	7.7	566	



	Criteria	JORC Code explanation	Commentary					
	Ŋ	The assumptions made regarding recovery of by-products.	na					
		Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No deleterious	or non-grade ele	ments ha	ve been e	stimated.	
		In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	5m X by 5mZ, when the strike direct employed with	is of the parent blowith sub-celling in with sub-celling in ction (minus 30 de in search distances ing is highly variab	X and Z tegrees rotes for estim	o 1.25m; ation). An ation rang	the blocks a ellipsoid se ging from 50	re rotated into arch was Om to 500m. The
ソ		Any assumptions behind modelling of selective mining units.	na					
		Any assumptions about correlation between variables	No assumption	ns have been mad	e regardir	ng the cor	relation of v	rariables.
		Description of how the geological interpretation was used to control the resource estimates.	interpretation for estimation	y, alteration and sof lodes within the within the grade side the grade should be shoul	ie resourc shells whi	e model. <i>i</i> le a soft b	A hard boun oundary wa	dary wasused s used for
		Discussion of basis for using or not using grade cutting or capping.	the Coefficient were applied t	s were applied to of Variation to a o 7 grade shell ob g/t Au to 70 g/t A	value less jects and	than 2, if	possible. H	igh grade cuts
		The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	■ Visu direct Mat com Mat or in aver com Distactor com The overall val to the compos below -275m F	mate was validate ally – displaying bet visual comparishematical by lode pare to the averahematical by swartervals of easting age composite grarisons were mance Weighted an posite grades idation showed the grades, with seals. The majority on of input and estable comparisons were mance weighted an posite grades idation showed the grades, with seals.	on the average sample the plot – the northing ades for the de with the design of the estimate this material the slight fight this material one.	erage block e composithe average and elevathe same in the estimate to Neighbor ted grades to over-esti	k grade for o te grades fo e block grad ation compa ntervals. Sin ted Ordinar ur grades w s are reason mation in the	each lode and reach lode less for "swathes" ared to the nultaneous y Kriging, Inverse ith the sample able compared ne deeper areas ed as Inferred
			Object/Domain	Composite Grade g/t	Au OK g/t	Au ID g/t	Au NN g/t	
			101	8.24	7.15	7.42	7.32	
			102	3.78 5.92	4.32 5.17	4.26 5.18	3.99 5.08	
			104	9.63	7.72	7.11	1.87	



Criteria	JORC Code explanation	Commentary				
		105	10.43	9.17	8.91	7.92
		106	9.56	9.66	10.51	11.17
		107	3.68	2.81	2.25	1.46
		108	4.96	4.60	4.77	4.79
		109	5.04	4.80	4.97	5.48
		110	2.33	2.30	2.43	2.70
		111	2.04	1.51	1.51	1.61
		112	3.34	2.83	2.73	2.39
		113	9.57	7.08	7.58	5.72
		114	4.26	3.42	3.50	3.04
		115	3.74	3.46	3.71	2.83
		116	3.02	2.63	2.38	1.77
		117	3.04	1.89	2.08	0.03
		118	2.1	2.96	2.59	2.70
		119	0.63	0.63	0.66	0.67
		120	5.39	4.83	5.03	4.75
		121	5.91	4.03	4.92	2.78
		1	6.16	3.24	2.82	1.64
		2	2.32	1.12	1.08	0.67
		3	5.61	5.43	4.83	4.54
		4	7.76	7.49	4.73	1.22
		5	8.47	8.55	8.42	6.58
		6	5.87	4.38	4.03	3.24
		7	1.79	1.17	1.01	0.67
		8	5.41	7.00	7.93	10.90
		9	2.91	2.72	2.58	3.32
		10	1	1.03	1.07	0.91
		11	0.61	0.61	0.59	0.54
		12	1.54	1.11	1.08	0.50
		13	2.77	2.16	2.30	1.51
		14	3.61	1.95	1.52	0.62
		15	2.28	1.84	0.93	0.85
		16	2.18	1.08	0.77	0.51
		17	1.18	1.00	0.82	0.50
		18	1.53	2.41	1.20	1.34
		20	0.63	2.46	2.26	1.70
		21	4.65	3.00	3.46	3.76
		Total	4.24	3.98	3.82	3.39
			1		-	
oisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and	Tonnages have	e been estimated	l on a dry b	asis.	
	the method of determination of the moisture content.					
cut-off parameters	The basis of the adopted cut- off grade(s) or quality parameters applied.	cut-off previou	esources were re usly reported by J the costs of und	lankowski ((2021); 3	g/t is based
Mining factors or assumptions	Assumptions made regarding possible mining		oth, and the prev			

