

DFS Confirms Attractive Economics and Mine Life for Phase One Norseman Restart

Pantoro Limited (**ASX:PNR**) (**Pantoro**) is pleased to announce the results of its Definitive Feasibility Study (**DFS**) for the Phase One of the restart of operations at the Norseman Gold Project (PNR 50%). The DFS results outlined are on a 100% basis unless otherwise stated.

Key Highlights

- Norseman confirmed as a financially robust gold mining operation underpinned by initial seven year Phase One project life.
- Project pre-tax net cashflow of \$486 million @ \$2,600/Oz.
- Average production of 108,000 ounces a year, peaking at 119,000 ounces in year two of production.
- LOM average AISC of \$1,292/oz enabling high margin production.
- Pre-production capital cost of \$89 million (including contingency), twelve month construction period and payback in 1.3 years.
- Processing Plant capacity of 1 Mtpa with flexibility to expand to 1.5 Mtpa.
- Initial Ore Reserve of 602,000 ounces which includes 4.9 Mt @ 3.2 g/t Au for 502,000 ounces of open pit and underground ore and 4.2 Mt @ 0.8 g/t Au for 100,000 ounces of surface stockpiles.
- Phase One life of mine production of 5.9 Mt @ 3.2 g/t Au for 610,000 ounces. Metallurgical recovery of 95% producing 580,000 ounces.
- Less than one third of the in-situ global Mineral Resource considered in the Phase One DFS. Resource to Reserve conversion cost to date of \$22.53/oz.
- Strategy to double the Ore Reserve during the next 12-18 months with 100,000 metres additional drilling planned.
- Exploration program over Lake Cowan and other priority targets to continue throughout Phase One construction and mining.
- Pantoro completing approvals processes and preparing tender documentation in order to rapidly progress to construction and operations.

Financial Summary

- DFS completed to $\pm 10\%$ cost accuracy.
- NPV_{5%} of \$384 million (pre-tax) and IRR 92% (pre-tax) at A\$2,600 gold price.
- Average C1 operating cost of \$1,137 per ounce.
- Average All in Sustaining Cost of \$1,292 per ounce.
- Pre-Production capital of \$89 million (PNR 50% share \$44.5M).
- Commenting on the outcomes of the DFS, Managing Director Paul Cmrlec said:

"The outcome of the DFS for Phase One of the Norseman Gold Project has met our expectations with impressive production and financial metrics. The resource development works conducted to date have been focused on six initial mining areas which represent less than one third of the total Mineral Resource inventory. From these six initial mining areas, the DFS for Phase One has returned a robust result for the restart of operations at the Norseman Gold Project.

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t: +61 8 6263 1110 | e: admin@pantoro.com.au | w: www.pantoro.com.au PO Box 1353 West Perth WA 6872 | 1187 Hay Street, West Perth WA 6005 "The Phase One DFS provides strong returns based on the initial mine life and low operating costs. In addition, there is significant potential to extend mine life from future planned targeted drilling. The project team is now focused on completing relevant statutory approvals. Tender documentation for the processing plant EPC and for mining works is well advanced and is expected to be released to potential external providers in the next few weeks.

The majority of the areas to be mined during Phase One are considered likely to continue deeper and Pantoro is confident that drilling at depth will confirm ongoing mine life extensions as is the case for most Western Australian Gold operations

During the Phase One definition phase, Mineral Resource to Ore Reserve conversion has been achieved at the very low cost of \$22.53 per ounce, demonstrating the relatively small spend required for further Ore Reserve addition. These activities will continue to be aggressively advanced with the goal of doubling the mining inventory over the next twelve to eighteen months.

Work is to be focused on the high grade Mainfield and Scotia deeps areas during the next six to twelve months, and we expect to add more high-grade underground feed sources to the base inventory. As is always the case for multiple mine assets, the mine schedule will be continually updated as additional ore sources are added to the inventory."

Enquiries

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Cautionary Statements

The production targets and financial forecasts ("Mine Plan") set out in the Definitive Feasibility Study (DFS) for the Norseman Gold Project utilise a portion of Inferred Mineral Resources.

The DFS is based on JORC Compliant Mineral Resources set out in this announcement. Pantoro confirms that 82% of the total mined tonnage and 79% of the total contained metal is from Probable Ore Reserves with the remainder from Inferred Mineral Resources. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. Classification of Mineral Resources is based on statistical analysis of the data set and Mineral Resource estimate, and where the required level of confidence based on data density for inclusion in the Mineral Resource has not been met, mineralisation is placed in an Unclassified category. No Unclassified mineralisation has been included in the production targets or financial forecasts.

The company confirms that open pit mines were optimised and designed on the basis of Measured or Indicated Mineral Resources only, and only Inferred Mineral Resources which lie within those designs have been included in the Mine Plan. This process ensures that the planned open pit mines are economic regardless of the inclusion of Inferred Mineral Resources. The nature of the high-grade Mineral Resources considered for underground mining makes full drill out to Indicated Mineral Resource status increasingly difficult and costly at depth. Pantoro routinely advances its operational underground mines on the basis of economic Ore Reserves and Inferred Mineral Resources, with additional confirmatory drilling undertaken from underground development as the mine advances. This process ensures that the planned underground mines are economic regardless of the inclusion of Inferred Mineral Resources. Appropriate underground DFS Modifying Factors and mining costs have been applied to the Inferred portion of the Mineral Resource, along with additional costs relating to further drilling of Inferred Mineral resources prior to any of this material being included in the study.

Certain statements in this report relate to the future, including forward looking statements relating to Pantoro's financial position and strategy. These forward looking statements involve known and unknown risks, uncertainties, assumptions and other important factors that could cause the actual results, performance or achievements of Pantoro to be materially different from future results, performance or achievements expressed or implied by such statements. Actual events or results may differ materially from the events or results expressed or implied in any forward looking statement and deviations are both normal and to be expected. Other than required by law, neither Pantoro, their officers nor any other person gives any representation, assurance or guarantee that the occurrence of the events expressed or implied in any forward looking statements will actually occur. You are cautioned not to place undue reliance on those statements.

Key Study Inputs and Outcomes

The DFS confirms modest pre-production capital with strong project cashflows driven by high Mineral Resource grades and excellent metallurgical recovery utilising conventional mining and carbon in leach processing techniques.

Production Summary	Ur	nits	Feasibility St	udy Outcomes
Initial Mine Life	ye	ars	7	.0
Total Underground Ore Mined	C)Z	1.5 Mt @ 4.87g/t for 233koz	
Total Open Pit Ore Mined	C)Z	4.3 Mt @ 2.70g/t for 374koz	
Total Phoenix Tails Reprocessed	C)Z	0.1 Mt @ .75	5g/t for 4koz
Gold Recovered	C)Z	579	,459
Processing Rate	M	tpa	1.0	Иtpa
Average Metallurgical Recovery LOM	(%	95	.0%
Project Development Capital				
Processing Plant	A	\$M	42	2.7
Non-Processing Infrastructure and Owners Cost	A\$M		30.9	
Project Development Capital	A\$M		73.6	
Pre-Production Mining Costs	A\$M		15.6	
Total Pre-Production Capital	A\$M		89.2	
Project Economics				
Gold Price	A\$/oz	2,200	2,600	2,800
Gold Revenue	A\$M	1,275	1,507	1,622
Project Cashflow (Pre-tax)	A\$M	260	486	599
All-In Sustaining Cost (AISC) ¹	A\$/oz	1,283	1,292	1,297
NPV _{5%} (Pre-tax)	A\$M	197	384	477
HRR (Pre-tax)	% p.a.	50%	92%	113%
Payback Period ² (Pre-tax)	Years	1.8	1.3	1.1
Project Cashflow (Post-tax)	A\$M	177	335	414
NPV _{5%} (Post-tax)	A\$M	129	260	325
IRR (Post-tax)	% p.a.	35%	67%	82%
Payback Period ² (Post-tax) ³	Years	2.1	1.5	1.3

All-in Sustaining Cost includes mining, processing, site administration, royalty costs and sustaining capital. It does not include exploration, corporate costs or non-sustaining capital.

Payback period is caulculated from the first month of gold production.

Pantoro has an estimated carry forward tax loss position at 30 June 2020 of \$86M which are available to offset any future taxable income for the Group which is expected to substantially reduce the post-tax payback period.

Rounding errors may occur.



Costs of Production	LOM Unit Cost (A\$/t)	LOM Unit Cost (A\$/oz)
Underground Mining	\$139/t UG Ore	\$356/oz
Open Pit Mining	\$54/t OP Ore	\$400/oz
Phoenix Tails Mining	\$3/t Ore	\$1/oz
Total Mining	\$74/t	\$757/oz
Processing & Maintenance	\$26/t	\$261/oz
Site Administration	\$12/t	\$119/oz
Total Cash Cost (C1)	\$111/t	\$1,137/oz
Royalties & Refining	\$6/t	\$66/oz
Sustaining Capital	\$9/t	\$89/oz
Total All-In Sustaining Cost (ASIC)	\$126/t	\$1,292/oz

Definitive Feasibility Study Summary

Mineral Resource and Ore Development

The Norseman Project Development strategy is focused on six initial mining areas which comprise under one third of the global Mineral Resource Inventory. The deposits included in the DFS were selected by Pantoro for consideration in the Phase One resource definition and DFS based on the following ranking criteria which assessed the expected:

Density and quality of existing drilling data.

Expected time and work effort to commence operations.

Expected Open pit production profile and life before transition to underground mining.

Expected pre-production capital requirements.

Expected ore grade and profitability.

Approvals requirements.



Figure: Primary focus areas in Phase One Update Mineral Resources.

Pantoro drilled a total of 88,780 metres of RC and diamond drilling at the Norseman Gold Project between August 2019 and August 2020. The composition of drilling completed was 85.4% Mineral Resource development, and 14.6% exploration.

Mineral Resource development was focused on infilling existing drilling to enable upgrading of the resource in areas to be mined in order to calculate Ore Reserves and develop the Operations Recommencement Plan.

In addition to the areas drilled, the St Patricks deposit which lies within the Norseman Manfield was remodelled and included in the Mine Plan owing to the extensive dataset already in place.

Operations Implementation Plan

Operations at Norseman are to be restarted with production from two major open pit mining centres and the OK underground mine. As the initial open pits are exhausted, the surface mining fleet will move to the next open pit mining centres, with underground mining then commencing from the base of the completed open pits where economic to do so.



The mine schedule presents an uncomplicated strategy for the first years of operation with ore primarily from three sources being Scotia, Cobbler, and the OK Underground Mine. The mines feed a central one million tonne per annum processing plant. Where appropriate, open pits have been staged to minimise pre-production capital costs while retaining operational cashflows.

The mine schedule has been developed to ensure that sunk mining costs are mininised while ensuring that stockpiles suitable for several months of feed are maintained throughout the project life.



The strategy provides ample time for subsequent mining areas to be brought on line to ensure uninterrupted ore supply. Project schedules will continue to be updated as additional ore sources are identified by resource development activities.

For conservatism, all ore has been scheduled as ROM grade material, and is fed to the plant on a blended basis. In practice, high grade and low grade ore feed will be separated when mining, maximising early production and cashflows. The additional open pits already defined at the project provide immediate and extensive contingency options in the event that unforeseen issues occur during execution.

	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Gold Produced (ounces)	72,000	119,000	101,000	110,000	102,000	75,000

Ore is to be processed in a new one million tonne per annum carbon in leach processing plant. The new processing plant is to be located adjacent to the existing Phoenix mill which is to be dismantled and removed.

Where suitable for use, existing buildings and infrastructure is to be refurbished to minimise capital and operating costs. Generally, buildings in the processing area are suitable for use, however the majority of the existing processing plant is to be replaced. Only primary crushing structures are being retained and refurbished. The balance of the processing plant is in poor condition and unsuitable for refurbishment.



Figure: New processing plant layout relative to existing infrastructure

Other site infrastructure including the tailings storage facility ("TSF"), raw water bore fields, roads, offices and workshop buildings are to be refurbished, upgraded and retained as necessary for operations.

Construction time inclusive of detailed design activities is 53 weeks from commencement, with scheduling driven by the time required for processing plant construction. Mining commences at Cobbler in month 9 and at Scotia in month 9 of the construction period to ensure uninterrupted ore feed to the processing plant.

Key Consultants

Pantoro managed completion of the DFS with input from prominent resource industry expert consultants and contractors as appropriate. External consultants that contributed to areas of the study are detailed in the table below.

Discipline	Company / Consultant
Mineral Resource interpretation, estimation and review	Entech
Geotechnical assessment	Peter O'Bryan and Associates
Mine design and scheduling	Minecomp
Metallurgy & comminution	ALS Metallurgy
	Orway Mineral Consultants
	Outotec
\bigcirc	Peter Sperring, consultant metallurgist
	MACA Interquip
Process plant engineering design	MACA Interquip
and cost estimates	BEC Engineering
	Peter Sperring
(\mathbf{D})	Krebs Consulting
Engineering design – Tailings dam	TailCon Projects Pty Ltd
Engineering design – HV power and reticulation	BEC Engineering
Power supply	Contract Power Group
Hydrology and hydrogeology	Groundwater Resource Management Pty Ltd
Groundwater – raw water supply &	Brilly Group
open pit dewatering	JMD Engineering
Environmental assessment &	Blueprint Environmental Strategies Pty Ltd
advice, preparation of Mining Proposal and Mine Closure Plan	MBS Environmental Pty Ltd
Mineral tenure	Austwide Mining Title Management Pty Ltd
Environmental studies	Mattiske Consulting
	Western Wildlife
	Invertebrate Solutions
D)	Wetlands Research & Management
×.	Environmental Technologies & Analytics
	Herring Storer Acoustics
	MBS Environmental Pty Ltd
Project approvals	Blueprint Environmental Strategies Pty Ltd

Geology

The project area lies at the southern extent of the Norseman - Wiluna Greenstone Belt of the Eastern Goldfields Province of the Yilgarn Block, Western Australia. The regional geology of the Norseman area has been subdivided into four formations being the Penneshaw Formation, Noganyer Formation, Woolyeenyer Formation and the Mt Kirk Formation.



Figure: Regional Geology of the Norseman Goldfiled

The oldest unit is the Penneshaw Formation which has been dated at 2938±10 Ma (U-Pb zircon, (Hill et al., 1992). The western part of this unit is dominated by amphibolite with minor sediment and felsic rocks, whereas the eastern part comprises intercalated amphibolite and highly deformed felsic rocks.

The overlying Noganyer Formation consists of sediment iron formation (jaspilite), siltstone and sandstone, and minor carbonaceous shale.

Overlying the Noganyer Formation with a conformable or gently unconformable contact is the Woolyeenyer Formation. The Woolyeenyer Formation is dominated by mafic volcanic rocks with minor conformable ultramafic units and sediment bands. These rocks are intruded by mafic dykes with a dominant northeast to northwest trend

that are interpreted to be syn-volcanic. The Woolyeenyer Formation is regarded as unconformably overlain by sedimentary and felsicvolcanic to volcaniclastic rocks of the Mt Kirk Formation that have been intruded by thick, differentiated mafic sills. The contact between these units is marked by the regionally extensive Abbottshall Chert comprising silicified banded and fine-grained sediment.

Intrusive rocks in the Norseman region include the Buldania granite, which intrudes the Penneshaw Formation; the Pioneer Granite and similar poorly exposed domal granites that intrude the sequence along the western margin of the greenstone belt; felsic porphyry to granitoid dykes intrude all units and predate mineralisation, and Proterozoic mafic dykes that occupy a Yilgarn-wide set of linear brittle fractures.

All the Norseman reefs are typical Archean lode systems and the orebodies are almost completely structurally controlled. They all share common features which indicates their genesis:

Most of the high grade ore zones occur where veins intersect 'gabbro' intrusions, and specific oriented contacts are particularly favourable. This is most likely a result of competency contrasts which allow preferential propagation of cracks and other openings within the coarser grained rocks, and the amount of veining is controlled by the orientation of the contact relative to stress directions.

Zones where NNE- and west-dipping felsic, dacitic porphyries are intersected by the reefs tend to be zones of intense structural complexity and gold grades are even more variable than usual. In some reefs these can be zones of high grades, and in others, low grades. This reflects the geometry relative to the local direction of maximum compression, and therefore whether the structures are tight or open.

Most reefs have only very narrow (a few metres at most) alteration selvages. In some cases, these selvages host high gold grades but in all cases the grade drops off very quickly away from the quartz vein. The northern deposits usually have wider alteration haloes caused by more reaction of ore fluids with host rocks (Archer and Turner, 1998)

Mineral Resource Estimate

The Mineral Resource Estimate has been updated in areas which have been advanced and remodelled during completion of the DFS. The Norseman Gold Project global Mineral Resource is summarised in the table below. Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

			Measured	l	Indicated		Inferred		Total				
_	2	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz
	Underground	267	14.4	124	2,048	13.6	895	2,883	10.7	988	5,196	12.0	2,010
- (Surface South	140	2.3	10	7,616	2.2	550	10,362	3.1	1,027	18,119	2.7	1,593
]]	Surface North	4,165	0.7	100	4,207	2.0	276	3,325	2.5	264	11,684	1.7	639
	Total	4,572	1.6	234	13,871	3.9	1,721	16,570	4.3	2,280	35,000	3.8	4,241

The Mineral Resources considered for inclusion in the Phase One DFS represent approximately 30% of the global Mineral Resource and is summarised in the table below. The full Mineral Resource summary which outlines changes to the Mineral Resource is included as Appendixes 1 and 2 of this announcement.

Indicated				Inferred			Total			
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Slippers	588	2.5	48	289	2.2	20	877	2.4	68	
Cobbler	1,834	1.6	95	438	1.3	19	2,272	1.6	113	
Mainfield ¹	368	8.0	95	298	5.3	51	666	6.8	146	
Gladstone	1,387	2.9	129	670	2.3	49	2,058	2.7	178	
OK Underground Mine	502	10.4	167	107	9.4	32	609	10.2	200	
Maybell ²	1,199	1.8	69	24	0.7	1	1,223	1.8	70	
Scotia	2,182	3.9	271	1,710	3.2	176	3,892	3.6	447	
Total	8,060	3.4	874	3,536	3.1	348	11,595	3.3	1,221	

1. Mainfield reporting includes only the St Patricks portion of the Mainfield Group.

2. Maybell is a re-reporting of the resource completed in 2017 by HGS Australia. No update was required for the area in the current open pit design.

The focus of resource development during the Phase One program was to delineate mineralisation likely to be mined in open pits. A number of the Mineral Resources included in the study are expected to present underground mining opportunities following completion of Phase One. Subsequent resource development programs will include conversion of deeper portions and extension of the Mineral Resources.

The project work plan includes sustained Mineral Resource development activity independent of the Phase One project construction throughout the 2021 calendar year. The ongoing resource development activities will aim to double the mining inventory for the Phase Two development phase.

The main focus areas of Phase Two include:

Scotia

The Scotia mining centre has performed very well during the Phase One resource development program with substantial growth within the existing high grade mineral resource, and discovery of additional mineralised zones (including Panda and Green Lantern) to provide substantial additional Mineral Resource growth.



Figure: Scotia Long Section looking west showing Mineral Resource greater than 1.0 g/t Au.



Figure: Scotia cross Section 'A' looking north showing Mineral Resource greater than 1.0 g/t below the southern pit.

The work program at Scotia during the coming twelve months will include:

- Drill out of extension to underground Ore Reserves with drilling planned below the existing Ore Reserve to the north, and at the southern end of the Mineral Resource where existing drilling at depth is extremely limited.
- Drilling to test the full strike extent of the Panda and Green Lantern Deposits before drilling out for conversion to Mineral Resource and Ore Reserve to the likely depth of open pit mines, and the first 100m vertical of likely underground operations.
- Drill testing mineralised zones of the Noganyer BIF formation where high grades are known to exist at surface or in shallow drilling.
 - Drill testing zones outside of Mineral Resources which have existing drilling with ore grade results.
 - Drill testing existing geophysical anomaly areas already identified.

Gladstone

Shallow dipping high-grade shoots extend below the planned open pit at Gladstone and remain open at depth. The company intends to drill down plunge of these high grade shoots with the intent being to define a suitable size Mineral Resource to justify underground mining studies.



Figure: Gladstone long section looking east showing Mineral Resource greater than 2.0 g/t.



Figure: Gladstone cross section looking south showing Mineral Resource greater than 2.0 g/t.

Mainfield

The Mainfield is considered to have the largest capacity to substantially increase the project mining inventory in the short term. Both open pit and underground opportunities exist in most areas of the +5 km strike of historical mining. While the current Mineral Resource includes a number of remnant Mineral Resources, large zones of unmined mineralisation exist with excellent potential for extension up and down dip. The primary areas to be included in Phase Two resource development include:

Open Pit - Mararoa Reef up dip of historic workings and Mt Barker trend. There is sufficient data to provide confidence that significant open pits can be delineated with a relatively small work effort. Zones which do not impact existing infrastructure are the primary targets in Phase Two.

Underground- South Crown, Butterfly, and O'Brien's provide an immediate target for definition of additional Mineral Resource and Ore Reserves. The areas are historically high grade easily accessed from existing underground infrastructure. These areas were left out of Phase One work due to eventual underground rehabilitation and dewatering activities for access but are considered to be very high value targets.

Polar Bear

The Polar Bear Peninsula is host to existing Mineral Resources at Sontaran, and known deposits at Leeders and Hinemoa. Drilling is currently wide spaced, and it is considered highly probable that mineralisation will be extended and converted to Ore Reserves in the near term.

Buldania

Similar to the Polar Bear area, Buldania is host to existing small Mineral Resources at Blackbutt and Tea Tree. Wide spaced drilling between the Mineral Resource areas suggest that mineralisation is likely to be more extensive than the current estimate. Drilling will be focussed on extending the Mineral Resource areas as far as possible ahead of conversion to Ore Reserves.

Princess Royal Mining Centre

The Princess Royal Mining Area is host to additional Mineral Resources at Kapoi and Jubilation. These areas will be drilled to infill and extend prior to updating Mineral Resources and subsequently targeting conversion to Ore Reserve.

The area has been subject of extensive historical mining, and the Desirables area is considered to hold outstanding potential for identification of additional Mineral Resources. The Desirables area is lower confidence that the other zones in the Phase Two program and will be drilled as part of the exploration budget when the opportunity presents.

Lake Cowan

Exploration activities will continue on Lake Cowan throughout the Phase Two development phase. Pantoro recently completed a short follow up drilling campaign at Sailfish with results outstanding. In addition, infill aircore drilling is planned at Anomaly 12 ahead of an initial diamond drilling campaign.

Pantoro will systematically work through the various identified anomalies on the lake including Snapper, Dhufish, Polar Bear lake areas and Cobbler extensions. Geophysical surveys are also being undertaken to further define the many prospects within the lake area.

Mining

Ore Reserves

The Ore Reserve resulting from the Phase One DFS is set out in the table below.

	Proven				Probable			Total		
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Underground	-	-	-	787	5.3	135	787	5.3	135	
Open Pit - Northern	-	-	-	2,058	2.4	161	2,058	2.4	161	
Open Pit - Southern	-	-	-	2,049	3.1	206	2,049	3.1	206	
Stockpiles	4,165	0.8	100	-	-	-	4,165	0.8	100	
TOTAL	4,165	0.8	100	4,895	3.2	502	9,060	2.1	602	

Full details relating to the Ore Reserve and material modifying factors is set out in Appendixes 1 and 2.

Life of Mine Plan

The Phase One DFS Life of Mine (LOM) mines and processes 5.9 Mt of ore of which 4.8 Mt is Ore Reserve and 1.1 Mt is Inferred Mineral Resources. 25% of the total Ore Reserve remains unmined and available for future production at the end of the Phase One DFS LOM.

The Inferred Mineral Resources have had modifying factors applied in the same manner as the Ore Reserve. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

	Life of Mine Plan						
	kT	Grade	kOz				
Underground	1,487	4.9	233				
Open Pit	4,300	2.7	374				
Stockpiles	146	0.8	4				
TOTAL	5,933	3.2	610				

All open pit mines were optimised and designed on the basis of Measured or Indicated Mineral Resources. Inferred Mineral Resources which lie within those designs have been included in the Mine Plan. This process ensures that the planned open pit mines are economic solely on the basis of Ore Reserves, regardless of the inclusion of Inferred Mineral Resources.

The nature of the high-grade Mineral Resources considered for underground mining makes full drill out to Indicated Mineral Resource status increasingly difficult and costly at depth. Pantoro routinely advances its operational underground mines on the basis of economic Ore Reserves and Inferred Mineral Resources, with additional confirmatory drilling undertaken from underground development as the mine advances. This process ensures that the planned underground mines are economic regardless of the inclusion of Inferred Mineral Resources.

Appropriate underground DFS Modifying Factors and mining costs have been applied to the Inferred portion of the Mineral Resource, along with additional costs relating to further drilling of Inferred Mineral resources prior to any of this material being included in the study.

Due to the nature of the included Inferred Mineralisation, a small portion of the planned ore feed is present as Inferred material through the project life. The percentage of inferred material increases towards the end of Phase One as underground mines included in the plan are extended to deeper levels.

Mining Schedule

Pantoro has utilised a very conservative approach to mine scheduling for the purposes of the DFS. All ore mined is assumed to be stockpiled and processed equally with no discrimination between high grade and low grade ore. In practice, higher grade ore will be transported to the ROM with low grade ore stockpiled at the mine until required for processing.

As additional ore sources are added in subsequent stages of Mineral Resource and Ore Reserve definition, new high grade ore sources will replace low grade stocks assumed to be mined.

The break down of ROM grade and low grade stocks in the open pit inventory is set out below.

	Mt	Grade (g/t)	kOz		
ROM Ore	3.0	3.44	332		
Low Grade Ore	1.1	1.04	37		
Total Open Pit Ore	4.1	2.79	369		
% Low Grade Tonnes Included in Schedule		27%			
% Low Grade Oz included in Schedule	10%				
Potential Annual Production Multiple		1.23			

The break down of ROM grade and low grade stocks in the underground inventory is

	Mt	Grade (g/t)	kOz		
ROM Ore	1.3	5.45	220		
Low Grade Ore	0.2	1.77	13		
Total Underground Ore	1.5	4.88	233		
% Low Grade Tonnes Included in Schedule		16%			
% Low Grade Oz included in Schedule	6%				
Potential Annual Production Multiple	1.12				

Prioritising higher grade feed to the mill presents a genuine opportunity which will be realised in practice when mining is underway.

Open Pit

The Mining inventory is primarily from Open Pit ore sources during Phase One.

Key Design Inputs

Open pits were optimised and designed using only Indicated Mineral Resources for conversion to Ore Reserve. The input parameters for open pit design are set out in the table below.

Parameters	Slippers	Gladstone- Everlasting	Cobbler	Scotia	Maybell	Lady Eleanor
Gold price per oz	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Wailangles	40 degrees	30-35 degrees	35-40 degrees	38-50 degrees	43 degrees	42 degrees
Royalties	2.5%	2.5%	2.5%	2.5%	3.5%	2.5%
Processing & Administration	\$33/t ore					
Mining costs	Range from \$3.78/t to \$5.47/t varying on depth	Range from \$4.22/t to \$6.50/t varying on depth	Range from \$3.41/t to \$6.05/t varying on depth	Range from \$3.08/t to \$6.44/t varying on depth	Range from \$3.10/t to \$7.78/t varying on depth	Range from \$3.33/t to \$5.78/t varying on depth
Ore loss	5%	5%	5%	5%	5%	5%
Dilution (ore width dependent)	10-20%	10-20%	7-10%	20%	10-20%	10-20%
Plant throughput rate	1Mt/annum	1Mt/annum	1Mt/annum	1Mt/annum	1Mt/annum	1Mt/annum

Mining cost inputs were established following provision of budget pricing for individual open pits by open pit mining contractors following site visits and review of open pit designs. Mining operations will be tendered for contract award prior to operations commencement.

	Unit	Northern Pits	Southern Pits
Pre-Production Loose Fill Movement	BCM	1,249,655	1,170,099
Pre-Production Strip Volume	BCM	3,608,186	2,235,034
Ore Mined	BCM	820,533	836,499
Waste Mined (Post Pre-Strip)	BCM	8,978,568	11,960,660
Total Strip Ratio (inc. backfill removal)	#	16.9	18.4
Strip Ratio (Post Pre-Strip)	#	10.9	14.3
Ore Mined	t	1,996,837	2,303,399
Ore Mined	g/t	2.38	2.98

Mine Design

The large open pits to be excavated at Scotia, Gladstone, and Cobbler have been designed in stages to maximise open pit ore feed throughout the project life. Other open pits have been designed to be excavated in a single stage.

Mine designs were completed based on the optimised shell for each area, and mine physicals and costs are scheduled on a monthly basis. A summary of the major open pit areas is provided below.

Scotia (South Mining Centre)

Scotia open pit mining centre is staged as three contiguous pits (North, Central and South). The final pit shell is 1,150 metres long and extends to a depth of 150 metres below surface. The open pit design was based on recommendations made by the DFS geotechnical consultants Peter O'Bryan and Associates.



Gladstone (North Mining Centre)

The Gladstone open pit mining centre is staged as a progressive cutback of the Gladstone-Everlasting orebody from south to north. The final pit shell is 1,550 metres long and extends to a depth of 100 metres below surface. The staging of the open pit allows for progressive dewatering and incorporates geotechnical design recommendations provided by DFS geotechnical consultants Peter O'Bryan and Associates.



Cobbler (North Mining Centre)

The Cobbler open pit mining centre is staged as a central starter pit to target the high grade core of the ore body followed by a large cutback of the starter pit to recover the remainder of economic mineralisation. The final open pit shell is 620 metres long and extends to a depth of 80m below surface. The open pit design was based on recommendations made by the DFS geotechnical consultants Peter O'Bryan and Associates.



620m strike length



Figure: Cobbler section showing broad ore zone.

Open Pit Mining Schedule

Mining has been scheduled to minimise pre-production capital while maintaining operational efficiency and processing plant ore feed. The open pit mining schedule commences with pre-stripping at Cobbler and Scotia approximately three months prior to the commencement of processing. While Cobbler is lower grade than Scotia and Gladstone, the pit provides easy access to bulk ore tonnes with a low strip ratio. Selection of Cobbler as a feed source at commencement of operations reduces total capital exposure and payback times while ensuring that a large ore stock pile is in place from the start of operations.

As the initial open pits are exhausted, additional ore feeds are brought on line. As the major mining centre at Scotia winds down and transitions to underground operations, the Gladstone-Everlasting pit comes on line, ensuring that large scale open pits are operational throughout the mine life to maximise efficiency. The schedule for mining activity at the individual mining centres set out in below.



Underground Mining Schedule

Underground mining in Phase One is primarily from the OK Underground Mine in the early phases of project development, with underground mining at Scotia and St Patricks to commence following completion of Phase One of open pit mining operations.

Mine	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
OK UG								
Scotia UG								
St Pats UG								

OK Underground Mine

The extensive existing infrastructure at the OK Underground Mine facilitates a rapid restart schedule with limited capital outlay. The existing underground development infrastructure is in good condition with multiple levels developed and accessible for production.



Figure: OK Underground Mine showing major ore lodes.

The major pre-production capital activity is excavation of a ventilation rise from the surface to the base of the existing workings to reduce ventilation operating costs over the life of the mine. Once the ventilation rise is established, production activities from already developed ore blocks can commence immediately. A small amount of dewatering and capital rehabilitation is required at the base of the decline to access the new reserve blocks below the workings.

Surface infrastructure is already in place with the required refurbishment costs included in the capital cost estimate.

There is an existing boxcut, portal and decline (5.5mW x 5.5mH) that will be used to access the underground workings. The decline will be extended at -1:7 grade (5.0mW x 5.5mH) to provide access to each new mining level.

Levels (4.0mW x 4.0mH) are planned at 16 metre intervals to provide suitable selectivity and geotechnical control during stoping operations. Ore drives will be mined at a nominal 2.5mW x 3.3mH on account of the narrow nature of the ore and to limit dilution during both development and stoping. Ore development is performed by single boom jumbo.

The ventilation network previously relied on an old production shaft which is linked to the decline to act as the primary exhaust airway. This will be used initially to commence mining operations while a 426m long 3.0m diameter raisebore shaft is developed to the 19 level to improve the efficiency of the ventilation network. This raise bore will also contain the secondary egress ladderway. Below the base of the raisebore the exhaust ventilation network will be extended with long hole raises (4.0m x 4.0m). The second egress ladderway will be extended between levels with airleg raises (1.2m x 1.2m).



Figure: OK Underground Mine showing O2 Lode Ore Reserves and existing development.



Figure: OK Underground Mine showing Star of Erin Ore Reserves and existing development.

Due to the sub vertical nature of the orebody, rock mass characteristics and modified stope stability analysis, long hole open stoping was selected as the most suitable mining method. This selection is supported by a review of prior mining operations where it was observed to perform well. Mining will progress top down with pillars systematically placed to maintain stable stope spans.

Cut-off grades were estimated using a cost model developed specifically for the OK Underground Mine. The estimated Stoping cut-off grade was rounded to 3.0 g/t gold. An incremental development cut-off grade of 0.5 g/t gold was applied to ore development necessarily mined to access each stoping block.

Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). A minimum mining width of 1.0 m was applied to the stope design process. An additional stope dilution of 0.5 m footwall and 0.5 m hanging wall dilution was applied in the MSO shape parameters to account for unplanned dilution. Stope shapes were created using gold grade as the MSO optimisation field.

Ore drive development has 15% dilution applied at zero grade.

Scotia Underground Mine

Scotia Underground is scheduled to start following completion of the North and South stages of open pit mining. Two separate portals will be established, one to the North and one to the South, to allow decline development to access the corresponding portion of the Ore Reserves beneath the final open pit shell.



The declines (5.0mW x 5.5mH) will be mined at 1:7 grade down to provide access to each new mining level.

Levels (4.0mW x 4.0mH) are planned at 15m intervals to provide suitable selectivity and geotechnical control during stoping operations. Ore drives will be mined at a nominal 2.5mW x 3.3mH and will be mined by single boom jumbo.

Ventilation will initially be provided by secondary fans positioned in the pit adjacent to each portal. As the mine is established a primary exhaust fan will be installed to exhaust through a dedicated portal in the open pit. Below the base of the open pit the exhaust ventilation network will be extended with long hole raises (4.0 m x 4.0 m). The second egress ladderway will be extended between levels with airleg raises (1.2 m x 1.2 m).

As with the OK Underground Mine, the sub vertical nature of the orebody, rock mass characteristics and modified stope stability analysis showed long hole open stoping to be the most suitable mining method.

Gut-off grades were estimated using a cost model developed specifically for the Scotia Mine. The estimated Stoping cut-off grade was rounded to 3.0 g/t gold. An incremental development cut-off grade of 1.0g/t gold was applied to ore development necessarily mined to access each stoping block.

Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). A minimum mining width of 1.0m was applied to the stope design process. An additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was applied in the MSO shape parameters to account for unplanned dilution. Stope shapes were created using gold grade as the MSO optimisation field.

St Pats Underground Mine

St Pats underground mine forms part of the iconic Mainfield at Norseman. Review of existing data by Pantoro identified St Pats as an immediate opportunity without the need for extensive drilling as the data in place is adequate for estimation of the Mineral Resource and Calculation of an initial Ore Reserve. Additional drilling at St Pats will be undertaken in the Phase Two Resource Development drilling program with the objective of substantially increasing the mining inventory before the commencement of development.



St Pats Underground is scheduled to start following completion of a small open pit which functions as a box cut and minor ore source and will provide a portal position to commence decline development. A single decline will be established from the base of the planned open pit over approximately 100 vertical metres and will break into the existing underground workings. This will allow the mine to use the extensive underground development infrastructure already in place, including the primary ventilation shaft and over 1,500 metres of decline development.



ST PATS UNDERGROUND MINE

The decline (5.0 mW x 5.5 mH) will be mined at 1:7 grade down to break into the existing workings and allow the primary ventilation network to be re-established.

Ventilation will initially be provided by a secondary fan positioned in the pit adjacent to the portal. Once the decline breaks into the existing mine workings the primary ventilation shaft will be recommissioned with an exhaust fan installed on surface. The second egress ladderway will be extended between levels with airleg raises (1.2 m x 1.2 m).

Due to the relatively flat nature of the ore body the mine plans to use airleg stoping as the primary means of production. This method was used successfully during the last phase of mining at St Pats which concluded in 2014.

Cut-off grades were estimated using a cost model developed specifically for the St Pats Mine. The estimated Stoping cut-off grade was rounded to 3.0 g/t gold.

Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). A stoping height of 2.0 m was applied to the stope design process. No additional stope dilution was applied in the MSO shape parameters to account for unplanned dilution outside of the conservative 2.0 m minimum airleg stoping height. Stope shapes were created using gold grade as the MSO optimisation field.

Mining recoveries were conservatively set at 85% for airleg stoping. Geotechnical modelling shows that extraction ratios should achieve 95% for airleg stoping.

Mineral Processing

Metallurgical testwork

Metallurgical testwork was undertaken at ALS Metallurgical laboratories under the direction and supervision of consultant metallurgist Peter Sperring.

Representative test samples were selected from drill core from the various mining centres and samples were subjected to both comminution and metallurgical testing. The very long operating history at Norseman has confirmed the outcomes of the tests in a practical operating sense.

Comminution testing confirmed hard rock conditions in fresh ore with high resistance to breakage and low abrasion. The comminution results which are presented in the table below were the key reason for including a new three stage crushing circuit in the processing plant design in favour of the historical Norseman mill circuit which included single stage crushing with SAG and ball mills operating in series.

Metallurgical testwork confirmed high gold recovery with high gravity gold recovery and rapid leaching kinetics. Testing at multiple grind sizes confirmed substantial recovery benefits grinding to P80 106µm, and limited additional benefit at P80 75µm.

Plant design inputs from metallurgical testing

The process design parameters utilised in the processing plant design and cost estimate are set out in the table below.

Process Design Parameter, units	Value	Source
Plant Capacity, tpa	1,000,000	Specification
Overall Gold Recovery, %	95.8	Testwork
Gravity Gold Recovery, Design %	45	Testwork
Mill Utilisation, %	91.3	Conservative Assumption
Specific Gravity	2.85	Testwork
Grind Size P80, μm	75	Testwork
Leach and CIL Circuit Residence Time, h	23	Design
Leach Slurry Density, % w/w	36	Testwork
Number of Leach Tanks	1	Design
Number of Adsorption Tanks	5	Design
Leach Cyanide Consumption, kg/t	0.65	Testwork
Quicklime Consumption, kg/t	8.2	Testwork
Elution Circuit Type / Size, tonne	AARL/4t	Design
Frequency of Elution, strips / week	7	Design
Tailings Thickener Solids Loading, t/m².h	0.70	Design

Processing Plant

A key design criteria for the processing plant was flexibility to treat multiple ore sources from both the Stage 1 operations and from additional ore sources likely to be accessed through subsequent phases of resource development.

Due to the high likelihood that multiple ore sources will be utilised to feed the processing plant over the life of mine, it was determined that the best strategy was to design the processing plant to grind one million tonnes per annum at p80 75µm for the Phase One ore blend. This design allows processing of one million tonnes per annum of the hardest feed source (Scotia) at a grind size of p80 106µm, or 0.8 million tonnes per annum at 75µm providing maximum flexibility to operations. The processing plant flowsheet consists of the following components:

A crushing circuit comprising of a primary jaw crusher, crushed ore stockpile, crushed ore reclaim, a multi-deck crushed ore screen operating in closed circuit with both a secondary and a tertiary cone crusher, producing a -10 mm product.

A milling circuit comprised of a ball mill operating in closed circuit with cyclones to produce a grind size P80 of 75 μ m.

Gravity concentration and removal of coarse free gold from the milling circuit and treatment of gravity concentrate by an intensive leach reactor, followed by a dedicated electrowinning circuit.

A CIL circuit to leach and adsorb gold from the milled ore onto activated carbon in one Leach tank and five CIL tanks.

- An AARL type elution circuit, coupled with a dedicated electrowinning circuit.
- A gold smelting/barring furnace to produce gold doré from the cathodic sludge products generated from the electrowinning operations.
 - Thickening of the CIL tails for water, plus reagent and minor soluble gold recovery.
- Tailings pumping via an overland pipeline to an existing dam tailings storage facility (TSF).







BOOT operation for crushing circuit

The study identified the crushing circuit as being suitable for operation using a Build-Own-Operate–Transfer model. The contractor will construct own and operate the crushing circuit for the first three years of operation, with transfer of asset ownership following a balloon payment at the end of the third year of operation.

During the life of the BOOT contract, the contractor is responsible for the operation, maintenance and cost of the crushing circuit from the primary crusher ore feed to the fine ore stockpile discharge. Operating under the BOOT model reduces Pantoro's operational risk and ensures optimal plant configuration before taking ownership.

The capital payment at the end of the three year BOOT contract is \$1.8 million. All costs associated with the BOOT contract are included in the DFS cost estimate.

Future Upgrades

The processing plant has been designed to easily accommodate a future upgrade to enable processing of approximately 1.5 million tonnes per annum. The crushing circuit has been sized to enable increased throughput without modification, and upgrades will be achieved through addition of mill capacity in parallel to the initial ball mill, and expansion of the leach train.

Implementation of upgrades to the milling capacity will not be considered until the Mining Inventory is substantially increased.

Site Infrastructure and Services

Pre-Production Capital

There is extensive existing site infrastructure which substantially reduces the pre-production capital requirements. The total pre-production capital requirements have been estimated for all elements of the project. Where possible, existing infrastructure is to be utilised and appropriate refurbishment and reinstatement costs have been allowed.

Pre-Production Capital	A\$M
Processing	
Processing Plant	41.2
Plant Spares	1.5
Site Earthworks & Owner Cost	3.0
TSF 4 Raise	3.0
Mill Commissioning Costs	3.0
Mining	
Open Pit Pre-Strip	9.8
Underground Capital	5.8
Mining Areas Infrastructure	0.8
Mine Dewatering Systems	1.3
Highway Intersections	1.1
Site Support	
Camp	8.4
Power Station & HV Power Supply	1.2
Borefield	0.4
Site Telemtrey & IT/Communications	1.6
Site Vehicles	0.9
Administration	
Pre-Production Flights & Accomodation	3.4
Site Administration Costs	2.8
Total	89.2



Existing workshop infrastructure.

Access Roads

Access to and from the Mining Centres, with the exception of OK Mining Centre, is primarily via both Coolgardie-Esperance and Eyre Highways.

The Princess Royal Mining Centre is accessed via an existing sealed intersection to Eyre Highway. Empty road trains will approach and enter Princess Royal access road along Eyre Highway from the west. Loaded road trains exiting Princess Royal access road turn right onto Eyre Hwy and head west.

Access to the Cobbler Mining Centre is currently via an unsealed intersection 90° to the Coolgardie-Esperance Highway and single lane track thereafter. Access to the Cobbler Mining Centre will require a new intersection to the Coolgardie-Esperance Highway and the track rebuilt to provide an adequate and safe access road through to the proposed ore pad and laydown area to primarily to facilitate ore haulage, regular delivery of fuel, freight and potable water.

Access to the Scotia Mining Centre is currently via an existing, wide, sealed intersection to Coolgardie-Esperance Highway. Empty road trains will approach and enter Scotia access road along Coolgardie-Esperance Highway from the north. Loaded road trains exiting Scotia access road turn right onto Coolgardie-Esperance Hwy and head north.

Power

The existing Contractor owned, and operated site based 10MW diesel power station is fully operational also provides power to the town of Norseman via an agreement with Horizon Power.

Two power supply companies, including the incumbent power provider, were approached to provide quotations for power supply. Layout plans for gas powered power stations, both with and without bullet storage, were provided and assessed. The payback based on estimated price of gas versus current and forecast price of diesel combined the amount and cost of civil work required to install such facility, was deemed to not be effective use of capital.

The project will include an upgrade the existing power station from 10MW generated at 3.3kV to 15MW generated at 11kV.

Power consumption, inclusive of power to Mining Centres where applicable is estimated to be 127,200 kWh per day.

BEC Engineering were engaged to undertake assessment and provide costing to re-energise the existing HV power supply via powerline to the bore field, plus installation of a new power line to OK Underground Mine.



Existing Haul road network is well established and in good condition.

Fuel storage facilities

Existing fuel storage facilities at the Princess Royal Mining Centre, Harlequin facilities, and at OK Mining Centre will be retained and re-activated for use.

All other fuel storage facilities required for mining will be supplied and installed by the mining contractor engaged to provide the mine services.

Raw water supply

The existing Jimberlana bore field consists of ten bores, three of which are equipped and were utilised for past production and seven other cased bores. The field includes a water storage and transfer station and associated pipelines to transfer raw water from the bore field to the processing plant.

Brilly Group was engaged to assess the existing infrastructure and provide an estimate to re-furbish bores and the transfer station back to operational status.

BEC Engineering were engaged to assess what remained of the pre-existing telemetry system and provide an estimate to re-instate telemetry to the production bores and water transfer station.

The production bores and transfer station, including the telemetry system to control the supply of water, will be refurbished to operational capacity prior to the new process plant being commissioned.

Potable water supply

Potable water is currently supplied to the NGP from the Goldfields and Agricultural Water Supply Scheme (GAWSS). MACA Interquip estimated potable water demand of 117m³ per day. In addition, it is estimated that a further 61kL per day is required for the accommodation village and other site facilities.

Water Corporation has confirmed availability of the required quantity of water and has provided supply pricing.

Tailings storage

TailCon Projects, specialist tailings storage design engineers with history of engagement at both the Norseman Gold Project and at Pantoro's Halls Creek operation, were engaged to assess TSF requirements.

TailCon Projects completed design and costing for an upstream raise from the existing main embankment. Life of design is estimated to be five years for 5.0M tonne of tailings stored at an assumed conservative average dry density of 1.5t/m³. The tailings facility construction is completed in three stages over the life of the project. All stages have been included in the project cost model.



The OK Underground Mine Office and Changerooms, an example of the substantial existing infrastructure.

Accommodation

Accommodation facilities have been designed assuming a 100% fly in fly out or drive in drive out workforce.

Three existing camp providers were engaged to assess and provide budget cost for accommodation of up to 260 persons and including catering and janitorial services.

Air transport

Significant work was undertaken in 2018 by Dundas Shire to upgrade the pre-existing salt lake sited Norseman airstrip which is a sealed facility suitable for small aircraft. Upgrade works are required in order to land larger craft suitable for servicing the project.

Pantoro's existing corporate travel partner Virgin Australia has provided a suitable transport solution between Perth and Kalgoorlie. Personnel will fly to Kalgoorlie and then travel by bus to the project site.

Charter flights to and from Norseman will be further assessed following the required upgrade works.

Project Approvals

All field work required for project approvals has been completed with the exception of required final spring flora surveys. The spring surveys are being completed during October 2020.

Approvals documentation is being finalised for submission, and the anticipated approvals timeline is set out in the figure below.

Activity	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21
Mining Proposal (MP) & Mine Closure Plan Documentation (2020 Format) and Approvals Process	_				
Process plant, TSF 4 & Accommodation Village MP					
Process plant, TSF 4 & Accommodation Village MP Assessment, Response, Approval					
Northern Mining Centre Open Pits MP's					
Northern Mining Centre MP Assessment, Response & Approval		(
Central Mining Centre Open Pit & UG MP's					
Central Mining Centre Open Pit & UG MP Assessment, Response & Approval		Ç.			
Southern Mining Centre Open Pits MP's	<u>.</u>				
Southern Mining Centre Open Pits MP's Assessment, Response & Approvals					



Existing Norseman Project administration and processing complex.

Capital Cost Estimate and Schedule

The capital cost for the project has been established to an expected accuracy of $\pm 10\%$. The components of the capital estimate are set out in the below table.

Physical Summary	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
Pre-Production	A\$M	72.8	16.5	-	-	-	-	-	89.2
Major Project Capital	A\$M	-	23.2	48.4	43.7	51.6	13.5	3.3	183.7
Sustaining	A\$M	-	7.8	8.1	12.6	17.7	3.0	2.1	51.4
Total	A\$M	72.8	47.5	56.6	56.4	69.3	16.5	5.3	324.4

The total pre-production capital cost is \$89 million.

The most significant pre-production capital cost item is the processing plant. The processing plant costs were generated by MIQ including the following assumptions:

The works have been assumed to be undertaken under an EPC design and construct basis, after this DFS.

All purchased equipment has been assumed to be purchased as new, with a separate line item included for all transportation to the Project site.

The capital cost estimate accuracy is $\pm 10\%$.

Owners development costs have not been included.

Pre-production labour and training costs have not been included.

Capitalised interest has not been included.

Owners insurance costs (capital estimate includes constructor's insurance only) has not been included.

Ongoing major project capital is composed of approximately 42% life of mine underground infrastructure, 36% open pit pre-stripping costs, 16% rights of use assets including crusher, camp and power station, and 4% other capital infrastructure.

Owners costs and other excluded costs have been included in the project capital costs outlined in the table above.

The total processing plant capital cost exclusive of capital costs associated with the BOOT contract for crushing (which are incurred over the life of the contract and included in the cost model) is \$42.77 million including capital spares.

Operating, Sustaining Capital Cost and Major Project Capital Model

A full site cost model suitable for use in site budgets and accounting operations has been established as part of the DFS. The cost model takes into account all expected costs and revenues throughout the project life and is based on monthly accounting.

Key cost model outputs are set out in the table below.

Physical Summary	Units	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Year 6 Total	Year 7 Total	Total
UG Ore Mined	t	-	92,831	206,485	327,976	415,302	323,914	120,152	1,486,660
UG Grade Mined	g/t	-	5.66	5.32	4.60	4.57	4.69	5.74	4.87
OP BCM Mined	BCM	-	7,472,300	7,602,698	4,452,681	6,490,284	3,860,964	980,306	30,859,234
OP Ore Mined	t	-	865,577	940,622	780,732	636,464	760,668	316,173	4,300,235
OP Grade Mined	g/t	-	2.25	3.53	2.66	2.20	3.20	1.42	2.70
Rhoenix Tails Mined	t	-	-	-	-	-	-	146,438	146,438
Phoenix Tails Grade	g/t	-	-	-	-	-	-	0.75	0.75
Ore Processed	t	-	933,333	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,933,333
Head Grade	g/t	-	2.59	3.87	3.28	3.57	3.31	2.52	3.20
Recovery	%	-	92.6%	95.7%	95.8%	95.8%	95.8%	92.9%	95.0%
Gold Produced	oz	-	72,023	118,967	101,090	109,982	102,081	75,316	579,459
Gold Price	A\$/oz	-	\$2,600	\$2,600	\$2,600	\$2,600	\$2,600	\$2,600	\$2,600
Cost Summary (\$/Oz)									
UG Mining		-	\$215	\$235	\$375	\$526	\$437	\$296	\$356
OP Mining		-	\$544	\$500	\$412	\$333	\$426	\$153	\$400
Phoenix Tails Mining		-	-	-	-	-	-	\$6	\$1
Processing		-	\$314	\$218	\$256	\$236	\$254	\$332	\$261
Admin		-	\$134	\$101	\$116	\$126	\$118	\$127	\$119
C1 Cash Cost		-	\$1,207	\$1,054	\$1,159	\$1,221	\$1,235	\$914	\$1,137
Royalties		-	\$63	\$64	\$63	\$64	\$63	\$63	\$63
Refining		-	\$3	\$3	\$3	\$3	\$3	\$3	\$3
Sustaining Capital		-	\$109	\$68	\$125	\$161	\$30	\$27	\$89
All-in Sustaining Costs		-	\$1,382	\$1,189	\$1,350	\$1,449	\$1,331	\$1,007	\$1,292
Major Project Capital		-	\$23.2M	\$48.4M	\$43.7M	\$51.6M	\$13.5M	\$3.3M	\$183.7M

Cashflow and Sensitivity Analysis

Sensitivity analysis demonstrates a robust project which can withstand fluctuations in gold price, ore grade and fuel price. The project is most sensitive to mined grade, gold price and site operating costs.

Pre-tax	Unit	A\$2,200/oz	A\$2,400/oz	A\$2,600/oz	A\$2,800/oz	A\$3,000/oz
Project Cashflow	A\$M	260	373	486	599	712
NPV _{5%}	A\$M	197	290	384	477	570
IRR	%	50%	71%	92%	113%	133%
Post-tax	Unit	A\$2,200/oz	A\$2,400/oz	A\$2,600/oz	A\$2,800/oz	A\$3,000/oz
Project Cashflow	A\$M	177	256	335	414	493
NPV _{5%}	A\$M	129	195	260	325	391
IRR	%	35%	51%	67%	82%	97%
Payback Period	Yrs	2.1	1.8	1.5	1.3	1.2



Project Financing

Pantoro undertook an A\$55 million capital raising during August 2020 which combined with existing cash balances and ongoing positive cashflow from Halls Creek positions the company to fund its share of project costs internally.

Notwithstanding the Pantoro's strong balance sheet, the Company has been in discussions with potential debt providers including bank and private equity institutions. The Company is considering options for a corporate debt facility to make additional working capital available if and when it is required.

APPENDIX 1 – MINERAL RESOURCE & ORE RESERVE

Norseman Gold Project Mineral Resource

	Measured			Indicated				Inferred		Total			
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Underground	267	14.4	124	2,048	13.6	895	2,883	10.7	988	5,196	12.0	2,010	
Surface South	140	2.3	10	7,616	2.2	550	10,362	3.1	1,027	18,119	2.7	1,593	
Surface North	4,165	0.7	100	4,207	2.0	276	3,325	2.5	264	11,684	1.7	639	
Total	4,572	1.6	234	13,871	3.9	1,721	16,570	4.3	2,280	35,000	3.8	4,241	

Norseman Gold Project Ore Reserve

	Proven				Probable		Total			
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Underground	-	-	-	787	5.3	135	787	5.3	135	
Open Pit - Northern Mining Centres	-	-	-	2,058	2.4	161	2,058	2.4	161	
Open Pit - Southern Mining Centres	-	-	-	2,049	3.1	206	2,049	3.1	206	
Stockpiles	4,165	0.8	100	-	-	-	4,165	0.8	100	
TOTAL	4,165	0.8	100	4,895	3.2	502	9,060	2.1	602	

otes: Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

Mineral Resource and Ore Reserve statements have been rounded for reporting.

Rounding may result in apparent summation differences between tonnes, grade and contained metal content.

Updated Mineral Resource Estimate

Key changes in the Mineral Resource Estimate since previously reported include:

- The Norseman Mineral Resource has been updated in part. Changes are limited to portions of the Mineral Resource which have been updated as part of Pantoro's Phase 1 DFS. Phase One drilling included approximately 76,000 metres of drilling focussed on resource devel-opment, and only considers 8 of the total 49 individual resources comprising the global MRE
- Modified Mineral Resources are: Slippers, Gladstone/Everlasting, Daisy South, Cobbler, Scotia, Lady Eleanor, St. Pats/Norseman Reef.
- A Maiden Mineral Resource for the Panda deposit is included.
- The Global Mineral Resource (as tabulated by category above) has only marginally decreased by 166,000 ounces.
- The Indicated Mineral Resource has increased by 14% and the Inferred Mineral Resource has decreased by 14%. This is a direct reflection of the increased drill density on the Phase One deposits.

Refer to Appendix 2 for full details of the changes to the Mineral Resource Estimate.