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Criteria	JORC Code explanation	Commentary
	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.	stoping. Previously mined areas may be accessible by the use of cemented fill. No detailed mining assumptions have been made and no external dilution has been added to the resource.
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.	A 120 tpd bacterial oxidation circuit was commissioned in September 1994 to treat sulphide concentrates, using the BacTech process. BacTech uses a moderately thermophilic culture with an optimum growth temperature of 45C. A pilot plant trial from October 1993 to July 1994 tested three bulk samples or concentrate. After bacterial oxidation, recoveries up to 99% were achieved. The performance between 1995 and 1997 of the flotation and bacterial oxidation circuit was generally lower than budgeted due almost entirely to below budge ore deliveries. Although the plant rarely achieved its full capability, it consistently exceeded the projected metallurgical recovery of 81%, with an average recover of 87.5%. Blending of ore was not anticipated prior to commissioning and feed variability created significant problems for both the flotation and bacterial oxidation circuits. Operating performance history demonstrates a steadily increasing recovery with initial commissioning values of 85% increasing rapidly to a maximum of 92.4% in 1994-95. This is indicative of improving metallurgical control and diminishing amounts of reactive sulphide from transitional zones. Based on historical operating data, one of the most significant factors affecting both throughput and recovery was mechanical and equipment failures within the bio oxidation circuit. Work was conducted in 2021 by OMC Mineral Consultants to define the characteristics of the ore and defining flowsheet options. Work involved two phases of mineralogical investigation; thin sections from core and quantitative analysis using electron microscopy, XRD and laser ablation ICP-MS. Metallurgical extraction test work included comminution test work, whole of ore leach test and flotation test work. The flotation concentrate was subject to 4 extraction options; Ultrafine Grinding to P80 of 15 and 10 micron material, basic two-stage roasting, basic pressure oxidation (POX) and Neutral Albion Leach (NAL). The study concluded the recommended flowsheet for the scoping study would c



Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered, this should be reported with an explanation of the environmental assumptions made.	No assumptions regarding possible waste and process residue disposal options have been made. Youanmi is a previously mined site, with historic waste dump and tailings dams.
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.	Bulk density data is predominantly derived from some standard Specific Gravit (SG) immersion measurements carried out between 1989 and 1992. Within the interpreted mineralised lodes, the mean density of the samples was 2.96tm ⁻³ . It was not deemed possible to subdomain this dataset into areas of differing buldensity values. A single value of 2.9tm ⁻³ was assigned to the fresh lode material throughout the deposit.
	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.	The water immersion method measurements were determined by measuring the weight of part or the entire sample in air and water and then applying the formula bulk density = weight_air/(weight_air-weight_water).
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	na
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource was classified as Indicated or Inferred based on the level of geological understanding of the mineralisation and the drillhole spacing. Dril hole sample spacing was the primary metric with Indicated Resources classified where sample spacing was 40m or less and Inferred Resources where sample spacing was greater than 40m. Areas of sample spacing greater than 200m were not classified.

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Criteria	JORC Code explanation	Commentary
D	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The classification reflects the overall level of confidence in mineralised domain continuity based on the drill sample data numbers, spacing and orientation, QAQC results, survey control and drilling methods and geological interpretation.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource classifications applied appropriately reflect the view of the Competent Person.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The Mineral Resource was audited by an independent, third party consultant, CSA Global, which verified the technical inputs, methodology, parameters and results of the estimate
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 accuracy of the Mineral Resource is communicated through the classification assigned. The Mineral Resource been classified in accordance with the JORC Code (2012 Edition) using a quantitative and qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this table.
	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.	The accuracy of the Mineral Resource is communicated through the Inferred or Indicated classification assigned to the deposit. The Mineral Resource has been classified in accordance with the JORC Code. All factors that have been considered have been adequately communicated in Section 1, Section 2 and Section 3 of this table. The Mineral Resource Statement relates to a global estimate of in-situ tonnes and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The depleted stopes and development from the 1995-1997 period produced 411kt @ 11.4 g/t. The current model in the same area has 764 kt @ 10.2 g/t. Discrepancy in quantity is due to the conservative approach to coding the mined material in the model. The minor grade difference is likely due to the increased resolution of sampling used to obtain higher grades in samples during



	Criteria	JORC Code explanation	Commentary
	D		production. Further analysis and modelling is required to understand the
1			differences and refine the model.