Norseman Gold Project Underground Mineral Resources

		Measured			Indicated		Inferred			Total			Competent Person ¹	
		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
	Mainfield Area													
\geq	Ajax	15	13	6	30	13	13	39	13	16	84	13	35	A
	Bullen - Marora Shoots 1 and 2	-	-	-	-	-	-	92	16.9	50	92	16.9	50	А
	Bullen - Mararoa (Phoenix)	-	-	-	56	25.0	45	-	-	-	56	25.0	45	A
\bigcirc	Bullen - Mararoa (Regent)	-	-	-	21	10.6	7	-	-	-	21	10.6	7	А
	Bullen - O'Briens Reef (CHWS)	-	-	-	5	15.3	3	35	26.9	31	41	25.4	33	A
615	St Patricks Combined (>100m)	-	-	-	160	13.0	67	234	6.0	45	394	8.9	112	В
	Butterfly Deeps	-	-	-	-	-	-	56	16.7	30	56	16.7	30	A
(\mathcal{O})	Crown Reef (Pillars and Remnants)	252	14.5	117	144	11.5	53	230	12.4	92	626	13.0	262	А
	ОК	-	-	-	242	16.1	125	79	9.5	24	321	14.5	150	В
	OK - Star Of Erin	-	-	-	260	5.0	42	28	9.1	8	288	5.4	50	В
	Racetrack X-Link	-	-	-	-	-	-	125	11.2	45	125	11.2	45	A
ad	Total Mainfield	267	14.4	124	918	12.0	354	918	11.5	341	2,103	12.1	820	
	North Royal													
<u></u>	North Royal/Slippers >200m	-	-	-	63	4.3	9	37	3.3	4	99	3.9	13	В
\bigcirc	North Royal - Tiara ²	-	-	-	131	26.9	113	505	15.5	252	636	17.9	366	A
	North Royal - Renegade	-	-	-	0	0.0	0	536	12.3	212	536	12.3	212	A
WJ	Total North Royal	-	-	-	194	19.6	122	1,078	13.5	468	1,272	14.4	591	
	Harlequin													
(D)	Harlequin East - Model 2	-	-	-	91	29.6	87	83	13.7	36	174	22.0	123	A
$\widetilde{\bigcirc}$	Harlequin West - Model 3	-	-	-	480	16.9	260	67	7.7	17	547	15.7	277	A
	Harlequin South - Model 4	-	-	-	0	0.0	0	34	18.0	19	34	18.0	19	А
2	Total Harlequin				571	18.9	347	183	12.3	73	754	17.3	419	
	Scotia													
\Box	Scotia	-	-	-	364	6.2	72	703	4.7	107	1,067	5.2	180	В
П	Total Scotia	-	-	-	364	6.2	72	703	4.7	107	1,067	5.2	180	

Refer to Competent Persons Statement.
Reporting adjusted for removal with overlap in reporting of Updated Slippers Resource.

Norseman Gold Project Surface Mineral Resources - South of Jimberlana Dyke

			Measured			Indicated			Inferred		Total		Competent Person ¹	
		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
	Mainfield Area													
\geq	Ground Lark	-	-	-	-	-	-	70	2.8	6	70	2.8	6	A
	Maloneys Reef	-	-	-	-	-	-	109	1.7	6	109	1.7	6	A
<u></u>	St Patricks Combined (<100m)	-	-	-	208	4.2	28	64	2.8	6	272	3.9	34	В
\bigcirc	Venture HW Reef	-	-	-	-	-	-	456	2.8	41	456	2.8	41	A
\bigcirc	Mararoa Regent North	-	-	-	-	-	-	1,176	7.9	300	1,176	7.9	300	A
615	Bluebird Shear	-	-	-	-	-	-	149	6.3	30	149	6.3	30	A
	Phoenix Crown Pillar	-	-	-	-	-	-	226	6.7	49	226	6.7	49	A
(\mathcal{O})	Butterfly Crown Pillar	-	-	-	-	-	-	292	3.9	37	292	3.9	37	A
5	Pascoe X-Link	-	-	-	-	-	-	330	10.8	115	330	10.8	115	A
	Star of Erin East	-	-	-	-	-	-	97	7.1	22	97	7.1	22	A
	Mount Barker	-	-	-	-	-	-	269	1.9	16	269	1.9	16	A
60	Total Mainfield Area	-	-	-	208	4.2	28	3,238	6.0	629	3,446	5.9	657	
	Mainfield East - Penneshaw													
	Gladstone-Everlasting	-	-	-	1,190	2.9	110	653	2.3	48	1,843	2.7	158	В
\bigcirc	Daisy South	-	-	-	198	3.0	13	17	1.9	1	215	2.9	20	В
	Total Mainfield East - Penneshaw	-	-	-	1,388	2.8	123	670	2.3	49	2,058	2.7	178	
W)	Noganyer													
	Andronicus	-	-	-	-	-	-	3,342	1.3	141	3,342	1.3	141	A
(D)	Lady Miller	-	-	-	702	2.1	47	309	1.7	17	1,011	2.0	64	A
$\widetilde{\bigcirc}$	Perkins	140	2.27	10	2,302	1.1	84	946	1.9	56	3,388	1.4	151	A
	Lord Percy	-	-	-	-	-	-	573	2.9	53	573	2.9	53	A
	Maybell	-	-	-	1,199	1.8	69	24	0.7	1	1,223	1.8	70	A
	Total Noganyer	-	-	-	4,202	1.5	201	5,194	1.6	268	9,536	1.6	479	
\bigcirc	Scotia													
	Scotia	-	-	-	1,552	3.6	180	743	2.3	56	2,295	3.2	236	В
	Lady Eleanor	-	-	-	198	1.8	12	198	1.4	9	397	1.6	21	В
	Freegift	-	-	-	-	-	-	254	1.5	13	254	1.5	13	A
	Panda	-	-	-	68	2.8	6	65	1.9	4	133	2.4	10	В
	Total Scotia	-	-	-	1,818	3.4	198	1,260	2.0	82	3,079	2.8	280	

1. Refer to Competent Persons Statement.

Norseman Gold Project Surface Mineral Resources - North of Jimberlana Dyke

		Measured			Indicated		Inferred			Total			Competent Person ¹	
		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
	North Royal													
\geq	Slippers N Royal Paleochannels	-	-	-	-	-	-	175	2.2	12	175	2.2	12	В
	N Royal Grade Control	-	-	-	56	3.9	7	3	9.6	1	59	4.1	8	А
	Slippers <200mRL	-	-	-	525	2.3	39	77	1.6	4	602	2.2	43	В
7	North Royal <200mRL	-	-	-	72	1.6	4	272	3.4	29	344	3.0	33	А
9	Golden Dragon	-	-	-	174	4.8	27	122	3.6	14	277	4.5	40	А
15	Каіроі	-	-	-				92	1.9	6	92	1.9	6	А
Y	Total North Royal	-	-	-	827	2.9	77	741	2.8	66	1,549	2.8	142	
\mathcal{D}	Harlequin				·									
3	Harlequin Top 200m	-	-	-	451	3.7	54	688	3.4	75	1,139	3.5	129	А
2	Total Harlequin	-	-	-	451	3.7	54	688	3.4	75	1,139	3.5	129	
	Lake Cowan				·									
R	Cobbler	-	-	-	1,834	1.6	95	438	1.3	19	2,272	1.6	113	В
	Dhufish	-	-	-	-	-	-	456	3.2	47	456	3.2	47	А
	Total Lake Cowan	-	-	-	1,834	1.6	95	894	2.3	66	2,728	1.8	160	
7	Polar Bear													
2	Sontaran	-	-	-	-	-	-	259	2.2	18	259	2.2	18	А
IJ	Total Polar Bear	-	-	-	-	-	-	259	2.2	18	259	2.2	18	
10	Buldania													
ID)	Buldania	-	-	-	1,095	1.4	51	743	1.6	39	1,844	1.5	90	А
5	Total Buldania	-	-	-	1,095	1.4	51	743	1.6	39	1,844	1.5	90	
<u></u>	Surface Stockpiles	-	-	-	-	-	-	-	-	-	-	-	-	
	Phoenix Tails	4,165	0.75	100	-	-	-	-	-	-	4,165	0.8	100	А
	Total Surface Stockpiles	4,165	0.7	100	-	-	-	-	-	-	4,165	0.7	100	

1. Refer to Competent Persons Statement.
Competent Person Statements

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Scott Huffadine (B.Sc. (Hons)), a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Huffadine is a Director and full time employee of the company. Mr Huffadine is eligible to participate in short and long term incentive plans of and holds shares and options in the Company as has been previously disclosed. Mr Huffadine 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 Huffadine consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this statement that relates to the Mineral Resources listed in this announcement is based on work compiled by the person whose name appears below. Mr Hawker is an independent consultant to CNGC and is a director of HGS Australia Exploration Services which is an entity providing services to CNGC and Mr Finch is a full-time employee of Pantoro Limited. Mr Finch is eligible to participate in short and long term incentive plans of and holds shares and options. Each person named in the table below are Members of the Australian Institute of Geoscientists and/or The Australasian Institute of Mining and Metallurgy and have sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which they have undertaken to qualify as a Competent Person as defined in the JORC Code 2012. Each person named in the table below consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Competent Person	Identifier	Institute
Andrew Hawker	А	Australian Institute of Geoscientists
Andrew Finch	В	Australian Institute of Geoscientists

The information in this report that relates to Ore Reserves is based on information compiled by Mr Tim Davidson, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy. Mr Davidson is a full time employee of the company. Mr Davidson is eligible to participate in short and long term incentive plans of and holds shares and options. Mr Davidson 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 Davidson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix 2 – Material Information Summaries

Material Summary - Slippers

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Mineral Resource Statement for the Slippers/Princess Royal Deposit Gold Mineral Resource Estimate (MRE) was prepared during April/March 2020 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

A full interpretation was completed by independent geological consultants Entech and reviewed by Pantoro technical staff. 39 domains were interpreted during the 2020 Slippers MRE.

The Slippers Princess Royal Mineral Resource (SMRE2020) was updated to include an additional 9,580 m drilling from 86 reverse circulation 3 and diamond holes. Depth from surface to the current vertical limit of the Mineral Resource is approximately 220 m.

Interpretations for Slippers were informed by Reverse Circulation drilling (249 drill holes), with Diamond Drilling (99 drill holes inclusive of diamond tails).

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold mineral resources within the deposits, based on Reverse Circulation and Drilling, Diamond Drilling sampling data available as of April 4th, 2020. The MRE comprises oxide, transitional and fresh material and is detailed in Table 1 below.

Reporting Group	Cut Off		Indicated		Inferred			Total			
L		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Open Pit	0.7	525	2.3	39	77	1.6	4	602	2.2	43	
Underground	2	63	4.3	9	37	3.3	4	99	3.9	13	
Paleochannel	0.7				175	2.2	12	175	2.2	12	
Total		588	2.5	48	289	2.2	20	877	2.4	68	

Table 1: Slippers Mineral Resource Estimate.

N.B Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources which are unable to have economic considerations applied to them, nor is there certainty that they will be converted to Measured or Indicated Resources through further sampling.

QAQC analysis has indicated that sampling methodology is adequate to support the MRE.

Drilling Techniques

A variety of drilling techniques were used to test the Slippers deposit, however the recent drilling has utilised and diamond drilling, NQ2 diameter core from RC pre-collars. All pre-collars were sampled. Reverse circulation drilling was carried out using a face sampling hammer and a 5 ³/₄ inch diameter bit.

Diamond

All diamond core is orientated and logged by a qualified geologist. It is sampled according to geology, with only selected samples assayed. Core is cut in half under the supervision of an experienced geologist utilising an Almonte diamond core-saw, with the RHS of cutting line routinely assayed, the other half retained in core trays on site for further analysis and storage. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval. Samples are a maximum of 1.2 m, with shorter intervals utilised according to geology to a minimum interval of 0.15 m where clearly defined mineralisation is evident. All diamond core is stored in core trays and is aligned, measured and marked up in metre intervals referenced back to downhole core blocks recording run meterage and any core loss if encountered. Downhole surveys are conducted during drilling, initially using a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled to October 2019 before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m. The RC drill holes used a REFLEX GYRO with survey measurements every 5m. A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m. No significant core loss has been noted from recent drilling. Visible gold is encountered at the project and where observed during logging, Screen Fire Assays are conducted.

Reverse Circulation

Samples are collected via both a cone splitter and a rig-mounted static splitter used, with sample falling though a riffle splitter and sampled every 1 m. Diamond hole pre-collars are sampled at 1m intervals.

All RC holes are geologically logged by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments. 100% of the holes are logged. Appropriately qualified company personnel supervise the drilling programs on site and monitor sample quality and integrity. Recovery and sample quality were visually monitored, and laboratory sample weights recorded and reviewed. Chip trays from each logged interval are retained and stored for reference. No significant water was encountered, and holes are typically dry.

Reverse Circulation samples of 2-5 kg in weight are dispatched to an external accredited laboratory Bureau Veritas in Kalgoorlie or Perth (BVA) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). Diamond samples 0.5-3.5 kg samples are dispatched to an external accredited laboratory (BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). The processes applied are industry standard for this type of sample.

Historic samples from CNGC from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal). Review of drilling programs indicate all intervals were assayed and is considered to be to industry standard at that time.

Sample Analysis Method

Samples were analysed at Bureau Veritas in Kalgoorlie and Perth. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice.

CRM standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up reassaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification.

Geology and Geological Interpretation

The Slippers deposit is located in the Eastern Goldfields of Western Australia, at the southern end of the highly productive Norseman-Wiluna greenstone belt. Deposits are primarily associated with northwest trending faults zones which intersect favorable stratigraphy.

Gold mineralisation in the Slippers/Princess Royal deposit area is hosted in a number of east dipping gabbroic dykes which intrude the bluebird gabbro and also the upper members of the Mararoa pillow basalts with cross cutting porphyry intrusives. Mineralisation is hosted within quartz throughout. The Reef is heavily fractured and deformed with gold associated with ramifying fractures throughout the reef in addition to the laminated vein margins. The grade in the reef intensifies in locations where the reef moves from its general 30-40 degree dip and flattens out.

Estimation Methodology

A three dimensional (3D) Ordinary Kriging interpolation approach was employed to estimate block grades within the mineralisation domains, underpinned by composites on 1 metre lengths. Composites included all available diamond, reverse circulation assay data and were 'best fit' with residuals reviewed and discarded prior to estimation.

Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain were completed. Based on the analysis, individual top cuts were applied to each domain.

The 3D parent estimation block size selected for interpolation was 10 metres in the Y, 5 metres in the X and 5 metres in the Z direction with the parent block size being determined through kriging neighbourhood analysis, review of vein dimensions, drilling density and potential mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframes. No block rotation was applied.

Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. 6 reference variograms from well informed domains were applied as estimate proxies to domains across the deposit with domains grouped on statistical, geometric and spatial proximity similarities.

The search strategy used a maximum extrapolation distance of 208, 122, 266 and 182 metres over three search passes for the primary domains (Domains 1, 2, 10, 11 and 32 respectively), with a maximum extrapolation distance of 150 metres over three passes for the paleochannel domain (Domain 21). The first pass search was equal to two thirds of the variogram maximum range (68, 40, 88, 69 and 60 metres for Domains 1, 2, 10, 11 and 32 respectively) with the second pass search equal to the variogram range (104, 61, 133, 105 and 91 metres for Domains 1, 2, 10, 11 and 32 respectively) and the third pass double the variogram range (208, 122, 266 and 182 metres for Domains 1, 2, 10, 11 and 32 respectively). For the paleochannel domain (Domain 21) The first pass search was equal to the variogram maximum range (50 metres) with the second pass search double the variogram range (100 metres) and the third pass triple the variogram range (150 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the all three search passes.

Check estimates were completed utilising Inverse Distance Squared (ID2) interpolation. Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.

Classification Criteria

This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.

Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and estimation quality was considered reasonable.

Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low.

Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 220 m below surface.

This approach considers all relevant factors and reflects the Competent Person's view of the deposit.

Cut-off Parameters

The global gold Mineral Resource has been reported at a 0.7 g/t gold cut-off for material within 150m of topographic surface and 2.0 g/t gold for material greater than 150m of topographic surface being based upon economic parameters and depths (within 220 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.

Assessment of Reasonable Prospects for Economic Extraction

The material reported in the Slippers MRE is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations.

The MRE extends nominally 220 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

No dilution, cost factors or metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

Ore Reserve Statement

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a DFS specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The proposed Slippers Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Pit wall angles were designed at 40 degrees based on geotechnical recommendations.

Dilution varies between 10% and 20% and is depending on the ore width. Dilution was applied at zero grade.

Mining recoveries were set at 95%.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 96.2% for oxide and 97.7% for fresh ore from the Slippers Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% for oxide and 95% for fresh ore was applied.

Cut-Off Parameters

Cut-off grade was estimated using a cost model developed specifically for the Slippers Open Pit DFS, this grade was 0.9g/t. Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Eut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. A Ground Water Extraction License is in place covering the project and allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Material Summary – Gladstone-Everlasting

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Mineral Resource Statement for the Gladstone/Everlasting Gold Mineral Resource Estimate (MRE) was prepared during April-May 2020 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

A full interpretation was completed by independent geological consultants Entech and reviewed by Pantoro technical staff. 48 domains were interpreted during the GEVMRE2020.

The Gladstone/Everlasting Gold Mineral Resource GEVMRE2020) was updated to include an additional 10,992 m drilling from 106 reverse circulation and 17 diamond holes. Depth from surface to the current vertical limit of the Mineral Resource is approximately 150 m

Interpretations for Gladstone/Everlasting were informed by Reverse Circulation drilling (433 drill holes), with Diamond Drilling (64 drill holes inclusive of diamond tails).

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold mineral resources within the deposits, based on Reverse Circulation and Diamond Drilling sampling data available as of May 8th, 2020. The MRE comprises oxide, transitional and fresh material and is detailed in Table 1 below.

Cut Off	Oxidation		Indicated			Inferred		Total			
())		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
	Oxide	87	2.8	8	30	2.3	2	117	2.7	10	
0.7	Transitional	352	2.9	33	95	2.2	7	448	2.8	40	
	Fresh	751	2.9	69	528	2.3	39	1278	2.6	108	
	Total	1190	2.9	110	653	2.3	48	1843	2.7	158	

 Table 1:
 Gladstone/Everlasting Mineral Resource Estimate.

N.B Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources which are unable to have economic considerations applied to them, nor is there certainty that they will be converted to Measured or Indicated Resources through further sampling.

QAQC analysis has indicated that sampling methodology is adequate to support the MRE.

Drilling Techniques

A variety of drilling techniques were used to test the GEV deposit, however the recent drilling has utilized Reverse circulation and diamond drilling, NQ2 diameter core from RC pre-collars. All pre-collars were sampled. Reverse circulation drilling was carried out using a face sampling hammer and a 5 ³/₄ inch diameter bit.

Diamond

All diamond core is orientated and logged by a qualified geologist. It is sampled according to geology, with only selected samples assayed. Core is cut in half under the supervision of an experienced geologist utilising an Almonte diamond core-saw, with the RHS of cutting line routinely assayed, the other half retained in core trays on site for further analysis and storage. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval. Samples are a maximum of 1.2 m, with shorter intervals utilised according to geology to a minimum interval of 0.15 m where clearly defined mineralisation is evident. All diamond core is stored in core trays and is aligned, measured and marked up in metre intervals referenced back to downhole core blocks recording run meterage and any core loss if encountered. Downhole surveys are conducted during drilling, initially using a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled to October 2019 before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m. The RC drill holes used a REFLEX GYRO with survey measurements every 5m. A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m. No significant core loss has been noted from recent drilling. Visible gold is encountered at the project and where observed during logging, Screen Fire Assays are conducted.

Reverse Circulation

Samples are collected via both a cone splitter and a rig-mounted static splitter used, with sample falling though a riffle splitter and sampled every 1 m. Diamond hole pre-collars are sampled at 1m intervals.

All RC holes are geologically logged by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments. 100% of the holes are logged. Appropriately qualified company personnel supervise the drilling programs on site and monitor sample quality and integrity. Recovery and sample quality were visually monitored, and laboratory sample weights recorded and reviewed. Chip trays from each logged interval are retained and stored for reference. No significant water was encountered, and holes are typically dry.

Reverse Circulation samples of 2-5 kg in weight are dispatched to an external accredited laboratory Bureau Veritas in Kalgoorlie or Perth (BVA) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). Diamond samples 0.5-3.5 kg samples are dispatched to an external accredited laboratory (BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). The processes applied are industry standard for this type of sample.

Historic samples from CNGC from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal). Review of drilling programs indicate all intervals were assayed and is considered to be to industry standard at that time.

Sample Analysis Method

Samples were analysed at Bureau Veritas in Kalgoorlie and Perth. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice.

CRM standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up reassaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification.

Geology and Geological Interpretation

The Gladstone/Everlasting deposits are located in the Eastern Goldfields of Western Australia, at the southern end of the highly productive Norseman-Wiluna greenstone belt.

The Gladstone/Everlasting deposits are developed in a NNW to NW striking, shallow west dipping shear zone developed in basalt and dolerite of the Penneshaw Formation. A 12-25m thick gabbro sill is present within and in the footwall of the Gladstone Shear Zone in the southern part of the prospect. The gabbro has intruded into the hanging wall of a quartz+biotite altered feldspar porphyry intrusion. The Gladstone Shear Zone appears to be concordant with 'stratigraphy' in the south, however in the north it appears to cut across stratigraphy as it heads in a NW direction.

In detail the Gladstone Shear Zone is 16-30m thick (commonly 20m thick) and is marked by early chlorite+actinolite+talc alteration or recrystallisation of mafic rock types that is overprinted by pervasive biotite alteration. The biotite alteration is strongest and thickest in the lower half of the shear zone. Chloritic shears are common in the hanging wall of the Gladstone Shear Zone. Narrow biotite shears are present in both the hanging wall and footwall of the shear zone, however they are generally thin and non-penetrative. A hanging wall shear zone is present in the hanging wall country rocks to the Gladstone Shear Zone in the south, where it is developed at the top contact between basalt and an 8-15m thick dolerite sill.

Estimation Methodology

A three dimensional (3D) Ordinary Kriging interpolation approach was employed to estimate block grades within the mineralisation domains, underpinned by composites on 1 metre lengths. Composites included all available diamond, reverse circulation assay data and were 'best fit' with residuals reviewed and discarded prior to estimation.

Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain were completed. Based on the analysis, individual top cuts were applied to each domain.

The 3D parent estimation block size selected for interpolation was 10 metres in the Y, 5 metres in the X and 5 metres in the Z direction with the parent block size being determined through kriging neighbourhood analysis, review of vein dimensions, drilling density and potential mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframes. No block rotation was applied.

Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. 3 reference variograms from well informed domains were applied as estimate proxies to domains across the deposit with domains grouped on statistical, geometric and spatial proximity similarities.

The search strategy used a maximum extrapolation distance of 246, 132 and 92 metres over three search passes for domains 1001, 1003 and 2005 respectively. The first pass search was equal to two thirds of the variogram maximum range (81, 44 and 30 metres for Domains 1001, 1003 and 2005 respectively) with the second pass search equal to the variogram range (123, 66 and 46 metres for Domains 1001, 1003 and 2005 respectively) and the third pass double the variogram range (246, 132 and 92 metres for Domains 1001, 1003 and 2005 respectively). A constant minimum of 4 and maximum of 16 composites was maintained across the all three search passes.

Check estimates were completed utilising both Ordinary Kriging with Dynamic Anisotropy (DA) and Inverse Distance Squared (ID2). Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.

Classification Criteria

This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.

Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 30 m, or was within 30 m of a block estimate, and estimation quality was considered reasonable.

Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 60 m, was within 60 m of the block estimate and where estimation quality was considered low.

Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 150 m below surface.

This approach considers all relevant factors and reflects the Competent Person's view of the deposit.

Cut-off Parameters

The global gold Mineral Resource has been reported at a 0.7 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 150 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.

Assessment of Reasonable Prospects for Economic Extraction

The material reported in the Gladstone/Everlasting MRE is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations.

The MRE extends nominally 150 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

No dilution, cost factors or metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

Ore Reserve Statement

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a DFS specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The proposed Gladstone Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Pit wall angles were designed based on geotechnical recommendations and vary from 30 to 35 degrees.

Dilution varies between 10% and 20% and is depending on the ore width. Dilution was applied at zero grade.

Mining recoveries were set at 95%.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 99.9% for oxide and 97.5% for fresh ore from the Gladstone Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 94% was applied.

Cut-Off Parameters

Cut-off grades were estimated using a cost model developed specifically for the Gladstone Open Pit DFS and ranged from 0.75g/t to 0.82g/t. Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Gladstone Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Material Summary – Daisy South Mineral Resource Update

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Mineral Resource Statement for the Daisy South Gold Mineral Resource Estimate (MRE) was prepared during May 2020 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

A full interpretation was completed by independent geological consultants Entech and reviewed by Pantoro technical staff. 25 domains were interpreted during the DSMRE2020.

The Daisy South Gold Mineral Resource (DSMRE2020) was updated to include an additional 4,702 m drilling from 39 reverse circulation and 8 diamond holes. Depth from surface to the current vertical limit of the Mineral Resource is approximately 130 m.

Interpretations for Daisy South were informed by Reverse Circulation drilling (89 drill holes), with Diamond Drilling (43 drill holes inclusive of diamond tails)

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold mineral resources within the deposits, based on Reverse Circulation and Diamond Drilling sampling data available as of May 8th, 2020. The MRE comprises oxide, transitional and fresh material and is detailed in Table 1 below.

Cut Off	Oxidation		Indicated			Inferred			Total		
\bigcirc		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
R	Oxide	35	2.5	3	1	1.9	0	36	2.5	3	
0.7	Transitional	36	2.8	3	7	2.0	0	44	2.7	4	
	Fresh	126	3.2	13	9	1.9	1	135	3.1	13	
	Total	198	3.0	19	17	1.9	1	215	2.9	20	

Table 1: Daisy South Mineral Resource Estimate.

N.B Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources which are unable to have economic considerations applied to them, nor is there certainty that they will be converted to Measured or Indicated Resources through further sampling.

QAQC analysis has indicated that sampling methodology is adequate to support the MRE.

Drilling Techniques

A variety of drilling techniques were used to test the Daisy deposit, however the recent drilling has utilized Reverse circulation and diamond drilling, NQ2 diameter core from RC pre-collars. All pre-collars were sampled. Reverse circulation drilling was carried out using a face sampling hammer and a 5 ³/₄ inch diameter bit.

Diamond

All diamond core is orientated and logged by a qualified geologist. It is sampled according to geology, with only selected samples assayed. Core is cut in half under the supervision of an experienced geologist utilising an Almonte diamond core-saw, with the RHS of cutting line routinely assayed, the other half retained in core trays on site for further analysis and storage. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval. Samples are a maximum of 1.2 m, with shorter intervals utilised according to geology to a minimum interval of 0.15 m where clearly defined mineralisation is evident. All diamond core is stored in core trays and is aligned, measured and marked up in metre intervals referenced back to downhole core blocks recording run meterage and any core loss if encountered. Downhole surveys are conducted during drilling, initially using a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled to October 2019 before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m. The RC drill holes used a REFLEX GYRO with survey measurements every 5m. A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m. No significant core loss has been noted from recent drilling. Visible gold is encountered at the project and where observed during logging, Screen Fire Assays are conducted.

Reverse Circulation

Samples are collected via both a cone splitter and a rig-mounted static splitter used, with sample falling though a riffle splitter and sampled every 1 m. Diamond hole pre-collars are sampled at 1m intervals.

All RC holes are geologically logged by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments. 100% of the holes are logged. Appropriately qualified company personnel supervise the drilling programs on site and monitor sample quality and integrity. Recovery and sample quality were visually monitored, and laboratory sample weights recorded and reviewed. Chip trays from each logged interval are retained and stored for reference. No significant water was encountered, and holes are typically dry.

Reverse Circulation samples of 2-5 kg in weight are dispatched to an external accredited laboratory Bureau Veritas in Kalgoorlie or Perth (BVA) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). Diamond samples 0.5-3.5 kg samples are dispatched to an external accredited laboratory (BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). The processes applied are industry standard for this type of sample.

Historic samples from CNGC from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal). Review of drilling programs indicate all intervals were assayed and is considered to be to industry standard at that time.

Sample Analysis Method

Samples were analysed at Bureau Veritas in Kalgoorlie and Perth. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice.

CRM standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up reassaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification.

Geology and Geological Interpretation

The Daisy South deposit is located in the Eastern Goldfields of Western Australia, at the southern end of the highly productive Norseman-Wiluna greenstone belt.

The deposit is located within the Daisy Shear Zone (DSZ) cuts through stratigraphy at an acute angle so the host stratigraphy varies along strike. The main body of Daisy South mineralisation is hosted within a sequence of massive to pillowed and amygdaloidal basalt that has been intruded by several dolerite sills of 5-15 m true thickness. The dolerites are defined by their coarser grainsize, Fe-Ti oxide content (ilmenite? ± leucoxene when altered) and rare quartz, and commonly have knife-edge intrusive contacts and chilled margins. At the southern end of the prospect, the DSZ enters a high-Mg to ultramafic sequence, characterised by fine- to coarse grained actinolite-tremolite rock. The coarser-grained ultramafic appears to occur proximal to shear zones, suggesting a degree of fluid/heat-driven recrystallisation. Glassy, plagioclase-phyric felsic porphyry dykes intrude the mafic-ultramafic sequence, but are relatively minor compared to Daisy and Gladstone.

The Daisy South mineralisation is closely associated with quartz-pyrite-pyrrhotite veining, and biotite-chlorite-pyrite-pyrrhotite alteration in the mafic rocks. Biotite is the clearest visual indicator of the broad DSZ corridor. When the DSZ is in high-Mg to ultramafic rocks, coarse actinolite-tremolite is also developed. These amphiboles overgrow the shear fabric in a random orientation, indicating some post shearing growth or recrystallization.

Folding and boudinage of mineralisation-stage features is widely developed at Daisy South. Fold axes (folded shears and veins) and boudin necks (boudinaged veins) have a common plunge of 3→006, with variation between gentle north (dominant) and gentle south plunges. Folds are dominantly

west verging. If considered as shear-related drag folds, these would indicate a component of normal movement on the DSZ. Jon Standing has recorded folds with the same vergence in the DSZ at Daisy. (Outhwaite,2019).

Estimation Methodology

A three dimensional (3D) Ordinary Kriging interpolation approach was employed to estimate block grades within the mineralisation domains, underpinned by composites on 1 metre lengths. Composites included all available diamond, reverse circulation assay data and were 'best fit' with residuals reviewed and discarded prior to estimation.

Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain were completed. Based on the analysis, individual top cuts were applied to each domain.

The 3D parent estimation block size selected for interpolation was 10 metres in the Y, 5 metres in the X and 5 metres in the Z direction with the parent block size being determined through kriging neighbourhood analysis, review of vein dimensions, drilling density and potential mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframes. No block rotation was applied.

Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. A single reference variogram from the best informed domain was applied as an estimate proxy to domains across the deposit.

The search strategy used a maximum extrapolation distance of 54 metres over three search passes for each domain. The first pass search was equal to the variogram maximum range (18 metres) with the second pass search equal to double the variogram range (36 metres) and the third pass triple the variogram range (54 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the all three search passes.

Check estimates were completed utilising both an ordinary kriging (OK) inside and out of a domain generated by a categorical indicator kriging (IK) as well as an Inverse Distance Squared (ID2) estimate within the interpreted domains. Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.

Classification Criteria

This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.

Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:

• Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and estimation quality was considered reasonable.

Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low.

Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 130 m below surface.

This approach considers all relevant factors and reflects the Competent Person's view of the deposit.

Cut-off Parameters

The global gold Mineral Resource has been reported at a 0.7 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 130 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.

Assessment of Reasonable Prospects for Economic Extraction

The material reported in the Daisy South MRE is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations.

The MRE extends nominally 130 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

No dilution, cost factors or metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

Ore Reserve Statement

Daisy South forms part of the Gladstone Mining Centre

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a DFS specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The proposed Gladstone Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Pit wall angles were designed based on geotechnical recommendations and vary from 30 to 35 degrees.

Dilution varies between 10% and 20% and is depending on the ore width. Dilution was applied at zero grade.

Mining recoveries were set at 95%.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 99.9% for oxide and 97.5% for fresh ore from the Gladstone Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 94% was applied.

Cut-Off Parameters

Cut-off grades were estimated using a cost model developed specifically for the Gladstone Open Pit DFS and ranged from 0.75g/t to 0.82g/t. Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Gladstone Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Material Summary – Scotia

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Mineral Resource Statement for the Scotia Gold Mineral Resource Estimate (SCMRE) was prepared during June 2020 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

A geological and mineralisation interpretation was completed by independent geological consultants Entech and reviewed by Pantoro technical staff with 58 domains being interpreted during the SCMRE2020.

The Scotia Gold Mineral Resource (SCMRE2020) was updated to include an additional 20,070m of drilling from 176 reverse circulation and 16 diamond holes. Depth from surface to the current vertical limit of the Mineral Resource is approximately 500 m

Interpretations for Scotia were informed by Reverse Circulation drilling (417 drill holes), with Diamond Drilling (203 drill holes inclusive of diamond tails).

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold mineral resources within the deposits, based on Reverse Circulation and Diamond Drilling sampling data available as of June 24th, 2020. The MRE comprises both open pit and underground resources, separated at a reference plane 150m below topographic surface and detailed in Table 1 below.

Reporting Group	Cut Off	Indicated				Inferred		Total			
		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Open Pit	0.5	1552	3.6	180	743	2.3	56	2295	3.2	236	
Underground	2	364	6.2	72	703	4.7	107	1067	5.2	180	
Total		1915	4.1	253	1446	3.5	163	3362	3.8	416	

Table 1: Scotia Mineral Resource Estimate.

N.B Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources which are unable to have economic considerations applied to them, nor is there certainty that they will be converted to Measured or Indicated Resources through further sampling.

Drilling Techniques

A variety of drilling techniques were used to test the Scotia deposit, however the recent drilling has utilized Reverse circulation and diamond drilling, NQ2 diameter core from RC pre-collars. All pre-collars were sampled. Reverse circulation drilling was carried out using a face sampling hammer and a 5 ³/₄ inch diameter bit.

Diamond

All diamond core is orientated and logged by a qualified geologist. It is sampled according to geology, with only selected samples assayed. Core is cut in half under the supervision of an experienced geologist utilising an Almonte diamond core-saw, with the RHS of cutting line routinely assayed, the other half retained in core trays on site for further analysis and storage. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval. Samples are a maximum of 1.2 m, with shorter intervals utilised according to geology to a minimum interval of 0.15 m where clearly defined mineralisation is evident. All diamond core is stored in core trays and is aligned, measured and marked up in metre intervals referenced back to downhole core blocks recording run meterage and any core loss if encountered. Downhole surveys are conducted during drilling, initially using a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled to October 2019 before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m. The RC drill holes used a REFLEX GYRO with survey measurements every 5m. A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m. No significant core loss has been noted from recent drilling. Visible gold is encountered at the project and where observed during logging, Screen Fire Assays are conducted.

Reverse Circulation

Samples are collected via both a cone splitter and a rig-mounted static splitter used, with sample falling though a riffle splitter and sampled every 1 m. Diamond hole pre-collars are sampled at 1m intervals.

All RC holes are geologically logged by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments. 100% of the holes are logged. Appropriately qualified company personnel supervise the drilling programs on site and monitor sample quality and integrity. Recovery and sample quality were visually monitored, and laboratory sample weights recorded and reviewed. Chip trays from each logged interval are retained and stored for reference. No significant water was encountered, and holes are typically dry.

Reverse Circulation samples of 2-5 kg in weight are dispatched to an external accredited laboratory Bureau Veritas in Kalgoorlie or Perth (BVA) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). Diamond samples 0.5-3.5 kg samples are dispatched to an external accredited laboratory (BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). The processes applied are industry standard for this type of sample.

Historic samples from CNGC from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal). Review of drilling programs indicate all intervals were assayed and is considered to be to industry standard at that time.

Sample Analysis Method

Samples were analysed at Bureau Veritas in Kalgoorlie and Perth. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice.

CRM standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up reassaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification.

Geology and Geological Interpretation

The Scotia deposit is located in the Eastern Goldfields of Western Australia, at the southern end of the highly productive Norseman-Wiluna greenstone belt.

The mineralisation at Scotia is hosted by a shear zone that transects the Woolyeenyer Formation, with various types of intruding dykes. The rocks differ from that at Norseman, in that the stratigraphy were formed at higher metamorphic grades, and at a higher temperature for alteration minerals. Primary gold is located in shear zones with quartz sulphide veins predominantly pyrrhotite and is structurally controlled by closely spaced brittle faults of varying orientations. Gold mineralisation is hosted by a D3 ductile shear zone striking north north-west and north, dipping east. Within the mine workings this follows a north striking, east dipping gabbroic dyke.

The attitude of bedding is unconstrained due to the absence of any sedimentary marker units in the drill holes. The orientation of the dolerite dykes is variable however the majority sit in a range between 47-80°/149-165°. These dykes range from 10-50m thickness and are important because shear zones are often localised along their contacts. The shear zones are 5-15m thick and are characterised by a penetrative foliation defined by an assemblage of chlorite+actinolite+biotite. Diopside+feldspar+quartz+actinolite veins are ubiquitous in the shear zones and these display a variety of vein morphologies. The most striking are veins that have undergone transposition by the shear foliation, suggesting their original geometry was shallow-dipping. In contrast, gold bearing quartz+actinolite+biotite+diopside+ chalcopyrite+pyrrhotite veins or reefs have planar margins and regular shapes typical of tabular veins. The gold-bearing veins are commonly oriented 65-70°/150-175°.

Several orientations of late faulting are observed that post-date the main foliation forming thrust deformation. Brittle arrays of fractures filled with quartz+carbonate+sphalerite+galena+pyrrhotite are oriented 75-80°/310-335°, 87°/073°, and 79°/111° with the latter displaying small displacements of normal faulting. Conjugate sets of brittleductile thrusts defined by chlorite+actinolite are present in STD-004. One set strikes 50°/347°, whereas the other dips shallowly east indicating the maximum compression direction for this event is E-W plunging ~25° to the west. (Standing, 2002).

Estimation Methodology

A three dimensional (3D) Ordinary Kriging interpolation approach was employed to estimate block grades within the mineralisation domains, underpinned by composites on 1 metre lengths. Composites included all available diamond, reverse circulation assay data and were 'best fit' with residuals reviewed and discarded prior to estimation.

Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain were completed. Based on the analysis, individual top cuts were applied to each domain.

The 3D parent estimation block size selected for interpolation was 10 metres in the Y, 5 metres in the X and 5 metres in the Z direction with the parent block size being determined through kriging neighbourhood analysis, review of vein dimensions, drilling density and potential mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframes. No block rotation was applied.

Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. 5 reference variograms from well informed domains were applied as estimate proxies to domains across the deposit with domains grouped on statistical, geometric and spatial proximity similarities.

The search strategy used a maximum extrapolation distance of 114, 84 and 75 metres over three search passes for the primary domains (Domains 2, 12 and 37 respectively), with a maximum extrapolation distance of 120 and 207 metres over three passes for the paelochannel domains (Domains 101 and 103 respectively). The first pass search was equal to the variogram maximum range (38, 28, 25, 40 and 69 metres for Domains 2, 12, 37, 101 and 103 respectively) with the second pass search double the variogram range (76, 56, 50, 80 and 138 metres for Domains 2, 12, 37, 101 and 103 respectively) and the third pass triple the variogram range (114, 84, 75, 120 and 207 metres for Domains 2, 12, 37, 101 and 103 respectively). A constant minimum of 4 and maximum of 16 composites was maintained across the first and second search passes, dropping to a minimum of 3 samples for the third pass.

A grade distance limiting function was applied to all domains restricting composite assays above 20 g/t to a range equal to the first pass of the domain, these being 38, 28, 25, 40 and 69 metres for Domains 2, 12, 37, 101 and 103 respectively.

Check estimates were completed utilising both Ordinary Kriging with Dynamic Anisotropy (DA) and Inverse Distance Squared (ID2). Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.

Classification Criteria

This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.

Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit and underground mining environment.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 30 m, or was within 30 m of a block estimate, and estimation quality was considered reasonable.

Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

• Drilling had a nominal spacing of 60 m, was within 60 m of the block estimate for the majority of the deposit, extending to 90 m at depth, on domain fringes and where estimation quality was considered low.

Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 500 m below surface.

This approach considers all relevant factors and reflects the Competent Person's view of the deposit. Appendix 2: Page 53

Cut-off Parameters

The global gold Mineral Resource has been reported at a 0.5 g/t gold cut-off for material within 150m of topographic surface and 2.0 g/t gold for material greater than 150m of topographic surface being based upon economic parameters and depths (within 500 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.

Assessment of Reasonable Prospects for Economic Extraction

The material reported in the Scotia MRE is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations.

The MRE extends nominally 500 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

No dilution, cost factors or metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

Ore Reserve Statement - Scotia Open Pit

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a DFS specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The proposed Scotia Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Pit wall angles were designed based on geotechnical recommendations and vary from 38 to 50 degrees.

Dilution varies between 10% and 20% and is depending on the ore width. Dilution was applied at zero grade.

Mining recoveries were set at 95%.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 μm. Metallurgical test work shows this will deliver recoveries of approximately 92.6% for ore from the Scotia Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied.

Cut-Off Parameters

Cut-off grade was estimated using a cost model developed specifically for the Scotia Open Pit DFS, this grade was 0.85g/t. Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Scotia Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Ore Reserve Statement - Scotia Underground

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The DFS proposed a decline mine with longhole open stoping selected as the production method. Ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive development has 15% dilution applied outside of the development profile.

The production level interval is 15 m. Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). Stope shapes were created using gold grade as the MSO optimisation field with the stoping cut-off grade applied (3.0 g/t gold). A minimum mining width of 1.0 m was applied. Additional stope dilution of 0.5 m footwall and 0.5 m hanging wall dilution was applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade.

Mining recoveries were set at 100% for development activities, and 85% for stoping.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 92.6% for Scotia Underground ore when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied.

Cut-Off Parameters

Cut-off grades were estimated using a cost model developed specifically for the Scotia Underground Mine DFS. The estimated Stoping cut-off grade was rounded to 3.0g/t gold. An incremental development cut-off grade of 1.0g/t gold was applied to ore development necessarily mined to access each stoping block.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover the Scotia Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Material Summary – Panda

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Maiden Mineral Resource Statement for the Panda Gold Mineral Resource Estimate (SCMRE) was prepared during September 2020 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

A full interpretation was completed by independent geological consultants Entech and reviewed by Pantoro technical staff. 8 domains were interpreted during the PMRE2020.

The Maiden Panda Gold Mineral Resource (PMRE2020) was compiled to include 5,400 m of drilling from 63 reverse circulation holes. Depth from surface to the current vertical limit of the Mineral Resource is approximately 130 m.

Interpretations for Panda were informed by Reverse Circulation drilling (63 drill holes).

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold mineral resources within the deposits, based on Reverse Circulation Drilling sampling data available as of September 3rd, 2020. The reportable MRE is detailed in Table 1 below.

7	Reporting Group	Cut Off	Indicated				Inferred		Total			
	リ		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
- (Open Pit	0.5	68	2.8	6	65	1.9	4	133	2.4	10	
IJ	Total		68	2.8	6	65	1.9	4	133	2.4	10	

Table 1: Panda Mineral Resource Estimate.

N.B Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources which are unable to have economic considerations applied to them, <u>no</u>r is there certainty that they will be converted to Measured or Indicated Resources through further sampling.

QAQC analysis has indicated that sampling methodology is adequate to support the MRE.

Drilling Techniques

A variety of drilling techniques were used to test the Daisy deposit, however the recent drilling has utilized Reverse circulation and diamond drilling, NQ2 diameter core from RC pre-collars. All pre-collars were sampled. Reverse circulation drilling was carried out using a face sampling hammer and a 5 ¾ inch diameter bit.

Diamond

All diamond core is orientated and logged by a qualified geologist. It is sampled according to geology, with only selected samples assayed. Core is cut in half under the supervision of an experienced geologist utilising an Almonte diamond core-saw, with the RHS of cutting line routinely assayed, the other half retained in core trays on site for further analysis and storage. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval. Samples are a maximum of 1.2 m, with shorter intervals utilised according to geology to a minimum interval of 0.15 m where clearly defined mineralisation is evident. All diamond core is stored in core trays and is aligned, measured and marked up in metre intervals referenced back to downhole core blocks recording run meterage and any core loss if encountered. Downhole surveys are conducted during drilling, initially using a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled to October 2019 before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m. The RC drill holes used a REFLEX GYRO with survey measurements every 5m. A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m. No significant core loss has been noted from recent drilling. Visible gold is encountered at the project and where observed during logging, Screen Fire Assays are conducted.

Reverse Circulation

Samples are collected via both a cone splitter and a rig-mounted static splitter used, with sample falling though a riffle splitter and sampled every 1 m. Diamond hole pre-collars are sampled at 1m intervals.

All RC holes are geologically logged by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments. 100% of the holes are logged. Appropriately qualified company personnel supervise the drilling programs on site and monitor sample quality and integrity. Recovery and sample quality were visually monitored, and laboratory sample weights recorded and reviewed. Chip trays from each logged interval are retained and stored for reference. No significant water was encountered, and holes are typically dry.

Reverse Circulation samples of 2-5 kg in weight are dispatched to an external accredited laboratory Bureau Veritas in Kalgoorlie or Perth (BVA) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). Diamond samples 0.5-3.5 kg samples are dispatched to an external accredited laboratory (BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). The processes applied are industry standard for this type of sample.

Historic samples from CNGC from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal). Review of drilling programs indicate all intervals were assayed and is considered to be to industry standard at that time.

Sample Analysis Method

Samples were analysed at Bureau Veritas in Kalgoorlie and Perth. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice.

CRM standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up reassaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification.

Geology and Geological Interpretation

The Panda deposit is located in the Eastern Goldfields of Western Australia, at the southern end of the highly productive Norseman-Wiluna greenstone belt.

The mineralisation at Panda is the same as the adjacent Scotia deposit and is hosted by a shear zone that transects the Woolyeenyer Formation, with various types of intruding dykes. The rocks differ from that at Norseman, in that the stratigraphy were formed at higher metamorphic grades, and at a higher temperature for alteration minerals. Primary gold is located in shear zones with quartz sulphide veins predominantly pyrrhotite and is structurally controlled by closely spaced brittle faults of varying orientations. Gold mineralisation is hosted by a D3 ductile shear zone striking north north-west and north, dipping east. Within the mine workings this follows a north striking, east dipping gabbroic dyke.

The attitude of bedding is unconstrained due to the absence of any sedimentary marker units in the drill holes. The orientation of the dolerite dykes is variable however the majority sit in a range between 47-80°/149-165°. These dykes range from 10-50m thickness and are important because shear zones are often localised along their contacts. The shear zones are 5-15m thick and are characterised by a penetrative foliation defined by an assemblage of chlorite+actinolite+biotite. Diopside+feldspar+quartz+actinolite veins are ubiquitous in the shear zones and these display a variety of vein morphologies. The most striking are veins that have undergone transposition by the shear foliation, suggesting their original geometry was shallow-dipping. In contrast, gold bearing quartz+actinolite+biotite+diopside+ chalcopyrite+pyrrhotite veins or reefs have planar margins and regular shapes typical of tabular veins. The gold-bearing veins are commonly oriented 65-70°/150-175°.

Several orientations of late faulting are observed that post-date the main foliation forming thrust deformation. Brittle arrays of fractures filled with quartz+carbonate+sphalerite+galena+pyrrhotite are oriented 75-80°/310-335°, 87°/073°, and 79°/111° with the latter displaying small displacements of normal faulting. Conjugate sets of brittle-ductile thrusts defined by chlorite+actinolite are present in STD-004. One set strikes 50°/347°, whereas the other dips shallowly east indicating the maximum compression direction for this event is E-W plunging ~25° to the west. (Standing, 2002).

Estimation Methodology

A three dimensional (3D) Ordinary Kriging interpolation approach was employed to estimate block grades within the mineralisation domains, underpinned by composites on 1 metre lengths. Composites included all available diamond, reverse circulation assay data and were 'best fit' with residuals reviewed and discarded prior to estimation.

Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain were completed. Based on the analysis, individual top cuts were applied to each domain.

The 3D parent estimation block size selected for interpolation was 10 metres in the Y, 5 metres in the X and 5 metres in the Z direction with the parent block size being determined through kriging neighbourhood analysis, review of vein dimensions, drilling density and potential mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframes. No block rotation was applied.

Variography was drawn from Scotia Domain 2 (SCMRE2020) with it acting as a well-informed proxy to domains across the deposit with statistical, geometric and spatial proximity similarities.

The search strategy used a maximum extrapolation distance of 38 metres over three search passes. The first pass search was equal to the variogram maximum range (38 metres) with the second pass search double the variogram range (76 metres) and the third pass triple the variogram range (114 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the first and second search passes, dropping to a minimum of 3 samples for the third pass.

A grade distance limiting function was applied to all domains restricting composite assays above 20 g/t to a range equal to the first pass of the domain, this being 38 metres.

Check estimates were completed utilising both Ordinary Kriging with Dynamic Anisotropy (DA) and Inverse Distance Squared (ID2). Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.

Classification Criteria

This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.

Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:

• Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and estimation quality was considered reasonable.

Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

 Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low.

Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 130 m below surface.

This approach considers all relevant factors and reflects the Competent Person's view of the deposit.

Cut-off Parameters

The global gold Mineral Resource has been reported at a 0.5 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 130 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.

Assessment of Reasonable Prospects for Economic Extraction

The material reported in the Panda MRE is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations.

The MRE extends nominally 130 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

No dilution, cost factors or metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

Ore Reserve Statement

Panda forms part of the Scotia Open Pit Mining Centre.

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a DFS specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The proposed Scotia Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Pit wall angles were designed based on geotechnical recommendations and vary from 38 to 50 degrees.

Dilution varies between 10% and 20% and is depending on the ore width. Dilution was applied at zero grade.

Mining recoveries were set at 95%.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 92.6% for ore from the Scotia Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied.

Cut-Off Parameters

Cut-off grade was estimated using a cost model developed specifically for the Scotia Open Pit DFS, this grade was 0.85g/t. Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Scotia Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Material Summary – Lady Eleanor

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Mineral Resource Statement for the Lady Eleanor Gold Mineral Resource Estimate (LEMRE) was prepared during September 2020 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

A full interpretation was completed by independent geological consultants Entech and reviewed by Pantoro technical staff with 8 domains being interpreted during the LEMRE2020.

The Lady Eleanor Gold Mineral Resource (LEMRE2020) was updated to include an additional 6,294m infill drilling from 64 reverse circulation and 2 diamond holes. Depth from surface to the current vertical limit of the Mineral Resource is approximately 100 metres.

Interpretations for Lady Eleanor were informed by Reverse Circulation drilling (55 drill holes), with Diamond Drilling (2 drill holes inclusive of diamond tails).

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold mineral resources within the deposits, based on Reverse Circulation and Diamond Drilling sampling data available as of September 3rd, 2020. The reportable MRE is detailed in Table 1 below.

7	Reporting Group	Cut Off	Indicated				Inferred		Total			
Λ))		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
	Open Pit	0.5	198	1.8	12	198	1.4	9	397	1.6	21	
	Total		198	1.8	12	198	1.4	9	397	1.6	21	

Table 1: Lady Eleanor Mineral Resource Estimate.

N.B Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources which are unable to have economic considerations applied to them, nor is there certainty that they will be converted to Measured or Indicated Resources through further sampling.

QAQC analysis has indicated that sampling methodology is adequate to support the MRE.

Drilling Techniques

A variety of drilling techniques were used to test the Lady Eleanor deposit, however the recent drilling has utilized Beverse circulation and diamond drilling, NQ2 diameter core from RC pre-collars. All pre-collars were sampled. Reverse circulation drilling was carried out using a face sampling hammer and a 5 ³/₄ inch diameter bit.

Diamond

All diamond core is orientated and logged by a qualified geologist. It is sampled according to geology, with only selected samples assayed. Core is cut in half under the supervision of an experienced geologist utilising an Almonte diamond core-saw, with the RHS of cutting line routinely assayed, the other half retained in core trays on site for further analysis and storage. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval. Samples are a maximum of 1.2 m, with shorter intervals utilised according to geology to a minimum interval of 0.15 m where clearly defined mineralisation is evident. All diamond core is stored in core trays and is aligned, measured and marked up in metre intervals referenced back to downhole core blocks recording run meterage and any core loss if encountered. Downhole surveys are conducted during drilling, initially using a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled to October 2019 before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m. The RC drill holes used a REFLEX GYRO with survey measurements every 5m. A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m. No significant core loss has been noted from recent drilling. Visible gold is encountered at the project and where observed during logging, Screen Fire Assays are conducted.

Reverse Circulation

Samples are collected via both a cone splitter and a rig-mounted static splitter used, with sample falling though a riffle splitter and sampled every 1 m. Diamond hole pre-collars are sampled at 1m intervals.

All RC holes are geologically logged by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments. 100% of the holes are logged. Appropriately qualified company personnel supervise the drilling programs on site and monitor sample quality and integrity. Recovery and sample quality were visually monitored, and laboratory sample weights recorded and reviewed. Chip trays from each logged interval are retained and stored for reference. No significant water was encountered, and holes are typically dry.

Reverse Circulation samples of 2-5 kg in weight are dispatched to an external accredited laboratory Bureau Veritas in Kalgoorlie or Perth (BVA) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). Diamond samples 0.5-3.5 kg samples are dispatched to an external accredited laboratory (BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). The processes applied are industry standard for this type of sample.

Historic samples from CNGC from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal). Review of drilling programs indicate all intervals were assayed and is considered to be to industry standard at that time.

Sample Analysis Method

Samples were analysed at Bureau Veritas in Kalgoorlie and Perth. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice.

CRM standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up reassaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification.

Geology and Geological Interpretation

The Lady Eleanor deposit is located in the Eastern Goldfields of Western Australia, at the southern end of the highly productive Norseman-Wiluna greenstone belt.

The mineralisation at Scotia Mining Centre is hosted by shear zones that transect the Woolyeenyer Formation, with various types of intruding dykes. The rocks differ from that at Norseman, in that the stratigraphy were formed at higher metamorphic grades, and at a higher temperature for alteration minerals. Primary gold is located in shear zones with quartz sulphide veins predominantly pyrrhotite and is structurally controlled by closely spaced brittle faults of varying orientations. Gold mineralisation is hosted by a D3 ductile shear zone striking north north-west and north, dipping east. Within the mine workings this follows a north striking, east dipping gabbroic dyke.

The attitude of bedding is unconstrained due to the absence of any sedimentary marker units in the drill holes. The orientation of the dolerite dykes is variable however the majority sit in a range between 47-80°/149-165°. These dykes range from 10-50m thickness and are important because shear zones are often localised along their contacts. The shear zones are 5-15m thick and are characterised by a penetrative foliation defined by an assemblage of chlorite+actinolite+biotite. Diopside+feldspar+quartz+actinolite veins are ubiquitous in the shear zones and these display a variety of vein morphologies. The most striking are veins that have undergone transposition by the shear foliation, suggesting their original geometry was shallow-dipping. In contrast, gold bearing quartz+actinolite+biotite+diopside+ chalcopyrite+pyrrhotite veins or reefs have planar margins and regular shapes typical of tabular veins. The gold-bearing veins are commonly oriented 65-70°/150-175°.

Several orientations of late faulting are observed that post-date the main foliation forming thrust deformation. Brittle arrays of fractures filled with quartz+carbonate+sphalerite+galena+pyrrhotite are oriented 75-80°/310-335°, 87°/073°, and 79°/111° with the latter displaying small displacements of normal faulting. Conjugate sets of brittle-ductile thrusts defined by chlorite+actinolite are present in STD-004. One set strikes 50°/347°, whereas the other dips shallowly east indicating the maximum compression direction for this event is E-W plunging ~25° to the west. (Standing, 2002).

Estimation Methodology

A three dimensional (3D) Ordinary Kriging interpolation approach was employed to estimate block grades within the mineralisation domains, underpinned by composites on 1 metre lengths. Composites included all available diamond, reverse circulation assay data and were 'best fit' with residuals reviewed and discarded prior to estimation.

Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain were completed. Based on the analysis, individual top cuts were applied to each domain.

The 3D parent estimation block size selected for interpolation was 10 metres in the Y, 5 metres in the X and 5 metres in the Z direction with the parent block size being determined through kriging neighbourhood analysis, review of vein dimensions, drilling density and potential mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframes. No block rotation was applied.

Variography was drawn from Scotia Domain 12 (SCMRE2020) with it acting as a well-informed proxy to domains across the deposit with statistical, geometric and spatial proximity similarities.

The search strategy used a maximum extrapolation distance of 84 metres over three search passes. The first pass search was equal to the variogram maximum range (28 metres) with the second pass search double the variogram range (56 metres) and the third pass triple the variogram range (84 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the first and second search passes, dropping to a minimum of 3 samples for the third pass.

A grade distance limiting function was applied to all domains restricting composite assays above 20 g/t to a range equal to the first pass of the domain, this being 28 metres.

Check estimates were completed utilising Inverse Distance Squared (ID2) interpolation. Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.

Classification Criteria

This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.

Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:

• Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and estimation quality was considered reasonable.

Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

 Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low.

Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 100 m below surface.

This approach considers all relevant factors and reflects the Competent Person's view of the deposit.

Cut-off Parameters

The global gold Mineral Resource has been reported at a 0.5 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 100 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.

Assessment of Reasonable Prospects for Economic Extraction

The material reported in the Lady Eleanor MRE is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations.

The MRE extends nominally 100 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

No dilution, cost factors or metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

Ore Reserve Statement

Lady Eleanor forms part of the Scotia Open Pit Mining Centre.

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a DFS specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The proposed Scotia Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Pit wall angles were designed based on geotechnical recommendations and vary from 38 to 50 degrees.

Dilution varies between 10% and 20% and is depending on the ore width. Dilution was applied at zero grade.

Mining recoveries were set at 95%.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 μm. Metallurgical test work shows this will deliver recoveries of approximately 92.6% for ore from the Scotia Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied.

Cut-Off Parameters

Cut-off grade was estimated using a cost model developed specifically for the Scotia Open Pit DFS, this grade was 0.85g/t. Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Eut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Scotia Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Material Summary – OK and Star of Erin

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Mineral Resource Statement for the OK and Star of Erin (SOE) Mineral Resource Estimate was prepared during September 2020 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

The OK Mineral Resource (OMRE2020) comprises Indicated and Inferred material and was estimated using 49,382 m of historical and recent (PNR) diamond drilling from 268 drill holes and 1863 m of sampling from 1616 production faces. It is reported excluding all historical mining activity. Depth from surface to the current vertical limit of the Mineral Resource is approximately 700 m.

The Star of Erin Mineral Resource (SMRE2020) comprises Indicated and Inferred material and was estimated using 33,540 m of historical and recent (PNR) diamond drilling from 136 drill holes. It is reported excluding all historical mining activity. Depth from surface to the current vertical limit of the Mineral Resource is approximately 400 m.

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold underground Mineral Resources within the deposits, based on diamond drilling and underground production sampling data available as of September 16th, 2020. The reportable MRE is detailed in Table 1 below.

Deposit	Reporting	Cut Off		Indicated			Inferred			Total	
\bigcirc	Group		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz
бк	Underground	2	242	16.1	125	79	9.5	24	321	14.5	150
Star of Erin		2	260	5.0	42	28	9.1	8	288	5.4	50
Total			502	10.4	167	107	9.4	32	609	10.2	200

Table 1: OK and Star of Erin Mineral Resource Estimate.

N.B Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources which are unable to have economic considerations applied to them, nor is there certainty that they will be converted to Measured or Indicated Resources through further sampling.

Drilling Techniques

A variety of drilling techniques were used to test the OK and SOE deposits historically with the overwhelming majority being underground diamond. All recent drilling has utilised NQ2 diameter diamond core from underground drill positions or the boxcut portal position.

Diamond

All diamond core is orientated and logged by a qualified geologist. It is sampled according to geology, with only selected samples assayed. Core is cut in half under the supervision of an experienced geologist utilising an Almonte diamond core-saw, with the RHS of cutting line routinely assayed, the other half retained in core trays on site for further analysis and storage. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval. Samples are a maximum of 1.2 m, with shorter intervals utilised according to geology to a minimum interval of 0.15 m where clearly defined mineralisation is evident. All diamond core is stored in core trays and is aligned, measured and marked up in metre intervals referenced back to downhole core blocks recording run meterage and any core loss if encountered. Downhole surveys are conducted during drilling using a reflex electronic single shot camera at collar, 20 m then every 30 m thereafter. No significant core loss has been noted from recent drilling. Visible gold is encountered at the project and where observed during logging, Screen Fire Assays are conducted.

Sample Analysis Method

Samples were analysed at Bureau Veritas in Kalgoorlie and Perth. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice.

CRM standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up reassaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification.

Geology and Geological Interpretation

The OK and SOE deposits are located in the Eastern Goldfields of Western Australia, at the southern end of the highly productive Norseman-Wiluna greenstone belt.

The OK Mine is a West to WNW-trending mineralized shear system located to the South-West of the productive North to NNE- trending reefs at Norseman. The OK deposits are located in the upper members of the Woolyeenyer Formation.

The local stratigraphy consists of pillowed amygdaloidal flows overlain by commonly megacrystic and glomeroporphyritic basalts of the Bluebird Gabbro Member. The entire sequence is West-dipping and west facing. These units are intruded by numerous Gabbro dykes which appear to dip West and transgress stratigraphy. The mafic sequence is intruded by a major sheeted diorite sill complex known as the Big Porphyry and a series of West-dipping quartz albite porphyry dykes which are semi concordant with stratigraphy.

There appears to be no stratigraphic control over ore distribution. However, the porphyry dykes exercise considerable structural control over gold deposition due to their unique mechanical properties.

The O2 Reef Structure is a well-developed sinistral shear zone up to 5 metres in width but rarely exceeding 2 metres in width, with an average bearing of 120 degrees. The reef possesses a reasonably continuous grade run of approximately 350m. The best mineralization is generally within lenses of laminated footwall quartz which display occasional brecciation and more commonly sinistral ramping. The mineralized quartz is often linked to parallel structures by tensional veins and compressional shears.

Star of Erin Structures strike East-West over a distance of 900m and comprises of a series of sub-parallel quartzbiotite diopside shears containing areas of visible gold, chalcopyrite, pyrrhotite and minor sphalerite and/or galena. The structures vary in width from 10cm up to 2m with large cross-cutting porphyries causing inflections of the reefs. The country rock comprises of basalts, gabbros and albite porphyry dykes with strongest mineralization in the megacrystic and glomeroporhyritic unit of the Blue Bird Gabbro.

Estimation Methodology

Five domains were estimated during the OMRE, these being Domain 1 (O2 lode) and Domains 2,3,7 and 30. Six domains were interpreted during the SMRE, these were domains 1, 2, 3, 4, 5, and 8.

A two dimensional (2D) Ordinary Kriging interpolation approach was employed to estimate block grades. The 2D interpolation approach utilised varies from a three-dimensional approach (3D) in that estimation of both an accumulation variable (intercept gold composite weighted by true width) and the true width variable, is undertaken on a 2D plane.

The gold mineralisation is hosted within quartz reefs and the interpreted mineralised domains were utilized as hard boundaries within the estimation process. Top caps were applied to the gram-meter accumulation variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain was completed.

The 2D parent estimation block size selected for interpolation was 10 metres in the Y and X direction with the parent block size being determined through kriging neighbourhood analysis, review of vein dimensions, drilling density and potential mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframes. Block rotation of 3060 was applied for OMRE, no block rotation was utilised for the SMRE.

For all domains variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging were derived and applied to each individual domain. The nature of the mineralisation at both deposits, combined with the available data spacing, resulted in robust variograms for the main domains of O2 (OK Domain 1) and Domain 3 (SOE), and poor spatial continuity models for all other domains. It is PNR's understanding that hangingwall, footwall reefs (proximal to the dominant reef system) have similar mineralisation controls, orientation and continuity of mineralisation. Thus EDA outcomes from the dominant reef system in each deposit, O2 (OK Domain 1) and Domain 3 (SOE), were tested against adjacent domains and, where appropriate, were applied across the remaining minor domains.

The search strategy for OMRE was a maximum extrapolation distance of 45 m over two search passes. All domains utilised a minimum of 4 and a maximum of 10 composites to form the search neighbourhood.

The search strategy for SMRE was a maximum extrapolation distance of 55 m over two search passes. All domains utilised a minimum of 4 and a maximum of 10 composites to form the search neighbourhood.

Check estimates were completed for O2 (OK Domain 1) and Domain 3 (SOE) utilising Inverse Distance Squared (3D) with Dynamic Anisotropy (DA), Ordinary Kriging (2D) with a distance based high-grade limit function and Ordinary Kriging (2D) with sub-domaining by numerical indicator modelling. The check estimation process was utilised to test sensitivity of the MRE outcomes to domaining approach, interpolation methodology and metal control.

Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.

Classification Criteria

This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data and estimation quality, drill hole spacing, geological and grade continuity, historical mining activity and metal distribution.

Additional considerations were the stage of project assessment, current understanding of mineralisation controls and selectivity within an open pit and underground mining environment. This approach considers all relevant factors and reflects the Competent Person's view of the deposit.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 30 m, or was within 20 m of a block estimate, and estimation quality was considered reasonable (SOR > 0.5).

Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 50 m, was within 40 m of the block estimate and estimation quality was considered low (SOR < 0.5).

Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

This approach considers all relevant factors and reflects the Competent Person's view of the deposit.

Cut-off Parameters

The global gold underground Mineral Resource has been reported at a 2.0 g/t gold cut-off and comprises fresh material only.

The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification:

OMRE. Nominally 700 m below surface topography and within 100 vertical metres of historical level development.

SMRE. Nominally 400 m below surface topography.

The above cut-off grades and reporting constraints are based upon economic parameters historically mined, optimised by previous owners and are supported by recent PNR mining studies.

Assessment of Reasonable Prospects for Economic Extraction

The material reported in the OMRE, SMRE is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations.

The MRE extends nominally 400-700 m below topographic surface, with OMRE Mineral Resources (depth of 700 m) within 100 vertical metres of historical mining and development.

Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an underground mining framework, based upon comparisons with adjacent Norseman deposits of the same style, commodity, comparable size and mining methodology.

No dilution, cost factors or metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

Ore Reserve Statement

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The DFS proposed a decline mine with longhole open stoping selected as the production method. Ore development is performed by single boom jumbo (profile: 2.5 m wide x 3.3 m high). Ore drive development has 15% dilution applied outside of the development profile.

The production level interval is 16m. Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). Stope shapes were created using gold grade as the MSO optimisation field with the stoping cut-off grade applied (3.0 g/t gold). A minimum mining width of 1.0m was applied. Additional stope dilution of 0.5 m footwall and 0.5 m hanging wall dilution was applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade.

Mining recoveries were set at 100% for development activities, and 85% for stoping.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 96.5% for ore from the OK Underground Mine when treated in the proposed new carbon in leach (CIL) processing plant. For DFS financial modelling purposes a processing recovery of 96% was applied.

Cut-Off Parameters

Cut-off grades were estimated using a cost model developed specifically for the OK Underground Mine DFS. The estimated Stoping cut-off grade was rounded to 3.0 g/t gold. An incremental development cut-off grade of 0.5 g/t gold was applied to ore development necessarily mined to access each stoping block.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. A Ground Water Extraction License is in place covering the project and allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Material Summary – Cobbler

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Mineral Resource Statement for the Cobbler Deposit Gold Mineral Resource Estimate was prepared during July 2020 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

Interpretations and block estimation for the Cobbler Mineral Resource (MRE2020) were informed by surface drilling (diamond and reverse circulation) for 2564 m of drilling intersecting ore and a combined total of 15,399 m of drilling from 221 drill holes (inclusive of diamond tails).

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold open pit Mineral Resources, at a 0.7 g/t Au cut off as of June 6th, 2020. The MRE comprises oxide, transitional and fresh material and is presented in Table 1 below.

Cut Off	Oxidation		Indicated			Inferred			Total		
		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
	Oxide	39	1.4	2	6	1.1	0	45	1.4	2	
0.7	Transition-al	431	1.7	23	142	1.6	7	573	1.7	30	
4	Fresh	1364	1.6	70	290	1.2	11	1654	1.5	81	
\bigcirc	1834	1.6	95	438	1.3	19	2272	1.6	113	20	

Table 1: Cobbler Mineral Resource Estimate.

N.B Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources which are unable to have economic considerations applied to them, nor is there certainty that they will be converted to Measured or Indicated Resources through further sampling.

Drilling Techniques

A variety of drilling techniques were used to test the Cobbler deposit, however the recent drilling has utilised and diamond drilling, NQ2 diameter core from RC pre-collars. All pre-collars were sampled. Reverse circulation drilling was carried out using a face sampling hammer and a 5 ³/₄ inch diameter bit.

Diamond

All diamond core is orientated and logged by a qualified geologist. It is sampled according to geology, with only selected samples assayed. Core is cut in half under the supervision of an experienced geologist utilising an Almonte diamond core-saw, with the RHS of cutting line routinely assayed, the other half retained in core trays on site for further analysis and storage. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval. Samples are a maximum of 1.2 m, with shorter intervals utilised according to geology to a minimum interval of 0.15 m where clearly defined mineralisation is evident. All diamond core is stored in core trays and is aligned, measured and marked up in metre intervals referenced back to downhole core blocks recording run meterage and any core loss if encountered. Downhole surveys are conducted during drilling, initially using a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled to October 2019 before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m. The RC drill holes used a REFLEX GYRO with survey measurements every 5m. A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m. No significant core loss has been noted from recent drilling. Visible gold is encountered at the project and where observed during logging, Screen Fire Assays are conducted.

Reverse Circulation

Samples are collected via both a cone splitter and a rig-mounted static splitter used, with sample falling though a riffle splitter and sampled every 1 m. Diamond hole pre-collars are sampled at 1m intervals.

All RC holes are geologically logged by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments. 100% of the holes are logged. Appropriately qualified company personnel supervise the drilling programs on site and monitor sample quality and integrity. Recovery and sample quality were visually monitored, and laboratory sample weights recorded and reviewed. Chip trays from each logged interval are retained and stored for reference. No significant water was encountered, and holes are typically dry.

Reverse Circulation samples of 2-5 kg in weight are dispatched to an external accredited laboratory Bureau Veritas in Kalgoorlie or Perth (BVA) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). Diamond samples 0.5-3.5 kg samples are dispatched to an external accredited laboratory (BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). The processes applied are industry standard for this type of sample.

Historic samples from CNGC from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal). Review of drilling programs indicate all intervals were assayed and is considered to be to industry standard at that time.

Sample Analysis Method

Samples were analysed at Bureau Veritas in Kalgoorlie and Perth. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice.

CRM standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up reassaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification.

Geology and Geological Interpretation

The mineralisation at Cobbler is somewhat different from that of the other Norseman deposits in that it is hosted by the Talbot Island ultramafics, located at the top of the Desirables Pillow Member of the Woolyeenyer Formation.

The local geology also includes High Mg basalts interflow sediments including carbonaceous shales and fragmental and volcaniclastic sandstones. The gold mineralisation itself is contained within a biotite-ankerite/dolomitearsenopyrite-pyrrhotite altered High- Mg basalt, which lies at the basal contact of the Talbot Island ultramafics. (Standing, 2020).

Estimation Methodology

A three dimensional (3D) Ordinary Kriging interpolation approach was employed to estimate block grades within the mineralisation domains, underpinned by diamond and reverse circulation drill data composites on 1 metre downhole lengths.

Six domains were estimated during the MRE2020, these being domains 1, 2, 3, 4 and 5 in the Cobbler Central area and domain 7 in Cobbler South.

The gold mineralisation is hosted within broad shear zones, quartz reefs and the interpreted mineralised domains were utilized as hard boundaries within the estimation process. Top caps were applied to the gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain was completed.

The parent estimation block size selected for interpolation was 10 m in the Y, 5 m in the X and Z directions with the parent block size being determined through kriging neighbourhood analysis, review of vein dimensions, drilling density and potential mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframes. No block rotation was applied.

For all domains variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging were derived and applied to each individual domain.

The search strategy for domains 1, 3 and 7 was a maximum extrapolation distance of 70 m and 105m over two search passes. A minimum of 6 and maximum of 12 composites was used in the first search pass and reduced to a minimum of 4 and a maximum of 12 composites in the second pass.

The search strategy for domains 2, 4, 5 was a maximum extrapolation distance of 45 m and 67.5m over two search passes. A minimum of 6 and maximum of 12 composites was used in the first search pass and reduced to a minimum of 4 and a maximum of 12 composites in the second pass.

Check estimates were completed utilising Inverse Distance weighting. Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.

Classification Criteria

This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data and estimation quality, drill hole spacing, geological and grade continuity, historical mining activity and metal distribution.

Additional considerations were the stage of project assessment, current understanding of mineralisation controls and selectivity within an open pit and underground mining environment.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 40 m, or was within 30 m of a block estimate, and estimation quality was considered reasonable (SOR > 0.5).

Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 60 m, was within 50 m of the block estimate and estimation quality was
 considered low (SOR < 0.5).

Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 150 m below surface.

This approach considers all relevant factors and reflects the Competent Person's view of the deposit.

Cut-off Parameters

The global gold open pit Mineral Resource has been reported at a 0.7 g/t gold cut-off. The applied cut off grades and reporting constraints are based upon economic parameters historically mined at nearby deposits of similar style, optimised by previous owners and are supported by recent PNR mining studies.

Assessment of Reasonable Prospects for Economic Extraction

The material reported in the Cobbler MRE is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations.

The Cobbler MRE extends vertically 150 m. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit mining framework, based upon comparisons with adjacent Norseman deposits of the same style, commodity, comparable size and mining methodology.

No dilution, cost factors or metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

Ore Reserve Statement

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a DFS specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The proposed Cobbler Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Pit wall angles were designed based on geotechnical recommendations and vary from 35 to 40 degrees.

Dilution varies between 7% and 10% and is depending on the ore width. Dilution was applied at zero grade.

Mining recoveries were set at 95%.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 93.8% for oxide and 85.8% for fresh ore from the Cobbler Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 90% for oxide and 85% for fresh ore was applied.

Cut-Off Parameters

Cut-off grades were estimated using a cost model developed specifically for the Cobbler Open Pit DFS and ranged from 0.76g/t to 0.83g/t. Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Cobbler Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Material Summary – St Patrick's

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Mineral Resource Statement for the St Patrick's Gold Mineral Resource Estimate (MRE) was prepared during September 2020 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

Interpretations and block estimation for the St Patrick's Mineral Resource (MRE2020) were informed by diamond drilling (surface and underground) and underground faces for 526 m of drilling intersecting ore and a combined total of 52,398 m of drilling from 312 drill holes (inclusive of diamond tails) and 1501 m of sampling from 2223 production faces.

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold Mineral Resources within the deposits, based on diamond drilling and underground production sampling data available as September 16th, 2020. The open pit MRE comprises oxide, transitional and fresh material, with only fresh material within the underground MRE, as presented in Table 1 below.

Reporting Group	Cut Off	Indicated		Inferred			Total			
\mathcal{J}		kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz
Open Pit	0.7	208	4.2	28	64	2.8	6	272	3.9	34
Underground	2	160	13.0	67	234	6.0	45	394	8.9	112
2		368	8.0	95	298	5.3	51	666	6.8	146

Table 1: St Patrick's Mineral Resource Estimate.

N.B Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources which are unable to have economic considerations applied to them, nor is there certainty that they will be converted to Measured or Indicated Resources through further sampling.

Drilling Techniques

All data utilised in the updated St Patrick's MRE is historic in nature, with no new data added at the time of resource compilation. Information on Drilling, Sampling and Geological Interpretation has been drawn from a report 'St Patricks and Norseman Reef Resource Report, March 2008' (Turner, B J).

The principal drilling technique for St Patrick's is diamond with surface drilling prior to January 2002 being NQ2 (79mm) diameter and post January 2002 being a mixture of HQ, NQ2 and in several instances BQ diameter due to drilling difficulties.

Underground drilling was completed with electric hydraulic drill rigs using a standard core size of either LTK46 and LTK48, both with a nominal core size of 38mm.

Historic holes prior to Croesus are either BQ or AX size for holes drilled prior to 1968.

Diamond

Sampling of diamond drill core is completed using half core and sampled so that the sample intervals match geological intervals and veins. Small veins, less than 15cm core length, have insufficient sample for assay. These intersections are bulked out to 15cm core length and dilution is included in the assay. The recent move towards the use of HQ core has enabled samples as small as 10cm core length to be taken, while still retaining an adequate sample size.

Recent surface diamond drilling collars have been picked up using differential GPS or conventional electronic total station, underground diamond drilling collars are picked up by the site surveyors using a conventional electronic total station. Older drill holes would have been picked up by conventional theodolites

Prior to January 2002, down hole surveys on surface holes were carried out at 50m intervals using an Eastman camera to give down hole direction (azimuths and dips) with a shot being taken every 50 metres beyond the casing. Since that time, shots have been taken using the same techniques, but at 30m intervals. No highly magnetic lithologies were encountered which might invalidate the azimuth readings. Some older holes would have been down hole surveyed by the acid tube technique, and some by camera surveys.

Sample Analysis Method

Assays prior to June 1996 were sent to the WMC laboratory in Kalgoorlie. Very old assays would have been done on site in CNGC's own assay lab using fire assay technique. From July 1996 assays were sent to Analabs in Perth. Assaying procedures changed with the change in laboratory.

Samples that expected to assay well, were subjected to bulk pulverisation with duplicate assays at the WMC Laboratory and Screen Fire assaying at Analabs. The routine assaying method for other samples was aqua regia digest at WMC and fire assay at Analabs.

The bulk pulverisation routine used at the WMC Laboratory involved milling the entire sample to a nominal -75 um. Duplicate samples were split from the milled material and the sample was analysed using aqua regia digest and an atomic absorption finish.

At Analabs the total sample is dried and milled in an LM5 mill to a nominal 90% passing 75um. An analytical pulp of approximately 200g is sub sampled from the bulk and the milled residue is retained for future reference. All the preparation equipment is flushed with barren feldspar prior to the commencement of the job. A 50 gram sample is fused in a lead collection fire assay. The resultant prill is dissolved in an aqua regia and the gold content of the sample is determined by AAS. For samples that contained visible free gold another method of screened fire assay was used. It involved a 1000g sample screened through a 106um mesh. The resulting plus and minus fractions are then analysed for gold by fire assay. Information reported includes size fraction weight, coarse and fine fraction gold content and calculated gold.

From early 2000 to January 2002 the drill core samples have been sent to Kalgoorlie Assay Labs to be sampled using a accelerated cyanide leach on the a hierarchy of sample sizes depending on initial sample weight, if insufficient sample is present a fire assay is performed. A fire assay on the tails is done on all assays over 1 g/t and any others to have a minium of 10% with a fire assay on the tails.

Since January 2002 the drill core samples have been sent to Ultratrace Laboratories in Perth, where the Leachwell technique is used. After drying and pulverising, samples are rolled for 12 hours in a cyanide solution, before gold in the resultant solution is determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (MS). Samples that assay greater than 0.100 ppm Au are then re-analysed using the Mini-BLEG technique, where a 50 gram sub-sample is subjected to a 2 hour semi-static leach in a cyanide solution. Again, ICP-MS is used to determine gold. Samples that assay over 1.00 ppm Au are subjected to a 40 gram fire assay "tail" using a sub-sample of the dried Leachwell residue, in order to pick up any gold that was missed during the cyanide leaching process.

Geology and Geological Interpretation

The St Patrick's deposit is located in the Eastern Goldfields of Western Australia, at the southern end of the highly productive Norseman-Wiluna greenstone belt.

Historically, most production in the Mainfield has come from north-striking, moderately east-dipping quartz reefs (Mararoa, Crown) that may have strike lengths in excess of 4 kilometres. In recent times, approximately east-west "crosslink" reefs (Bluebird Link, Bullen West, OK) have been recognised as important ore sources. These reefs are interpreted to have formed as tensional structures between the major north-striking structures.

The Norseman and St. Patrick's reefs are separate shear/vein systems located at the northern end of the Mainfield area and are examples of north-south and crosslink reefs, respectively.

The Norseman reef strikes north-south, dips moderately to the east, and has a strike length in excess of 4 kilometres. In the area covered by this report the structure is oriented approximately 006/35E, and comprises a 10-15 metre shear zone with the Norseman reef at the core. In the northern parts the structure is hosted by the gently south-dipping Crown Main Dyke, while to the south it progresses out of the dyke and into an overlying sequence of moderately west-dipping pillow basalt and fine- to medium-grained dolerite.

The shear zone is expressed as a margin-parallel ductile deformation fabric and is usually affected by gradational, foliation-controlled biotite-chlorite-carbonate-pyrrhotite alteration, though in places the shear is narrow and alteration can be almost non-existent. The reef is generally a massive to weakly-laminated milky white quartz vein that reaches up to 3 metres in width, and though visible gold is common, sulphide content is generally very low. In places the reef can become very narrow, or pinch out altogether.

Variable vein behaviour, such as folding or splitting, is apparent in places, and seems to be localised around the reef's intersection with the St. Patrick's reef. Structural observations suggest that proximal to their intersection, the Norseman reef approaches parallelism with St. Patrick's.

The St. Patrick's structure is oriented 060/30SE, and lies in the footwall (western side) of the Norseman structure – the intersection of the two plunges moderately to the southeast. The structure is a 6-8-metre-wide shear zone with the St. Patrick's reef at its centre, and is strongly confined to just within the basal contact of the Crown Main Dyke gabbro. Beneath this gabbro lies a sequence of moderately west-dipping pillow basalt.

The structure is defined by a moderate shear fabric, which is affected by gradational foliation-controlled biotitechlorite-carbonate-sulphide alteration, and is remarkably consistent in both thickness and orientation. The vein itself reaches up to 2 metres in width, has a moderately- to strongly-laminated or breccia texture, and often has a smoky grey colour due to fine contained sulphide. The most common sulphide assemblage is pyrite-chalcopyritearsenopyrite-galena (in order of abundance), and again, visible gold is common. As with the Norseman reef, and most other reefs in the Norseman Goldfield, the St. Patrick's reef can become very narrow in places, or pinch out altogether.

The St. Patrick's reef is interpreted to be a crosslink-style deposit, formed between the Mararoa structure to the west, and the Norseman structure to the east, though the width of shearing around the reef is relatively wide in comparison to other crosslink deposits (HV1, Bluebird Link), prohibiting its classification as a purely tensional structure. The reef abuts against both the Norseman and Mararoa structures, though recent drill hole evidence suggests that St. Patrick's is expressed as a weak foliation in the hanging wall of the Norseman structure.

Estimation Methodology

Four domains were estimated during the 2020 St Patrick's MRE, these being Domain 3 (St Patrick's Norseman Updip), Domain 4 (St Patrick's Norseman Central), Domain 5 (St Patrick's 2) and Domain 7 (St Patrick's Norseman Downdip).

A two dimensional (2D) Ordinary Kriging interpolation approach was employed to estimate block grades. The 2D interpolation approach utilised varies from a three-dimensional approach (3D) in that estimation of both an accumulation variable (intercept gold composite weighted by true width) and the true width variable, is undertaken on a 2D plane.

The gold mineralisation is hosted within quartz reefs and the interpreted mineralised domains were utilized as hard boundaries within the estimation process. Top caps were applied to the gram-meter accumulation variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain was completed.

The nature of the mineralisation at St Patrick's, combined with the available data spacing, resulted in under-sampled population tails for domains 3, 5 and 7. It is understood that all the domains (3,4,5,7) comprise similar mineralisation controls, orientation and continuity of mineralisation. However, domain 4 comprised the bulk of historical drill, face data and a well-informed statistical dataset, from which to assess Exploratory Data Analysis (EDA) outcomes such as top caps, variography and search neighbourhood parameters. Thus EDA outcomes from domain 4 were tested against adjacent domains and, where appropriate, were applied across domains 3, 5 and 7.

The parent estimation block size selected for interpolation was 10 metres in the Y and X direction and 5 m in the Z direction with the parent block size being determined through kriging neighbourhood analysis, review of vein dimensions, drilling density and potential mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframes. No block rotation was applied.

For all domains variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging were derived and applied to each individual domain. The search strategy was a maximum extrapolation distance of 75 m over two search passes. All domains utilised a minimum of 4 and a maximum of 10.

Check estimates were completed utilising Inverse Distance Squared and Ordinary Kriging with a distance based high-grade limit function.

Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.

Classification Criteria

This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data and estimation quality, drill hole spacing, geological and grade continuity, historical mining activity and metal distribution.

Additional considerations were the stage of project assessment, current understanding of mineralisation controls and selectivity within an open pit and underground mining environment.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 30 m, or was within 20 m of a block estimate, and estimation guality was • considered reasonable (SOR > 0.5).

Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

Drilling had a nominal spacing of 50 m, was within 40 m of the block estimate and estimation quality was • considered low (SOR < 0.5).

Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 500 m below surface, with the threshold for Open Pit and Underground reporting being nominally 100 m below surface.

This approach considers all relevant factors and reflects the Competent Person's view of the deposit.

Cut-off Parameters

The global gold open pit Mineral Resource has been reported at a 0.7 g/t gold cut-off and above -120m RL (0-100m below topographic surface).

The global gold underground Mineral Resource has been reported at a 2.0 g/t gold cut-off and below -120m RL (greater than 100 m below topographic surface).

Both the above cut off grades and reporting constraints are based upon economic parameters historically mined, optimised by previous owners and are supported by recent PNR mining studies.

Assessment of Reasonable Prospects for Economic Extraction

The material reported in the St Patrick's MRE is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations.

The St Patrick's MRE extends nominally 500 m. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with adjacent Norseman deposits of the same style, commodity, comparable size and mining methodology.

No dilution, cost factors or metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

Ore Reserve Statement - St Patrick's Open Pit

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a DFS specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The proposed St Pats Open Pit is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Pit wall angles were designed based on geotechnical recommendations and vary from 47 to 50 degrees.

Dilution of 10% was applied. Dilution was applied at zero grade.

Mining recoveries were set at 95%.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Historical records from previous St Pats processing campaigns through the existing CIL plant indicate that ore treated in the proposed new CIL processing plant will achieve reveries in excess of 95%. For DFS financial modelling purposes a processing recovery of 95% was applied.

Cut-Off Parameters

Cut-off grade was estimated using a cost model developed specifically for the St Pats Open Pit DFS, this grade was 0.7g/t. Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. A Ground Water Extraction License is in place covering the project and allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Ore Reserve Statement - St Patrick's Underground

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The DFS proposed a decline mine with longhole open stoping selected as the production method. Ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive development has 15% dilution applied outside of the development profile.

The production level interval varies between 20 and 30 metres due to lateral offset of the ore shoots, the existing development infrastructure and the decline position. Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). A stoping height of 2.0m was applied to the stope design process. No additional stope dilution was applied in the MSO shape parameters to account for unplanned dilution outside of the conservative 2.0m minimum airleg stoping height. Stope shapes were created using gold grade as the MSO optimisation field.

Mining recoveries were set at 100% for development activities, and 85% for stoping.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Historical records from previous St Pats processing campaigns through the existing CIL plant indicate that ore treated in the proposed new CIL processing plant will achieve reveries in excess of 95%. For DFS financial modelling purposes a processing recovery of 95% was applied.

Cut-Off Parameters

Cut-off grades were estimated using a cost model developed specifically for the St Pats Underground Mine DFS. The estimated airleg mining cut-off grade was rounded to 3.0g/t gold.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. A Ground Water Extraction License is in place covering the project and allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Material Summary - Maybell

Material information summary as required under ASX Listing Rule 5.8 and JORC 2012 reporting guidelines.

Mineral Resource Statement

The Mineral Resource Estimate for Maybell has not changed from previously reported.

Ore Reserve Statement

Material Assumptions for Ore Reserves

The Ore Reserve estimate is based on the 2020 Mineral Resource estimate. The Ore Reserve is based on a DFS specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Classification

The Ore Reserve estimate has been derived from Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. Probable Ore Reserves are derived from Indicated Mineral Resources. It is the Competent Person's view that the classification used for this Ore Reserve estimate is appropriate.

Mining Factors or Assumptions

The proposed Maybell Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Pit wall angles were designed at 43 degrees based on geotechnical recommendations.

Dilution of 10% was applied. Dilution was applied at zero grade.

Mining recoveries were set at 95%.

Metallurgical Factors or Assumptions

The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 94.9% for ore from the Maybell Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 94% was applied.

Cut-Off Parameters

Cut-off grades were estimated using a cost model developed specifically for the Maybell Open Pit DFS, this grade was 0.81g/t. Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Cut-off grade estimates were generated using a gold price assumption of \$2,000 per ounce.

Estimation Methodology

A mine design and mining schedule was created in the process of completing the DFS. A financial model was created that contemplated all capital and operating costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. The Ore Reserve only includes the portion of the Mineral Resource that was determined to be economic to mine as a result of the of the technical and financial modelling that formed the DFS.

Material Modifying Factors, Approvals And Infrastructure Requirements

Mining and processing operations are planned to be conducted wholly within granted Mining Leases and will require statutory approval prior to commencement. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Maybell Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and are wholly within granted Mining Leases. Mining and processing infrastructure formed part of the DFS. Costs associated with constructing infrastructure for the purposes of mining and processing were accounted for in the DFS.

Appendix 3 – JORC Code 2012 Edition – Table 1

SECTION 1: SAMPLING TECHNIQUES AND DATA – COBBLER

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals	This release relates to the Mineral Resource estimate (MRE) for the Cobbler prospect at the Norseman gold project.
	under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	 RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	• RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	 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. 	• Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge)
	 In cases where 'industry standard' work has been done this would be relativel simple (eg'reverse circulation drilling was used to obtain 1 m samples from whice 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases mor explanation may be required, such as where there is coarse gold that has inherer sampling problems. Unusual commodities or mineralisation types (eg submarin nodules) may warrant disclosure of detailed information. 	 All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of 0.15m where clearly defined mineralisation is evident.
S		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks .
		 Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		 Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
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). 	 RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8 inch diameter bit Surface DD – HQ and NQ2 diamond tail completed on RC or Rock Roller precollars, All core has orientations completed where possible with confidence and quality marked accordingly.

Criteria	JORC Code explanation	Commentary
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 	 All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
	of the samples.	 RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
	sample bias may have occurred due to preferential loss/gain of fine/coarse	RC drilling by previous operators to industry standard at the time
	material.	 DD – Core loss has been noted in oxide and transitional material in some holes in the current Cobbler drilling program. Zones of core loss have not been included in any reported assay results.
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.	 Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	mineralogy, sulphide content and composition, quartz content, veining, and general comments.
	The total length and percentage of the relevant intersections logged.	100% of the holes are logged.
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	All RC holes are sampled on 1m intervals
and sample preparation	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled	RC samples taken of the fixed cone splitter, generally dry.
	wet or dry.	Sample sizes are considered appropriate for the material being sampled
	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. 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 situ material 	• Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future
		analysis.
		 For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
	 Whether sample sizes are appropriate to the grain size of the material being 	• Core was cut under the supervision of an experienced geologist, it is routinely cut on the orientation line.
	sampled.	 All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
		• Field duplicates i.e. other half of core or 1/4 core has not been routinely sampled
		Half core is considered appropriate for diamond drill samples.
ש		 RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company
	Discuss any adjustment to assay data.	Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

Criteria	JORC Code explanation	Commentary
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. Specification of the grid system used. 	• Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
	Quality and adequacy of topographic control.	• The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
D		• A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
		Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
		• The project lies in MGA 94, zone 51.
		• Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
		Pre Pantoro survey accuracy and quality assumed to industry standard
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore. 	• Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
	Reserve estimation procedure(s) and classifications applied.	No compositing is applied to diamond drilling or RC sampling.
	Whether sample compositing has been applied.	All RC samples are at 1m intervals.
		• Core samples are both sampled to geology of between 0.15 and 1.2m intervals.
Orientation of data in	• Whether the orientation of sampling achieves unbiased sampling of possible	No bias of sampling is believed to exist through the drilling orientation
relation to geological structure	structures and the extent to which this is known, considering the deposit type.	All drilling in this program is perpendicular to the orebody.
	 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. 	
Sample security	The measures taken to ensure sample security.	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
		Samples are tracked during shipping.
		Pre Pantoro operator sample security assumed to be consistent and adequate.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS - COBBLER

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 tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/44.
	 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. 	• Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.
		• The tenements are in good standing and no known impediments exist.
Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	• Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
D D D D D D D D D D D D D D D D D D D		 In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
		• From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
5		• The Gladstone and Gladstone South deposits were drilled by both CNGC and Croesus who mined the pits between 2004 and 2006.
ð		• The Daisy and Daisy South deposits were drilled by both CNGC and Croesus who mined the Daisy pit till 2003.
Geology	Deposit type, geological setting and style of mineralisation.	• The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
		• The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria	JORC Code explanation	Commentary
		 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick , these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena , sphalerite, chalcopyrite, pyrite and arsenopyrite.
		 The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: » easting and northing of the drill hole collar 	• No assay results are reported as part of this announcement.
	 » elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
	» dip and azimuth of the hole	
	» down hole length and interception depth	
	» hole length.	
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	

Criteria	JORC Code explanation	Commentary
Data aggregation 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.	No assay results are reported as part of this announcement.
	• 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.	
1	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between	These relationships are particularly important in the reporting of Exploration	Surface RC drilling of the pits is perpendicular to the orebody
mineralisation widths and intercept lengths	 If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	• Downhole lengths are reported and true widths are not known at this time as the orebodies in the Cobbler area do demonstrate dip changes.
	• 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').	
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. 	 No assay results are reported as part 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.	No assay results are reported as part of this announcement.
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 meaningful data to report.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	• Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES - COBBLER

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	 Recent Data input has been governed by lookup tables and programmed import of assay data from lab into database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	Data validation procedures used.	 Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
		 Historic drill collars have been picked up by DGPS and all data loaded for spatial validation and compared to metadata recovered from open file reports from previous operators.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	• The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	 Confidence in the geological interpretation is generally proportional to the drill density.
	 Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. 	 Data used for the geological interpretation includes surface reverse circulation and diamond drill logging data. Air Core data was excluded from the estimation process.
	The use of geology in guiding and controlling Mineral Resource estimation.	In general, the interpretation of the mineralised structures is clear.
	The factors affecting continuity both of grade and geology.	• Interpretation of the data based upon mineralisation occurrences identified lodes which were utilised as hard boundaries during estimation.
))		 Geology and grade continuity are constrained by mineralisation intercepts and mining orientation of key deposit structures. Geological interpretation of the data, with quartz veining as a proxy for mineralisation, was used as a basis for domain interpretations. A nominal cut-off above 0.5 g/t gold was utilised, in combination with geology, for domaining mineralisation zones.
		 Weathering, lithology and regolith surfaces were interpreted by Entech geologists from drill logging and extended laterally beyond the limits of the Mineral Resource model using Leapfrog Software.
)		 Geology and grade continuity are constrained by quartz veining within the primary shear zone and parallel structures. At this stage of the project there appears a strong correlation between gold tenor and density of quartz veining.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower	• The Cobbler deposit is approximately 700m in strike length and generally 0.5 to 3m wide extending nominally 150 metres below surface.
	limits of the Mineral Resource.	• Mineralisation within the model which did not satisfy the classification criteria for the MRE remained unclassified.

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Criteria	JO	RC Code explanation	Со	mmentary	
Estimation and modelling techniques	•	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	•	A 3D block model was created for the Cobbler deposit. Mineralised structure were domained separately. Models contain grade estimates and attributes for blocks within each domain only. Geological interpretation forms the basis for the mineralisation domain wireframes: these were oriented along trends of grade continuity and form bar	
ð	•	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account	•	boundaries during estimation. Six domains representing the primary mineralisation were created.	
		of such data. The assumptions made regarding recovery of by-products.	•	Downhole composites were generated at 1 m using a best fit methodology an 60% minimum threshold. Diamond and reverse circulation data was utilise	
	•	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).		considered suitable for assessment as Indicated and Inferred material within JORC framework.	
	•	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	•	Assessment and application of top-cutting for the 3D estimate was undertake on the gold variable within individual domains. Statistical (and spatial) top cu	
	•	Any assumptions benind modelling of selective mining units. Any assumptions about correlation between variables.		basis with 4 domains at Cobbler capped at 15 g/t gold (Domains 2,3,4 and 7 1 domain capped at 20 g/t gold (Domain 5 remained uncapped	
	•	•	Description of how the geological interpretation was used to control the resource estimates.	•	Cobbler
		Discussion of basis for using or not using grade cutting or capping	•	Domain $1 = 20$ g/t, 7 composites capped, with a 4% metal reduction.	
		The process of validation, the checking process used the comparison of model	•	Domain $2 = 15 \text{ g/t}$, 2 composites capped, with a 11% metal reduction.	
	•	data to drill hole data, and use of reconciliation data if available.	•	Domain $3 = 15 \text{ g/t}$, 1 composites capped, with a 1% metal reduction.	
			•	Domain $4 = 15$ g/t, 1 composites capped, with a 14% metal reduction.	
			•	Domain $7 = 15$ g/t, 1 composites capped, with a 4% metal reduction.	
			•	Variography analysis of individual domains was undertaken on gold variables 3D space, followed by Qualitative Kriging Neighbourhood Analysis to assist wi determining appropriate search parameters.	
-			•	The search strategy for domains 1, 3 and 7 was a maximum extrapolation distant of 70 m and 105m over two search passes. A minimum of 6 and maximum of composites was used in the first search pass and reduced to a minimum of 4 ar a maximum of 12 composites in the second pass.	
			•	The search strategy for domains 2, 4, 5 was a maximum extrapolation distant of 45 m and 67.5m over two search passes. A minimum of 6 and maximum of composites was used in the first search pass and reduced to a minimum of 4 ar a maximum of 12 composites in the second pass.	
			•	Block dimensions for interpolation were Y: 10 mN, X: 5mE, Z: 5mRL with succelling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate doma volume definition and honour wireframe geometry. Considerations relating appropriate block size include: drill hole data spacing, potential mining methor variogram continuity ranges and search neighbourhood optimisation.	

	Criteria	JORC Code explanation	Сог	mmentary
			•	A Check Estimate was undertaken using Inverse Distance Squared with Dynamic Anisotropy (DA).
			•	Validation of the gold estimation was completed by global and local bias analysis, statistical and visual inspections in 3D space.
	D		•	No selective mining units were assumed in this estimate. The Mineral Resources were considered suitable for potential open pit mining given the grade, depth from surface, consideration of historical mining at Norseman and PNR internal mining studies.
			•	There were no assumptions made with respect to by-products.
ク			•	No estimation was made for deleterious elements or other non-grade variables. Preliminary gravity and cyanidation metallurgical test work suggests there are not any elements which adversely affect metallurgical recovery.
2	Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and	•	Tonnage was estimated on a dry basis.
))		the method of determination of the moisture content	•	The tonnages of material on stockpiles are quoted on a dry basis.
3	Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Indicated and Inferred, oxide, transitional and fresh Open Pit Mineral Resources have been reported at a 0.7 g/t gold cut-off and within 150m below surface topography.
3)			•	The above cut-off grade and reporting constraints are based upon economic parameters historically mined and optimised by previous owners.
	Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always	•	The Cobbler MRE extends nominally 110 m to 150 m, respectively, below topographic surface.
		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.	•	Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit framework.
)	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	•	Croesus undertook metallurgical test work with AMMTEC in 2002 and 2005 on 3 composites Oxide, Transitional and Fresh at a variety of established grind sizes. The samples displayed very good recoveries in Oxide and transitional ores, but lower recoveries in the fresh material. Pantoro has undertaken Drilling to provide additional data to support the MRE update.
		this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Pantoro Completed additional Metallurgical testing on composites at ALS. Composites were made up of representative ore intervals per metallurgical domain and are representative of the transitional and fresh material to be mined and processed.
			•	The results were consistent with the work completed by AMMTEC with the 2004 results showing 93.75% for oxide, 90.4% for Transitional and 85.8% for fresh on 24 h P80 75 Micron, ALS returned 95.96% for transitional and 78.08% for Fresh at the same established grind size.

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.	The deposits are located on granted exploration leases with existing historic mining disturbance.
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 measurements of ore were calculated from available historic picnometer data.
	• 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.	buik density was applied within the block moder based upon weathering state.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 This Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological, grade continuity and metal distribution. The data utilised in the current Cobbler Mineral Resource include a total of 15,399m of drilling from 221 reverse circulation and diamond holes. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment. This approach considers all relevant factors and reflects the Competent Person's
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	The current Mineral Resource has been reviewed internally. No reconciliation data exists for this project.
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.	 Given the early stage of the project no confidence levels were derived from the current MRE. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement reflects a global estimate of tonnes and grade. No production data is available for these deposits.
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - COBBLER

	Criteria	JO	RC Code explanation	Со	ommentary
	Mineral Resource estimate for conversion to Ore	•	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
	Reserves	•	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
	Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
		•	If no site visits have been undertaken indicate why this is the case.		
\bigcirc	Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	•	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in Sortember 2020.
		•	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	•	Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
	Cut-off parameters	•	The basis of the cut-off grade(s) or quality parameters applied.	•	Cut-off grades were estimated using a cost model developed specifically for the Cobbler Open Pit DFS and ranged from 0.76g/t to 0.83g/t.
M				•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
	Mining factors or assumptions	•	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	•	The proposed Cobbler Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit.
P		•	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	•	Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
		•	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	•	Pit wall angles were designed based on geotechnical recommendations and vary from 35 to 40 degrees.
\bigcirc	-	•	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	•	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
<u> </u>		•	The mining dilution factors used.	•	Dilution varies between 7% and 10% and is depending on the ore width. Dilution
$\overline{\bigcirc}$		•	The mining recovery factors used.	•	was applied at zero grade.
		•	Any minimum mining widths used.		Mining recoveries were set at 95%
		•	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.		
		•	The infrastructure requirements of the selected mining methods.		

	Criteria	JOF	RC Code explanation	Con	nmentary
	Metallurgical factors or assumptions	•	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	•	The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
		•	Whether the metallurgical process is well-tested technology or novel in nature.	•	The CIP process is the conventional gold processing method in Western Australia
)	•	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	•	and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 93.8% for oxide and
		•	Any assumptions or allowances made for deleterious elements.		85.8% for fresh ore from the Cobbler Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery
5		•	The existence of any bulk sample or pilot scale test work and the degree to which		of 90% for oxide and 85% for fresh ore was applied.
			Such samples are considered representative of the oreovery as a whole.	•	There are not any know deleterious elements.
		•	been based on the appropriate mineralogy to meet the specifications?	•	Not applicable.
	Environmental	•	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	•	Mining and processing operations are conducted wholly within granted Mining Leases.
			of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	•	The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Cobbler Mining Centre allowing for the extraction and use of water for mining operations.
				•	Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
				•	The waste rock comprises is non-acid forming.
	Infrastructure	•	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	•	The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
			provided, or accessed.	•	Power generation, water and transportation infrastructure is in place at the site.
				•	Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
)	1			•	An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.

Criteria	JORC Code explanation	Commentary
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs 	• A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	 The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Operating costs were estimated using reasonable equipment productivity and maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing the DFS. There are no known deleterious elements, as such no allowances have beer made. All costs were estimated in Australian dollars. Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS. Processing costs were sourced from the Company's Norseman Gold Projec Processing Plant DFS. The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 applicable to the project. Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce. The gold price assumption used to generate this Ore Reserve estimate is ar average gold price projection from a sample group of banks and financia industry analysts.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	Gold sold at spot price.
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	 A financial model was created that contemplated all capital and operating cost: associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate. Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.

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Criteria	JORC Code explanation	Commentary
Social	The status of agreements with key stakeholders and matters leading to social	The Ore Reserve is located on granted mining leases.
	licence to operate.	• The Company maintains a good relationship with key stakeholders and with the local community.
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are conducted in a secondary with the ising venture accounter.
1	Any identified material naturally occurring risks.	conducted in accordance with the joint venture agreement.
1	The status of material legal agreements and marketing arrangements.	• The Company has management control of the site, and mineral and mining tenements.
)	 The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory 	The mineral and mining tenements remain in good standing.
)	approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	 The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	• The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
1	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	• This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.

SECTION 1: SAMPLING TECHNIQUES AND DATA – DAISY SOUTH (GLADSTONE MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the 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.	• This release relates to the Mineral Resource estimate (MRE) for the Daisy South prospect at the Norseman gold project.
		 RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	 RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
)	 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 	• Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	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.	 All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of 15m where clearly defined mineralisation is evident.
1		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks .
)		 Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		 Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
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). 	 RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8 inch diameter bit
1		 Surface DD – HQ and NQ2 diamond tail completed on RC or Rock Roller precollars, All core has orientations completed where possible with confidence and quality marked accordingly.

Criteria	JORC Code explanation	Commentary
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. 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. 	 All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded. RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed. RC drilling by previous operators to industry standard at the time DD – No significant core loss was noted in the current diamond drilling program at Daisy.
) Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments. 100% of the holes are logged
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	All RC holes are sampled on 1m intervals
and sample preparation	 If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 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 situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 RC samples taken of the fixed cone splitter, generally dry. Sample sizes are considered appropriate for the material being sampled Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future analysis. For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory. Core was cut under the supervision of an experienced geologist; it is routinely cut on the orientation line. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval Field duplicates i.e. other half of core or ¼ core has not been routinely sampled Half core is considered appropriate for diamond drill samples. RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. Lab standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	• Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company database. Data is visually checked for errors before being sent to company database.
	Discuss any adjustment to assay data.	Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

Criteria	JORC Code explanation	Commentary
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. Specification of the grid system used 	 Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
	Quality and adaguacy of tanggraphic control	• The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
	Quality and adequacy of topographic control.	• A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
		Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
		• The project lies in MGA 94, zone 51.
		• Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
		Pre Pantoro survey accuracy and quality assumed to industry standard
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore 	• Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
	Reserve estimation procedure(s) and classifications applied.	No compositing is applied to diamond drilling or RC sampling.
	Whether sample compositing has been applied.	All RC samples are at 1m intervals.
		• Core samples are both sampled to geology of between 0.15 and 1.2m intervals
Orientation of data in	• Whether the orientation of sampling achieves unbiased sampling of possible	• No bias of sampling is believed to exist through the drilling orientation
relation to geological structure	structures and the extent to which this is known, considering the deposit type.	All drilling in this program is perpendicular to the orebody
	 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. 	
Sample security	The measures taken to ensure sample security.	• The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
		Samples are tracked during shipping.
		Pre Pantoro operator sample security assumed to be consistent and adequate
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS - DAISY SOUTH (GLADSTONE MINING CENTRE)

	Criteria	JORC Code explanation	Con	nmentary
	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	•	The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/43.
		 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. 	•	Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.
			•	The tenements are in good standing and no known impediments exist.
))	Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
	parties		•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
リコ			•	From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
-))			•	The Gladstone and Gladstone South deposits were drilled by both CNGC and Croesus who mined the pits between 2004 and 2006.
))			•	The Daisy and Daisy South deposits were drilled by both CNGC and Croesus who mined the Daisy pit till 2003.
<u>」)))</u>	Geology	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
」)) コ			•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

	Criteria	JORC Code explanation	Commentary
			 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick , these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena , sphalerite, chalcopyrite, pyrite and arsenopyrite.
			 The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
	Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 	No assay results are reported as part of this announcement.
)		» easting and northing of the drill hole collar	
)		 » elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
		» dip and azimuth of the hole	
)		» down hole length and interception depth	
		» hole length.	
_		 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	
)	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. 	No assay results are reported as part of this announcement.
		 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.	Appendix 3: Page 102

	Criteria	JORC Code explanation	Commentary
	Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Desure	Surface RC drilling of the pits is perpendicular to the orebody
		 If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	Downhole lengths are reported and true widths are not known at this time as the orebodies in the Princess/North Royal area do demonstrate dip changes
	D	 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'). 	
	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. 	 No assay results are reported as part 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. 	No assay results are reported as part of this announcement.
S	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 meaningful data to report.
T	Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). 	Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE
		 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – DAISY SOUTH (GLADSTONE MINING CENTRE)

SECTION 3: ESTI	SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – DAISY SOU Criteria JORC Code explanation		TH (GLADSTONE MINING CENTRE) Commentary		
Database integrity	• Me tra Re	easures taken to ensure that data has not been corrupted by, for example, anscription or keying errors, between its initial collection and its use for Mineral source estimation purposes.	•	Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.	
	• Da	ata validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.	
Site visits	• Co ou	omment on any site visits undertaken by the Competent Person and the atcome of those visits.	•	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.	
	• If r	no site visits have been undertaken indicate why this is the case.			

Criteria	JORC Code explanation	Commentary
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 f Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main mineralised structures. Data used for the geological interpretation is primarily drawn from drill logging data. In general, the interpretation of the mineralised structures is clear. Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades. Geology and grade continuity are constrained by quartz veining hosted within
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 The Daisy Snear Zone. The Daisy South deposit (including remnants from Daisy) is approximately 840m in strike length, consists of several parallel lodes generally 0.5 to 2m wide and extends nominally 130 m metres below surface.
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production 	 A single block model was generated for the Daisy South deposit. Indi-vidual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only. Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard boundaries during estimation.
	 records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic 	 A total of 25 domains were interpreted during the 2020 Daisy South MRE. A 3D volume block model "3DBM" was utilised with all optimised and validated interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated
	 significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. 	 and/or available for coding. Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to pro-vide adequate domain volume definition and honour wireframe geome-try. Considerations relating to appropriate block size include: drill hole data spacing, conceptual mining
	 Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. 	 method, variogram continuity ranges and search neighbourhood optimisation. Diamond and reverse circulation data was utilised during the estimate. Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction with-in each mineralized domain were completed. Based on this analysis, individual top cuts
	 The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	were applied to each domain.

	Criteria	JORC Code explanation		nmentary
			•	Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. A single reference variogram from the best informed domain was applied as an estimate proxy to domains across the deposit.
	D		•	The search strategy used a maximum extrapolation distance of 54 me-tres over three search passes for each domain. The first pass search was equal to the variogram maximum range (18 metres) with the sec-ond pass search equal to double the variogram range (36 metres) and the third pass triple the variogram range (54 metres). A constant mini-mum of 4 and maximum of 16 composites was maintained across the all three search passes.
))			•	Average sample spacing at Daisy South is nominal 25 metre spaced sections with majority 1m downhole spaced sampling.
			•	All estimates were undertaken using Surpac mining software.
リアショス			•	Check estimates were completed utilising both an ordinary kriging (OK) inside and out of a domain generated by a categorical indicator kriging (IK) as well as an Inverse Distance Squared (ID2) estimate within the interpreted domains. Global and local validation of the gold variable es-timated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
フココ			•	Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
))			•	By products are not included in the resource estimate.
			•	No deleterious elements have been estimated.
	Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	•	Tonnage was estimated on a dry basis.
	Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Mineral Resource has been reported at a 0.7 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 130 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.
)	Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	•	The MRE extends nominally 130 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	 The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	 Daisy South has not been previously mined but is considered a direct analogue to the Daisy deposit mined on the same structure 200m to the north and the adjacent Gladstone deposit. Daisy South had a representative Fresh and an Oxide sample tested for metallurgical recovery by ALS in 2020 by PNRS, the recovery results being 99.42% and 97.48% respectively recovery by gravity and leaching after 24 hours at P80 75 micron. These results aligned with little variation to the work completed independently by Croesus in 2002 on Daisy South composites. Existing test work was also completed on Gladstone by CNGC Ltd in 1999 at AMMTEC on a fresh sample which returned a recovery of 93.4 % at 24h P80 80 micron. No factors from the metallurgy have been applied to the estimates.
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	 The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Bulk density values for ore were assumed based on data from previous resource reports as well as data from historical mining and regional exploration activities. Bulk densities for mineralisation and waste applied are: 1.8, 2.4 and 2.7 for oxide, transitional and fresh material respectively.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.

Criteria	JORC Code explanation	Commentary
		 Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and estimation quality was considered reasonable.
		 Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low.
		 Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.
		• The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 130 m below surface.
Ď		This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	 The current Mineral Resource has been reviewed internally by PNRS, with no fatal flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.
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	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
)	 appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. 	The statement reflects a global estimate of tonnes and grade.
		 No spatially comparable production data was available for this deposit at the time of MRE compilation.
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - DAISY SOUTH (GLADSTONE MINING CENTRE)

Criteria		JORC Code explanation	Commentary		
	Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.	
		Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.	
	Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.	
		If no site visits have been undertaken indicate why this is the case.			
	Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	•	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020	
		The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Persurger to Ora Persurger Such studies will	• M	Mining factors and casts used to generate this Ore Beserve estimate are based	
)		have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.		on the DFS study.	
	Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	•	Cut-off grades were estimated using a cost model developed specifically for the Gladstone Open Pit DFS and ranged from 0.75g/t to 0.82g/t.	
			•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.	
	Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	•	The proposed Gladstone Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit.	
		• The choice, nature and appropriateness of the selected mining method(s) and		Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.	
		other mining parameters including associated design issues such as pre-strip, access, etc.	•	Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.	
)		The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	•	Pit wall angles were designed based on geotechnical recommendations and vary from 30 to 35 degrees.	
)		• The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	•	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.	
		The mining dilution factors used.	•	Dilution varies between 10% and 20% and is depending on the ore width. Dilution	
5		The mining recovery factors used.		was applied at zero grade.	
		Any minimum mining widths used.	•	Mining recoveries were set at 95%.	
		• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.			
		The infrastructure requirements of the selected mining methods.			
Crit	eria	JOI	RC Code explanation	Cor	nmentary
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Met assu	allurgical factors or Imptions	•	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	•	The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	•	•	Whether the metallurgical process is well-tested technology or novel in nature.	•	The CIP process is the conventional gold processing method in Western Australia
		•	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	•	and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 99.9% for oxide and
		•	Any assumptions or allowances made for deleterious elements.		97.5% for fresh ore from the Gladstone Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing
		•	such samples are considered representative of the orebody as a whole.		There are not any know deletarious elements
			For minerals that are defined by a specification, has the ore reserve estimation	•	Net employed
			been based on the appropriate mineralogy to meet the specifications?	•	Not applicable.
Envi	ironmental	•	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	•	Mining and processing operations are conducted wholly within granted Mining Leases.
			of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	•	The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Gladstone Mining Centre allowing for the extraction and use of water for mining operations.
				•	Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
				•	The waste rock comprises is non-acid forming.
Infra	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	•	The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.		
		provided, or accessed.	•	Power generation, water and transportation infrastructure is in place at the site.	
				•	Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
)				•	An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.

Criteria	JORC Code explanation	Commentary
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs 	• A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	 The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Operating costs were estimated using reasonable equipment productivity and maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing the DFS. There are no known deleterious elements, as such no allowances have beer made. All costs were estimated in Australian dollars. Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS. Processing costs were sourced from the Company's Norseman Gold Projec Processing Plant DFS. The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 applicable to the project. Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce. The gold price assumption used to generate this Ore Reserve estimate is ar average gold price projection from a sample group of banks and financia industry analysts.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	Gold sold at spot price.
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	 A financial model was created that contemplated all capital and operating cost: associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate. Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.

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Criteria	JORC Code explanation	Commentary
Social	The status of agreements with key stakeholders and matters leading to social	The Ore Reserve is located on granted mining leases.
	licence to operate.	• The Company maintains a good relationship with key stakeholders and with the local community.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. 	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are conducted in a
1		conducted in accordance with the joint venture agreement.
1	The status of material legal agreements and marketing arrangements.	• The Company has management control of the site, and mineral and mining tenements.
)	 The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory 	The mineral and mining tenements remain in good standing.
)	approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	 The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	• The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
1	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	• This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA – GLADSTONE-EVERLASTING (GLADSTONE MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the 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. 	This release relates to the Mineral Resource estimate (MRE) for the Gladstone/ Everlasting prospect at the Norseman gold project.
		RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	• RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	Aspects of the determination of mineralisation that are Material to the Public Report.	 Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P00.75 micron) for fire accry (40g charge)
	 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 inheren sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of 0.15m where clearly defined mineralisation is evident.
		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks.
		• Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		 Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, aug Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, dep	• RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8 inch diameter bit
	of diamond tails, face-sampling bit or other type, whether core is oriented and i so, by what method, etc).	 Surface DD – HQ and NQ2 diamond tail completed on RC or Rock Roller precollars, All core has orientations completed where possible with confidence and quality marked accordingly.

Criteria	JORC Code explanation	Commentary
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 	 All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
	of the samples.	 RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
	sample bias may have occurred due to preferential loss/gain of fine/coarse	RC drilling by previous operators to industry standard at the time
	material.	 DD – Core loss has been noted in fresh material in some holes in the current Gladstone drilling program. Zones of core loss have not been included in any reported assay results.
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.	 Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	mineralogy, sulphide content and composition, quartz content, veining, and general comments.
	The total length and percentage of the relevant intersections logged.	100% of the holes are logged
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	All RC holes are sampled on 1m intervals
and sample preparation	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled	RC samples taken of the fixed cone splitter, generally dry.
	wet or dry.	Sample sizes are considered appropriate for the material being sampled
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples	analysis.
	 Measures taken to ensure that the sampling is representative of the in situ material Selle studies for instrument of the instrumen	 For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
	 Whether sample sizes are appropriate to the grain size of the material being 	Core was cut under the supervision of an experienced geologist, it is routinely cut on the orientation line.
	sampled.	 All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
		• Field duplicates i.e. other half of core or ¼ core has not been routinely sampled
		Half core is considered appropriate for diamond drill samples.
ש		 RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	• Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company
	Discuss any adjustment to assay data.	Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

Criteria	JORC Code explanation	Commentary
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. Specification of the grid system used 	• Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
	Quality and adequacy of topographic control	• The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
		• A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
		Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
		The project lies in MGA 94, zone 51.
		• Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
		Pre Pantoro survey accuracy and quality assumed to industry standard
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore 	• Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
	Reserve estimation procedure(s) and classifications applied.	No compositing is applied to diamond drilling or RC sampling.
	• Whether sample compositing has been applied.	All RC samples are at 1m intervals.
		• Core samples are both sampled to geology of between 0.15 and 1.2m intervals
Orientation of data in	• Whether the orientation of sampling achieves unbiased sampling of possible	No bias of sampling is believed to exist through the drilling orientation
relation to geological structure	structures and the extent to which this is known, considering the deposit type.	All drilling in this program is perpendicular to the orebody
	 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. 	
Sample security	The measures taken to ensure sample security.	• The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
		Samples are tracked during shipping.
		Pre Pantoro operator sample security assumed to be consistent and adequate
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS – GLADSTONE-EVERLASTING (GLADSTONE MINING CENTRE)

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	• The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/42 and P63/1393.
	 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. 	• Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.P63/1393 is being converted to M63/659.
		• The tenements are in good standing and no known impediments exist.
Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	• Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
		 In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
		• From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
		• The Gladstone and Gladstone South deposits were drilled by both CNGC and Croesus who mined the pits between 2004 and 2006.
		• The Daisy and Daisy South deposits were drilled by both CNGC and Croesus who mined the Daisy pit till 2003.
Geology	Deposit type, geological setting and style of mineralisation.	• The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
		• The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria	JORC Code explanation	Commentary
		 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick , these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena , sphalerite, chalcopyrite, pyrite and arsenopyrite.
		 The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: » easting and northing of the drill hole collar 	• No assay results are reported as part of this announcement.
	 » elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
	» dip and azimuth of the hole	
)	» down hole length and interception depth	
	» hole length.	
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	

Criteria	JORC Code explanation	Commentary
Data aggregation 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.	No assay results are reported as part of this announcement.
	• 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.	
1	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between	These relationships are particularly important in the reporting of Exploration	Surface RC drilling of the pits is perpendicular to the orebody
intercept lengths	 Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	Downhole lengths are reported and true widths are not known at this time as the orebodies in the Princess/North Royal area do demonstrate dip changes
)	• 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').	
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. 	No assay results are reported as part 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.	No assay results are reported as part of this announcement.
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 meaningful data to report.
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	• Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – GLADSTONE-EVERLASTING (GLADSTONE MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	• Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	Data validation procedures used.	 Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	• Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main
	Nature of the data used and of any assumptions made.	mineralised structures.
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	Data used for the geological interpretation is primarily drawn from drill logging data.
	The use of geology in guiding and controlling Mineral Resource estimation.	• In general, the interpretation of the mineralised structures is clear.
	The factors affecting continuity both of grade and geology.	• Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
		• Geology and grade continuity are constrained by quartz veining hosted within the Gladstone Shear Zone.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Gladstone-Everlasting deposit is approximately 1700m in strike length, consists of several parallel lodes generally 0.5 to 2m wide and extends nominally 150 m metres below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	 A single block model was generated for the Gladstone-Everlasting depos Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only. Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form has
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	 boundaries during estimation. A total of 48 domains were interpreted during the 2020 Gladstone-Everlastir MRE.
	The assumptions made regarding recovery of by-products.	A 3D volume block model "3DBM" was utilised with all optimised and validate
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	c interpolation, density, domains, depletions, classification, and other informatic required for resource reporting and subsequent mine planning being interpolate and/or available for coding.
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	 Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with su celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate doma
	Any assumptions behind modelling of selective mining units.	volume definition and honour wireframe geometry. Considerations relating
	Any assumptions about correlation between variables.	method, variogram continuity ranges and search neighbourhood optimisation
	 Description of how the geological interpretation was used to control the resource estimates. 	• Diamond and reverse circulation data was utilised during the estimate
	Discussion of basis for using or not using grade cutting or capping.	Top cuts were applied to the composited gold variable after statistical, spat analysis and assessment of percentage of metal reduction within each mineraliz
	• The process of validation, the checking process used, the comparison of mode data to drill hole data, and use of reconciliation data if available.	domain were completed. Based on the analysis, individual top cuts were appli to each domain.
		 Variography was conducted in the plane of mineralisation and from whi parameters for the Ordinary Kriging and search neighbourhoods were deriv and applied to each individual domain. 3 reference variograms from well inform domains were applied as estimate proxies to domains across the deposit w domains grouped on statistical, geometric and spatial proximity similarities.
		• The search strategy used a maximum extrapolation distance of 246, 132 and metres over three search passes for domains 1001, 1003 and 2005 respective. The first pass search was equal to two thirds of the variogram maximum range (44 and 30 metres for Domains 1001, 1003 and 2005 respectively) with the seco pass search equal to the variogram range (123, 66 and 46 metres for Doma 1001, 1003 and 2005 respectively) and the third pass double the variogram range (246, 132 and 92 metres for Domains 1001, 1003 and 2005 respectively) constant minimum of 4 and maximum of 16 composites was maintained acro the all three search passes.
		Average sample spacing at Gladstone-Everlasting is nominal 25 metre space sections with majority 1m downhole spaced sampling.
		All estimates were undertaken using Surpac mining software

	Criteria	JORC Code explanation	Cor	nmentary
			•	Check estimates were completed utilising both Ordinary Kriging with Dynamic Anisotropy (DA) and Inverse Distance Squared (ID2). Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
	D		•	Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
			•	By products are not included in the resource estimate.
7			•	No deleterious elements have been estimated.
リ	Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	•	Tonnage was estimated on a dry basis.
0000	Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Mineral Resource has been reported at a 0.7 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 150 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.
	Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	•	The MRE extends nominally 150 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
	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.	•	Gladstone was previously mined as part of the Norseman Gold Project by Croesus in the early 2000's. Existing test work was also completed on Gladstone by CNGC Ltd in 1999 at AMMTEC on a fresh sample which returned a recovery of 93.4 % at 24h P80 80 micron. Pantoro completed a metallurgical test on oxide material in 2020 at ALS which returned an overall recovery of 99.89% at 24h P80 75 micron. The review of historic reconciliation data and the performance through the mill combined with test work supports recovery of the in situ Mineral Resource via conventional gravity and cyanidation methodology.
			•	No factors from the metallurgy have been applied to the estimates.
	Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	•	The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.

	Criteria	JO	RC Code explanation	Cor	nmentary
	Bulk density	•	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for yoid spaces (yugs porosity etc.) moisture and differences	•	Bulk density values for ore were assumed based on data from previous resource reports as well as data from historical mining and regional ex-ploration activities. Bulk densities for mineralisation and waste applied are: 1.8, 2.4 and 2.7 for oxide, transitional and fresh material respectively.
)	•	between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.		
	Classification	•	The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.	•	 This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment. Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where: » Drilling had a nominal spacing of 30 m, or was within 30 m of a block estimate, and estimation quality was considered reasonable. Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where: » Drilling had a nominal spacing of 60 m, was within 60 m of the block estimate and where estimation quality was considered low. Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified. The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 150 m below surface.
7				-	view of the deposit.
ツ	Audits or reviews	•	The results of any audits or reviews of Mineral Resource estimates	•	The current Mineral Resource has been reviewed both internally by PNRS and externally by independent geological consultants Entech, with no fatal flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.

	Criteria	JORC Code explanation	Со	mmentary
	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	•	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
		appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource	•	The statement reflects a global estimate of tonnes and grade.
	D	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 Gladstone and Gladstone South Open Pit were mined from January 2004 to March 2006 and produced an estimated 20,000 ounces at a grade of approximately 3.15 g/t Au
		• 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.	•	No spatially comparable production data was available for this deposit at the time of MRE compilation.
(15)		These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - GLADSTONE-EVERLASTING (GLADSTONE MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	 The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020.
)	 The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	 Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	Cut-off grades were estimated using a cost model developed specifically for the Gladstone Open Pit DFS and ranged from 0.75g/t to 0.82g/t.
)		Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	• The proposed Gladstone Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	 Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
1	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	• Pit wall angles were designed based on geotechnical recommendations and vary from 30 to 35 degrees.
)	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	• Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	The mining dilution factors used.	• Dilution varies between 10% and 20% and is depending on the ore width. Dilution
)	The mining recovery factors used.	was applied at zero grade.
)	Any minimum mining widths used.	Mining recoveries were set at 95%.
)	• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	
1	The infrastructure requirements of the selected mining methods.	
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	• The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	• Whether the metallurgical process is well-tested technology or novel in nature.	The CIP process is the conventional gold processing method in Western Australia
	• The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	 The proposed milling circuit produces a grind size P80 of 75 μm. Metallurgical test work shows this will deliver recoveries of approximately 99.9% for oxide and
1	Any assumptions or allowances made for deleterious elements.	97.5% for fresh ore from the Gladstone Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing
)	such samples are considered representative of the orebody as a whole.	 There are not any know deleterious elements
)	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	Not applicable.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waster ock characterisation and the consideration	Mining and processing operations are conducted wholly within granted Mining Leases.
1	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Gladstone Mining Centre allowing for the extraction and use of water for mining operations.
		• Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
		The waste rock comprises is non-acid forming.

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Criteria	JORC Code explanation	Commentary
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	• The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
		• Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
1		• An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs	• A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	 Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Operating costs were estimated using reasonable equipment productivity and maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing the DFS. There are no known deleterious elements, as such no allowances have been made. All costs were estimated in Australian dollars. Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS. Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS. The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce. The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.

	Criteria	JORC Code explanation	Co	ommentary
	Market assessment	 The demand, supply and stock situation for the particular commodi consumption trends and factors likely to affect supply and demand into t future. 	y, • ie	Gold sold at spot price.
		 A customer and competitor analysis along with the identification of likely mark windows for the product. 	et	
)	Price and volume forecasts and the basis for these forecasts.		
		 For industrial minerals the customer specification, testing and acceptan requirements prior to a supply contract. 	e	
)))	Economic	 The inputs to the economic analysis to produce the net present value (NPV) in t study, the source and confidence of these economic inputs including estimat inflation, discount rate, etc. 	e • d	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
9		NPV ranges and sensitivity to variations in the significant assumptions and inpu	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
3			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
	Social	• The status of agreements with key stakeholders and matters leading to soc	al •	The Ore Reserve is located on granted mining leases.
\mathcal{I}		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
	Other	• To the extent relevant, the impact of the following on the project and/or on t estimation and classification of the Ore Reserves:	e •	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are
굇		Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
2)		The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
		The status of governmental agreements and approvals critical to the viabil of the project such as minoral tenement status, and government and statute	ty .	The mineral and mining tenements remain in good standing.
リ シ コ	_	approvals. There must be reasonable grounds to expect that all necessa Government approvals will be received within the timeframes anticipated in t Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of a unresolved matter that is dependent on a third party on which extraction of t reserve is contingent.	ry ne ny ne	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
)	Classification	The basis for the classification of the Ore Reserves into varying confiden categories.	:e •	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
-		• Whether the result appropriately reflects the Competent Person's view of t deposit.	e •	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
		 The proportion of Probable Ore Reserves that have been derived from Measur Mineral Resources (if any). 	d •	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	 This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.

SECTION 1: SAMPLING TECHNIQUES AND DATA – LADY ELEANOR (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF	This release relates to the Mineral Resource estimate (MRE) for the Lady Eleanor prospect at the Norseman gold project.
	instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	 RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
)	Aspects of the determination of mineralisation that are Material to the Public Report.	• Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P90.75 microp) for fire assay (40g charge)
	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.	 All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of15m where clearly defined mineralisation is evident.
1		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks.
)	·	Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
Drilling techniques	ing 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	RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8 inch diameter bit
)	of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Surface DD –NQ2 diamond tail completed on RC or Rock Roller precollars, All core has orientations completed where possible with confidence and quality marked accordingly.
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 	• All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
	 Measures taken to maximise sample recovery and ensure representative nature of the 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. 	• RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
1		RC drilling by previous operators to industry standard at the time
)		DD-No significant core loss was noted in the diamond drilling at Lady Eleanor
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.	Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy sulphide content and composition guartz content veiping and
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	general comments.
	The total length and percentage of the relevant intersections logged.	100% of the holes are logged

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Criteria	JORC Code explanation	Commentary
Sub-sampling techniques	• If core, whether cut or sawn and whether quarter, half or all core taken.	All RC holes are sampled on 1m intervals
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples taken of the fixed cone splitter, generally dry.
		Sample sizes are considered appropriate for the material being sampled
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Field duplicates are routinely collected for RC drilling.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future analysis.
	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.	• For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
)	• Whether sample sizes are appropriate to the grain size of the material being sampled.	• Core was cut under the supervision of an experienced geologist, it is routinely cut on the orientation line.
)		All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
Ő		• Field duplicates i.e. other half of core or 1/4 core has not been routinely sampled
		Half core is considered appropriate for diamond drill samples.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice.
)		No geophysical logging of drilling was performed.
		 Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification
1		 RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).

Ver ass	ification of sampling and aying	• The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
		The use of twinned holes.	There are no twinned holes drilled as part of these results
		• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	 All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company database manager for further validation and unloaded into an officit database.
		Discuss any adjustment to assay data.	Hard copies of original drill logs are kept in onsite office.
			Visual checks of the data re completed in Surpac mining software
			• No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.
Loc	cation of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole	RC drill holes used a REFLEX GYRO with survey measurements every 5m.
		estimation.	• A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
3		Specification of the grid system used.	• Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north
		Quality and adequacy of topographic control.	seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
			Surface DD/RC drilling is marked out using GPS and final pickups using DGPS collar pickups
			The project lies in MGA 94, zone 51.
			Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
Dat	ta spacing and	Data spacing for reporting of Exploration Results.	This current round of drilling was nominally on 25m northing lines and spacing was between 10.30m across section lines depending on pre-existing hele
	Indution	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Minoral Poseurce and Ore	positions.
2		Reserve estimation procedure(s) and classifications applied.	No compositing is applied to RC or diamond sampling.
		Whether sample compositing has been applied.	All RC samples are at 1m intervals.
			• Core samples are both sampled to geology of between 0.15 and 1.2m intervals.
Ori	entation of data in	• Whether the orientation of sampling achieves unbiased sampling of possible	No bias of sampling is believed to exist through the drilling orientation
stru	ation to geological ucture	ical structures and the extent to which this is known, considering the deposit type.	All drilling in this program is perpendicular to the orebody
		• 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.	

Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	• The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
		Samples are tracked during shipping.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS – LADY ELEANOR (SCOTIA MINING CENTRE)

\bigcirc	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	• The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/112.
		 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. 	 Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.
			The tenements are in good standing and no known impediments exist.
ani	Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	• Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
erson,	parties		 In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
\bigcirc			• From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
			• The Scotia deposit was drilled drilled by CNGC who mined the deposit by both open pit and underground methods between 1987 and 1996.
\bigcirc			

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	• The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
		• The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.
		 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena, sphalerite, chalcopyrite, pyrite and arsenopyrite.
		 The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.

Criteria	JORC Code explanation	Commentary
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	No assay results are reported as part of this announcement.
	» easting and northing of the drill hole collar	
	» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
1	» dip and azimuth of the hole	
	» down hole length and interception depth	
)	» hole length.	
)	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation method	 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. 	No assay results are reported as part of this announcement.
	• 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.	
Relationship between mineralisation widths and	• These relationships are particularly important in the reporting of Exploration Results.	 Surface RC/DD drilling is perpendicular to the orebody Downhole lengths are reported and true widths are estimated using prior
intercept lengths	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	oriented core measurements as a guide.
)	• 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').	
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. 	No assay results are reported as part 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.	No assay results are reported as part of this announcement.
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 meaningful data to report.

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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. 	 Further to this MRE, additional drilling will be undertaken to evaluate and tes the potential for depth and Strike extensions of the ore shoots for further MR updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – LADY ELEANOR (SCOTIA MINING CENTRE)

	Criteria	JOF	RC Code explanation	Сог	mmentary
	Database integrity	•	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	•	Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
D S D		•	Data validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
	Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
(JU)		•	If no site visits have been undertaken indicate why this is the case.		
	Geological interpretation	•	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	•	Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main minoralized structures
\bigcirc		•	Nature of the data used and of any assumptions made.		
\bigcirc		•	The effect, if any, of alternative interpretations on Mineral Resource estimation.	•	Data used for the geological interpretation includes surface and trench mapping and drill logging data.
		•	The use of geology in guiding and controlling Mineral Resource estimation.	•	In general, the interpretation of the mineralised structures is clear.
		•	The factors affecting continuity both of grade and geology.	•	Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
				•	Geology and grade continuity are constrained by quartz veining within the Scotia Shear Zone.
	Dimensions	•	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	•	The Lady Eleanor deposit is approximately 400m in strike length, consists of multiple parallel lodes generally 0.5 to 2m wide and extends nominally 100 m metres below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	 A single block model was generated for the Lady Eleanor deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
		 Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard boundaries during estimation
	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	 A total of 8 primary mineralisation domains were interpreted during the 2020 Lady Eleanor MRE.
	The assumptions made regarding recovery of by-products.	• A 3D volume block model "3DBM" was utilised with all optimised and validated
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated and/or available for coding.
	 In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	 Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate domain
	Any assumptions behind modelling of selective mining units.	volume definition and honour wireframe geometry. Considerations relating
	Any assumptions about correlation between variables.	method, variogram continuity ranges and search neighbourhood optimisation.
	Description of how the geological interpretation was used to control the resource	Diamond and reverse circulation data was utilised during the estimate
	 Discussion of basis for using or not using grade cutting or capping. 	• Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available	domain were completed. Based on the analysis, individual top cuts were applied to each domain.
		 Variography was drawn from Scotia Domain 12 (SCMRE2020) with it acting as a well-informed proxy to domains across the deposit with statistical, geometric and spatial proximity similarities.
		• The search strategy used a maximum extrapolation distance of 84 metres over three search passes. The first pass search was equal to the variogram maximum range (28 metres) with the second pass search double the variogram range (56 metres) and the third pass triple the variogram range (84 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the first and second search passes, dropping to a minimum of 3 samples for the third pass.
		• A grade distance limiting function was applied to all domains restricting composite assays above 20 g/t to a range equal to the first pass of the domain, this being 28 metres.
		 Average sample spacing at Lady Eleanor is nominally 25 metre spaced sections with majority 1m downhole spaced sampling, widening to a nominal 50 metre section spacing at depth.
		All estimates were undertaken using Surpac mining software.
		Check estimates were completed utilising Inverse Distance Squared (ID2) interpolation.

	Criteria	JORC Code explanation	Con	nmentary
			•	Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
			•	By products are not included in the resource estimate.
>>			•	No deleterious elements have been estimated.
	Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	•	Tonnage was estimated on a dry basis.
	Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Mineral Resource has been reported at a 0.5 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 100 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted.
	Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	•	The MRE extends nominally 100 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
	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. 	•	Scotia (the nearest lithological and structural analogue) has previously been mined and by both Open pit and Underground methods with all material treated through the existing Norseman plant with no issues noted for the 155,000 ounces produced historically. Scotia had a representative Fresh sample tested for metallurgical recovery by ALS in 2020 by PNRS, the recovery results were 92.57% recovery by gravity and leaching after 24 hours at P80 75 micron. No factors from the metallurgy have been applied to the estimates.
	Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	•	The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.

Criteria	JORC Code explanation	Commentary
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 measurements of ore were calculated from drill core on the Scotia deposit for fresh material only using the water displacement method and data from historical mining and regional exploration activities.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences	Bulk densities for mineralisation applied are: 1.8, 2.4 and 2.91 for oxide, transitional and fresh material respectively.
	 Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	Bulk densities for waste material applied are: 1.8, 2.4 and 2.98 for oxide, transitional and fresh material respectively.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative 	This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes bictorical mining activity as well as metal distribution.
	confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	 Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.
	Whether the result appropriately reliects the Competent Person's view of the deposit.	 Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:
) 		» Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and estimation quality was considered reasonable.
		 Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low.
		Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.
		The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 100 m below surface.
		This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	• The current Mineral Resource has been reviewed internally by PNRS with no fatal flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.

Criteria	JORC Code explanation	Со	mmentary
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	•	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to guantify the relative accuracy of the resource	The statement reflects a global estimate of tonnes and grade.	
Ð	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.	•	No historic production data was available for this deposit at the time of MRE compilation.
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.		
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - LADY ELEANOR (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	• If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS
	• The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	Open Pit
		• Cut-off grade was estimated using a cost model developed specifically for the Scotia Open Pit DFS.
		The estimated open pit cut-off grade was 0.85g/t gold.
		Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
		Underground
		• Cut-off grades were estimated using a cost model developed specifically for the Scotia Underground DFS.
)		The estimated Stoping cut-off grade was rounded to 3.0g/t gold.
		An incremental development cut-off grade of 1.0g/t gold was applied to ore development necessarily mined to access each stoping block.
Mining factors or	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility	Open Pit
assumptions	Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	• The proposed Scotia Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground,
)	• The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip,	and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
	 access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope 	Mineral Resources were optimized using whittle 4D software followed by detailed
		open pit design using Surpac software.
	sizes, etc), grade control and pre-production drilling.	Pit wall angles were designed based on geotechnical recommendations and vary from 38 to 50 degrees
)	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	 Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	The mining dilution factors used.	Dilution varies between 10% and 20% and is depending on the ore width. Dilution
)	The mining recovery factors used.	was applied at zero grade.
1	Any minimum mining widths used.	Mining recoveries were set at 95%.
	The manner in which inferred Mineral Decourses are utilized in mining studies	Underground
	and the sensitivity of the outcome to their inclusion.	The DFS proposed a decline mine with mechanised jumbo development.
/	The infrastructure requirements of the selected mining methods.	• Capital development is performed by twin boom jumbo and ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive development has 15% dilution applied at zero grade.
)		• Production is by longhole stoping methods and are considered suitable by the Competent Person for the geotechnical conditions encountered at the mine.
		• Stope strike length will generally be limited to 15m prior to placement of a pillar to maintain geotechnical control. The typical level interval is 15m.
		• Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). Stope shapes were created using gold grade as the MSO optimisation field with the stoping cut-off grade applied (3.0g/t gold).

Criteria		JORC Code explanation	Commentary
			 A minimum mining width of 1.0m was applied. Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade. Mining recoveries were set at 100% for development activities and 85% for open stoping. Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate. All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.
Metallurg	jical factors or ons	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	 The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralisation. The CIP process is the conventional gold processing method in Western Australia and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 µm. Metal-lurgical test work shows this will deliver recoveries of approximately 92.6% for ore from the Scotia Mining Centre when treated in the pro-posed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied. There are not any know deleterious elements. Not applicable.
Environm	ental	 The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported. 	 Mining and processing operations are conducted wholly within granted Mining Leases. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Scotia Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations. The waste rock comprises is non-acid forming.

Criteria	JORC Code explanation	Commentary
Infrastructure	 The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. 	t • The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
		• Power generation, water and transportation infrastructure is in place at the site.
D		Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
		An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study	 A financial model was created that contemplated all capital costs asso-ciated with the proposed mining operation, using supplier and contractor costs provided to
	The methodology used to estimate operating costs.	the Company for the purposes of completing the DFS.
	Allowances made for the content of deleterious elements.	 Operating costs were estimated using reasonable equipment productivi-ty a maintenance assumptions contractor supplied costs and con-sumable put
	• The source of exchange rates used in the study.	inputs from suppliers provided to the Company for the purposes of completing
	Derivation of transportation charges.	the DFS.
	The basis for forecasting or source of treatment and refining charges, penalties fo failure to meet specification, etc.	r There are no known deleterious elements, as such no allowances have been made.
	The allowances made for royalties payable, both Government and private.	All costs were estimated in Australian dollars.
		Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
		 Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
		• The ad valorem value-based state government royalty of 2.5% is ap-plied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	 Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	 charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	• The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.
Market assessment	The demand, supply and stock situation for the particular commodity consumption trends and factors likely to affect supply and demand into the future.	 Gold sold at spot price.
	A customer and competitor analysis along with the identification of likely marker windows for the product.	t
	• Price and volume forecasts and the basis for these forecasts.	
	 For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	
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Criteria	JORC Code explanation	Commentary
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimate inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and input 	 A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
		 NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
		• Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
Social	• The status of agreements with key stakeholders and matters leading to soci	al • The Ore Reserve is located on granted mining leases.
	licence to operate.	• The Company maintains a good relationship with key stakeholders and with the local community.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: 	• The Company has 50% ownership of the Project through an unincorpo-rated joint venture with Central Norseman Gold Corporation. All project activities are
	Any identified material naturally occurring risks.	conducted in accordance with the joint venture agreement.
	The status of material legal agreements and marketing arrangements.	The Company has management control of the site, and mineral and mining tenements.
	 The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutor approvals. There must be reasonable grounds to expect that all necessar Government approvals will be received within the timeframes anticipated in th Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of ar unresolved matter that is dependent on a third party on which extraction of th reserve is contingent. 	 The mineral and mining tenements remain in good standing. The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	• The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	 Whether the result appropriately reflects the Competent Person's view of the deposit. 	• Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
_	The proportion of Probable Ore Reserves that have been derived from Measure Mineral Resources (if any).	d • It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	• This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	• Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	
SECTION 1: SAMPLING TECHNIQUES AND DATA – PANDA (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the 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. 	 This release relates to the Mineral Resource estimate (MRE) for the Panda prospect at the Norseman gold project. RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	• RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	Aspects of the determination of mineralisation that are Material to the Public Report.	Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
	 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. 	
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). 	RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8 inch diameter bit.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	 RC- recoveries are monitored by visual inspection of split reject and lab weight
	 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. 	 RC drilling by previous operators to industry standard at the time
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.	Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	mineralogy, sulphide content and composition, quartz content, veining, and general comments.
	The total length and percentage of the relevant intersections logged.	100% of the holes are logged

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	All RC holes are sampled on 1m intervals.
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wat an drug	RC samples taken of the fixed cone splitter, generally dry.
	wet of dry.	Sample sizes are considered appropriate for the material being sampled
P. C.	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	Field duplicates are routinely collected for RC drilling.
	• 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 situ material collected, including for instance results for field duplicate/second-half sampling.	
)	• Whether sample sizes are appropriate to the grain size of the material being sampled.	
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assay determined using fire assay with 40g charge. Where other elements are assays are determined using fire assay with 40g charge. Where other elements are assays are determined using fire assay with 40g charge. Where other elements are assays are determined using fire assay with 40g charge. Where other elements are assays are determined using fire assay with 40g charge.
)	• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	methods used approach total mineral consumption and are typical of industry standard practice.
1	Nature of quality control procedures adopted (eg standards, blanks, duplicates,	No geophysical logging of drilling was performed.
	external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	 Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification
		 RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).

	Criteria	JO	RC Code explanation	Сог	mmentary
	Verification of sampling and assaying	•	The verification of significant intersections by either independent or alternative company personnel.	•	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
		•	The use of twinned holes.	•	There are no twinned holes drilled as part of these results
	D	•	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	•	All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.
-				•	Visual checks of the data re completed in Surpac mining software
)				•	No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.
)	Location of data points	•	Accuracy and quality of surveys used to locate drill holes (collar and down-hole	•	RC drill holes used a REFLEX GYRO with survey measurements every 5m.
))			estimation.	•	A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
		•	Specification of the grid system used. Quality and adequacy of topographic control.	•	Surface RC drilling is marked out using GPS and final pickups using DGPS collar pickups
				•	The project lies in MGA 94, zone 51.
1))				•	Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
	Data spacing and distribution	•	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied	•	This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions. No compositing is applied to RC sampling. All RC samples are at 1m intervals
	Orientation of data in	•	Whether the orientation of sampling achieves unbiased sampling of possible	•	No bias of sampling is believed to exist through the drilling orientation
))	relation to geological		structures and the extent to which this is known, considering the deposit type.		All drilling in this program is perpendicular to the orebody
		•	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.		
	Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
				•	Samples are tracked during shipping.
	Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS – PANDA (SCOTIA MINING CENTRE)

	Criteria	JORC Code explanation	Cor	nmentary
	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 	•	The tenement where the MRE has been completed is 50% held by Pantoro subsidiary com-pany Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/36.
)	 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. 	•	Tenement transfers to Pantoro South are yet to occur as stamp duty assess-ments have not been completed by the office of state revenue. The tenements predate na-tive title claims.
			•	The tenements are in good standing and no known impediments exist.
)	Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
	parties		•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
3)			•	From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
			•	The Scotia deposit was drilled drilled by CNGC who mined the deposit by both open pit and underground methods between 1987 and 1996.
	Geology	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
	1		•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria	JORC Code explanation	Commentary
		 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick , these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena , sphalerite, chalcopyrite, pyrite and arsenopyrite.
		 The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: » easting and northing of the drill hole collar 	• No assay results are reported as part of this announcement.
	 » elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
	» dip and azimuth of the hole	
	» down hole length and interception depth	
	» hole length.	
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	

Criteria	JORC Code explanation	Commentary
Data aggregation 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.	No assay results are reported as part of this announcement.
	• 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.	
1	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between	These relationships are particularly important in the reporting of Exploration	Surface RC drilling is perpendicular to the orebody
intercept lengths	 Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	Downhole lengths are reported and true widths are estimated using prior oriented core measurements as a guide.
)	• 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').	
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. 	No assay results are reported as part 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.	No assay results are reported as part of this announcement.
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 meaningful data to report.
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	• Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – PANDA (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	• Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	Data validation procedures used.	 Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. 	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
)	If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main
	Nature of the data used and of any assumptions made.	mineralised structures.
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	Data used for the geological interpretation includes surface and trench mapping and drill logging data.
	The use of geology in guiding and controlling Mineral Resource estimation.	In general, the interpretation of the mineralised structures is clear.
	The factors affecting continuity both of grade and geology.	 Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
		• Geology and grade continuity are constrained by quartz veining within the Scotia Shear Zone.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Panda deposit is approximately 220m in strike length, consists of multiple parallel lodes generally 0.5 to 2m wide and extends nominally 130 m metres below surface.

Criteria	JOF	RC Code explanation	Cor	nmentary
Estimation and modelling techniques	•	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data	•	A single block model was generated for the Panda deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
		points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	•	Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard boundaries during actimation
D	•	records and whether the Mineral Resource estimate takes appropriate account of such data.	•	A total of 8 primary mineralisation domains were interpreted during the 2020 Panda Maiden MRE.
	•	The assumptions made regarding recovery of by-products.	•	A 3D volume block model "3DBM" was utilised with all optimised and validated
	•	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).		interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated and/or available for coding.
	•	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	•	Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate domain
	•	Any assumptions behind modelling of selective mining units.		volume definition and honour wireframe geometry. Considerations relating
	•	Any assumptions about correlation between variables.		method, variogram continuity ranges and search neighbourhood optimisation.
	•	Description of how the geological interpretation was used to control the resource	•	Diamond and reverse circulation data was utilised during the estimate.
		Discussion of basis for using or not using grade cutting or capping.	•	Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized
	•	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available		domain were completed. Based on the analysis, individual top cuts were applied to each domain.
			•	Variography was drawn from Scotia Domain 2 (SCMRE2020) with it acting as a well-informed proxy to domains across the deposit with statistical, geometric and spatial proximity similarities.
			•	The search strategy used a maximum extrapolation distance of 38 metres over three search passes. The first pass search was equal to the variogram maximum range (38 metres) with the second pass search double the variogram range (76 metres) and the third pass triple the variogram range (114 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the first and second search passes, dropping to a minimum of 3 samples for the third pass.
			•	A grade distance limiting function was applied to all domains restricting composite assays above 20 g/t to a range equal to the first pass of the domain, this being 38 metres.
			•	Average sample spacing at Panda is nominally 25 metre spaced sections with majority 1m downhole spaced sampling, widening to a nominal 50 metre section spacing at depth.
			•	All estimates were undertaken using Surpac mining software.
			•	Check estimates were completed utilising both Ordinary Kriging with Dynamic Anisotropy (DA) and Inverse Distance Squared (ID2).

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	Criteria	JORC Code explanation	Con	nmentary
			•	Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
			•	By products are not included in the resource estimate.
>>			•	No deleterious elements have been estimated.
	Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	•	Tonnage was estimated on a dry basis.
	Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Mineral Resource has been reported at a 0.5 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 100 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted.
	Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	•	The MRE extends nominally 130 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
	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. 	•	Scotia (the nearest lithological and structural analogue) has previously been mined and by both Open pit and Underground methods with all material treated through the existing Norseman plant with no issues noted for the 155,000 ounces produced historically. Scotia had a representative Fresh sample tested for metallurgical recovery by ALS in 2020 by PNRS, the recovery results were 92.57% recovery by gravity and leaching after 24 hours at P80 75 micron. No factors from the metallurgy have been applied to the estimates.
	Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	•	The deposits are on granted mining leases with existing mining disturb-ance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.

Criteria	JORC Code explanation	Commentary
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptio If determined, the method used, whether wet or dry, the frequency of t measurements, the nature, size and representativeness of the samples. 	 Bulk density measurements of ore were calculated from drill core on the Scotia deposit for fresh material only using the water displacement method and data from historical mining and regional exploration activities.
þ	The bulk density for bulk material must have been measured by methods the adequately account for void spaces (vugs, porosity, etc.), moisture and difference between rock and alteration zones within the deposit.	• Bulk densities for mineralisation and waste applied are: 1.65, 1.8, 2.4 and 2.7 for transported cover, oxide, transitional and fresh material respectively.
	Discuss assumptions for bulk density estimates used in the evaluation process the different materials.	of
Classification	 The basis for the classification of the Mineral Resources into varying confider categories. Whether appropriate account has been taken of all relevant factors (i.e. relations) 	 This Maiden Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation
	confidence in tonnage/grade estimations, reliability of input data, confidence continuity of geology and metal values, quality, quantity and distribution of t data).	 volumes, historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.
	deposit.	 Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and estimation quality was considered reasonable.
		 Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low.
		• Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.
=		• The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 130 m below surface.
		• This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	• The current Mineral Resource has been reviewed internally by PNRS with no fatal flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.

Criteria	JORC Code explanation	Cor	mmentary
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 relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement reflects a global estimate of tonnes and grade. As this is a maiden MRE, no historic production data was available for this deposit at the time of MRE compilation.
	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data where available. 		

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - PANDA (SCOTIA MINING CENTRE)

2	Criteria	JORC Code explanation	Cor	mmentary
リ	Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
	Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
	Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
)		If no site visits have been undertaken indicate why this is the case.		
)	Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	•	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS
	1	• The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	•	Completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	Open Pit
		• Cut-off grade was estimated using a cost model developed specifically for the Scotia Open Pit DFS.
		The estimated open pit cut-off grade was 0.85g/t gold.
		Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
		Underground
		• Cut-off grades were estimated using a cost model developed specifically for the Scotia Underground DFS.
)		The estimated Stoping cut-off grade was rounded to 3.0g/t gold.
		An incremental development cut-off grade of 1.0g/t gold was applied to ore development necessarily mined to access each stoping block.
Mining factors or	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility	Open Pit
assumptions	Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	• The proposed Scotia Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground,
)	 The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. 	and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
		Mineral Resources were optimized using whittle 4D software followed by detailed
		open pit design using Surpac software.
		Pit wall angles were designed based on geotechnical recommendations and vary from 38 to 50 degrees
)	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	 Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	The mining dilution factors used.	Dilution varies between 10% and 20% and is depending on the ore width. Dilution
)	The mining recovery factors used.	was applied at zero grade.
1	Any minimum mining widths used.	Mining recoveries were set at 95%.
	The manner in which inferred Mineral Decourses are utilized in mining studies	Underground
	and the sensitivity of the outcome to their inclusion.	The DFS proposed a decline mine with mechanised jumbo development.
/	The infrastructure requirements of the selected mining methods.	• Capital development is performed by twin boom jumbo and ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive development has 15% dilution applied at zero grade.
)		• Production is by longhole stoping methods and are considered suitable by the Competent Person for the geotechnical conditions encountered at the mine.
		• Stope strike length will generally be limited to 15m prior to placement of a pillar to maintain geotechnical control. The typical level interval is 15m.
		• Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). Stope shapes were created using gold grade as the MSO optimisation field with the stoping cut-off grade applied (3.0g/t gold).

Criteria		JORC Code explanation	Commentary
			 A minimum mining width of 1.0m was applied. Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade. Mining recoveries were set at 100% for development activities and 85% for open stoping. Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate. All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.
Metallurg assumption	jical factors or ons	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	 The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralisation. The CIP process is the conventional gold processing method in Western Australia and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 µm. Metal-lurgical test work shows this will deliver recoveries of approximately 92.6% for ore from the Scotia Mining Centre when treated in the pro-posed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied. There are not any know deleterious elements. Not applicable.
Environm	nental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 Mining and processing operations are conducted wholly within granted Mining Leases. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Scotia Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations. The waste rock comprises is non-acid forming.

Criteria	JORC Code explanation	Commentary
Infrastructure	The existence of appropriate infrastructure: availability of land for plan development, power, water, transportation (particularly for bulk commodities) labour, accommodation; or the ease with which the infrastructure can be	 The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
D .		Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
		An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study	 A financial model was created that contemplated all capital costs asso-ciated with the proposed mining operation, using supplier and contractor costs provided to
	The methodology used to estimate operating costs.	the Company for the purposes of completing the DFS.
	Allowances made for the content of deleterious elements.	Operating costs were estimated using reasonable equipment productivi-ty and maintenance assumptions, contractor supplied costs and con-sumable price
	• The source of exchange rates used in the study.	inputs from suppliers provided to the Company for the purposes of completing
	Derivation of transportation charges.	the DFS.
	The basis for forecasting or source of treatment and refining charges, penalties fo failure to meet specification, etc.	r There are no known deleterious elements, as such no allowances have been made.
	The allowances made for rovalties pavable, both Government and private.	All costs were estimated in Australian dollars.
		Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
		 Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
		• The ad valorem value-based state government royalty of 2.5% is ap-plied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	 Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	 charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	• The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.
Market assessment	The demand, supply and stock situation for the particular commodity consumption trends and factors likely to affect supply and demand into the future.	v, • Gold sold at spot price.
	A customer and competitor analysis along with the identification of likely marker windows for the product.	t
	• Price and volume forecasts and the basis for these forecasts.	
	 For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	
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Criteria	JORC Code explanation	Commentary
Economic	 The inputs to the economic analysis to produce the net present value (NPV) is study, the source and confidence of these economic inputs including estiminflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and in 	 A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
		NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
		Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
Social	The status of agreements with key stakeholders and matters leading to a	• The Ore Reserve is located on granted mining leases.
	licence to operate.	• The Company maintains a good relationship with key stakeholders and with the local community.
Other	• To the extent relevant, the impact of the following on the project and/or o estimation and classification of the Ore Reserves:	n the • The Company has 50% ownership of the Project through an unincorpo-rated joint venture with Central Norseman Gold Corporation. All project activities are
	Any identified material naturally occurring risks.	conducted in accordance with the joint venture agreement.
	The status of material legal agreements and marketing arrangements.	The Company has management control of the site, and mineral and mining tenements.
	 The status of governmental agreements and approvals critical to the via of the project, such as mineral tenement status, and government and stat approvals. There must be reasonable grounds to expect that all nece Government approvals will be received within the timeframes anticipated i Pre-Feasibility or Feasibility study. Highlight and discuss the materiality o unresolved matter that is dependent on a third party on which extraction o reserve is contingent. 	 bility utory The mineral and mining tenements remain in good standing. The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	The basis for the classification of the Ore Reserves into varying confic categories.	lence • The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	Whether the result appropriately reflects the Competent Person's view of deposit.	f the Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
_	The proportion of Probable Ore Reserves that have been derived from Meas Mineral Resources (if any).	• It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	• This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA – SCOTIA (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Cor	mmentary
Sampling techr	 Nature and quality of sampling (eg cut channels, random chips, or specialised industry standard measurement tools appropriate to the mineration) 	fic • als	This release relates to the Mineral Resource estimate (MRE) for the Scotia prospect at the Norseman gold project.
	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.	RF ad	RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	 Include reference to measures taken to ensure sample representivity and t appropriate calibration of any measurement tools or systems used. 	he •	RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	 Aspects of the determination of mineralisation that are Material to the Pub Report. In cases where 'industry standard' work has been done this would be relative 	lic •	Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P00.75 microp) for fire accay (400 charge)
))))]	In cases where industry standard work has been done this would be related simple (eg 'reverse circulation drilling was used to obtain 1 m samples from whi 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 inhere sampling problems. Unusual commodities or mineralisation types (eg submari nodules) may warrant disclosure of detailed information.	ch ore nt ne	All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of15m where clearly defined mineralisation is evident.
		•	Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks.
		•	Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		•	Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75 μ m, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Drilling technic	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, aug Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, dep 	er, • th	RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8-inch diameter bit
1	of diamond tails, face-sampling bit or other type, whether core is oriented and so, by what method, etc).	•	Surface DD – HQ and NQ2 diamond tail completed on RC or Rock Roller precollars, All core has orientations completed where possible with confidence and quality marked accordingly.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	 All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	 RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse	 RC drilling by previous operators to industry standard at the time
	material.	DD –No significant Core loss was noted in current drilling.
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.	 Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration misoralogy, cubbide context and composition guarta context variance and misoralogy.
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	general comments.
	The total length and percentage of the relevant intersections logged.	100% of the holes are logged
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	All RC holes are sampled on 1m intervals
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled	RC samples taken of the fixed cone splitter, generally dry.
	wet or dry.	Sample sizes are considered appropriate for the material being sampled
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	 Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples	analysis.
	 Measures taken to ensure that the sampling is representative of the in situ material 	• For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
	 Whether sample sizes are appropriate to the grain size of the material being 	• Core was cut under the supervision of an experienced geologist; it is routinely cut on the orientation line.
	sampled.	All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
		• Field duplicates i.e. other half of core or 1/4 core has not been routinely sampled
		Half core is considered appropriate for diamond drill samples.
		RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model reading times calibrations factors applied and their derivation atc. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice.
Ð	Nature of quality control procedures adopted (eq standards blanks duplicates)	• No geophysical logging of drilling was performed.
	external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	 Lab standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 microns is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification
		 RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	 Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	ta • All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company
	Discuss any adjustment to assay data.	database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		• No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered .

Criteria	JORC Code explanation	Commentary
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. Specification of the grid system used 	 Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
	Quality and adequacy of tanggraphic control	• The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
	Quality and adequacy of topographic control.	• A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
		Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
		The project lies in MGA 94, zone 51.
		Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
		Pre Pantoro survey accuracy and quality assumed to industry standard
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Original Continuity appropriate for the Mineral Continuity appropriate for th	Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
	Reserve estimation procedure(s) and classifications applied.	No compositing is applied to diamond drilling or RC sampling.
	Whether sample compositing has been applied.	All RC samples are at 1m intervals.
		• Core samples are both sampled to geology of between 0.15 and 1.2m intervals
Orientation of data in	• Whether the orientation of sampling achieves unbiased sampling of possible	• No bias of sampling is believed to exist through the drilling orientation
relation to geological structure	structures and the extent to which this is known, considering the deposit type.	All drilling in this program is perpendicular to the orebody
	 If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, thi should be assessed and reported if material. 	y s
Sample security	The measures taken to ensure sample security.	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
		Samples are tracked during shipping.
		Pre Pantoro operator sample security assumed to be consistent and adequate
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS – SCOTIA (SCOTIA MINING CENTRE)

	Criteria	JORC Code explanation	Cor	nmentary
	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 	•	The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/36.
/()	 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. 	•	Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.
_			•	The tenements are in good standing and no known impediments exist.
))	Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
	parties		•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management, the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
リコ			•	The Scotia deposit was drilled drilled by CNGC who mined the deposit by both open pit and underground methods between 1987 and 1996.
	Geology	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
	1		•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

	Criteria	JORC Code explanation	Commentary
			 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick , these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena , sphalerite, chalcopyrite, pyrite and arsenopyrite.
			 The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
	Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 	No assay results are reported as part of this announcement.
\		» easting and northing of the drill hole collar	
)		 » elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
1		» dip and azimuth of the hole	
)		» down hole length and interception depth	
		» hole length.	
_		 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	
)	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. 	No assay results are reported as part of this announcement.
		 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.	Appendix 3: Page 166

Criteria	JORC Code explanation	Commentary
Relationship between	These relationships are particularly important in the reporting of Exploration	Surface RC drilling is perpendicular to the orebody
mineralisation widths and intercept lengths	Results.	• Downhole lengths are reported and true widths are estimated using prior
	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	oriented core measurements as a guide.
	• 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').	
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.	No assay results are reported as part 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.	No assay results are reported as part of this announcement.
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 meaningful data to report.
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 	 Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE updates.
	geological interpretations and future drilling areas, provided this information is not commercially sensitive.	

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – SCOTIA (SCOTIA MINING CENTRE)

	Criteria	JOF	RC Code explanation	Cor	mmentary
))))	Database integrity	•	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	•	Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
		•	Data validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
	Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
		•	If no site visits have been undertaken indicate why this is the case.		

Criteria	JORC Code explanation	Commentary
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	 Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main mineral data for the main
	Nature of the data used and of any assumptions made.	mineralised structures.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	 Data used for the geological interpretation includes surface and trench mapping and drill logging data. Where available, backs mapping was also utilized from
	The use of geology in guiding and controlling Mineral Resource estimation.	close spaced level development in the historic underground portions of the
	The factors affecting continuity both of grade and geology.	 In general, the interpretation of the mineralised structures is clear.
		Geological interpretation of the data was used as a basis for the lodes which were
		then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
		• Geology and grade continuity are constrained by quartz veining within the Scotia Shear Zone.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Scotia deposit is approximately 1600m in strike length, consists of multiple parallel lodes generally 0.5 to 2m wide and extends nominally 500 m metres below surface.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data	• A single block model was generated for the Scotia deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
	points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	• Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account	boundaries during estimation.
	of such data.	 A total of 58 domains were interpreted during the 2020 Scotia MRE, with 7 being paleo-channel domains and the balance being primary mineralisation.
	The assumptions made regarding recovery of by-products.	• A 3D volume block model "3DBM" was utilised with all optimised and validated
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated and/or available for coding.
==	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	 Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate domain
	Any assumptions behind modelling of selective mining units.	volume definition and honour wireframe geometry. Considerations relating
	Any assumptions about correlation between variables.	to appropriate block size include: drill hole data spacing, conceptual mining method, variogram continuity ranges and search neighbourhood optimisation.
	• Description of how the geological interpretation was used to control the resource estimates.	Diamond and reverse circulation data was utilised during the estimate
	Discussion of basis for using or not using grade cutting or capping.	 Iop cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	domain were completed. Based on the analysis individual top cuts were applied to each domain.

Criteria	JO	RC Code explanation	Co	mmentary
			•	Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. 5 reference variograms from well informed domains were applied as estimate proxies to domains across the deposit with domains grouped on statistical, geometric and spatial proximity similarities.
			•	The search strategy used a maximum extrapolation distance of 114, 84 and 75 metres over three search passes for the primary domains (Domains 2, 12 and 37 respectively), with a maximum extrapolation distance of 120 and 207 metres over three passes for the paelochannel domains (Domains 101 and 103 respectively). The first pass search was equal to the variogram maximum range (38, 28, 25, 40 and 69 metres for Domains 2, 12, 37, 101 and 103 respectively) with the second pass search double the variogram range (76, 56, 50, 80 and 138 metres for Domains 2, 12, 37, 101 and 103 respectively) and the third pass triple the variogram range (114, 84, 75, 120 and 207 metres for Domains 2, 12, 37, 101 and 103 respectively). A constant minimum of 4 and maximum of 16 composites was maintained across the first and second search passes, dropping to a minimum of 3 samples for the third pass.
			•	A grade distance limiting function was applied to all domains restricting composite assays above 20 g/t to a range equal to the first pass of the domain, these being 38, 28, 25, 40 and 69 metres for Domains 2, 12, 37, 101 and 103 respectively.
			•	Average sample spacing at Scotia is nominal 25 metre spaced sections with majority 1m downhole spaced sampling.
			•	All estimates were undertaken using Surpac mining software.
			•	Check estimates were completed utilising both Ordinary Kriging with Dynamic Anisotropy (DA) and Inverse Distance Squared (ID2).
			•	Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
			•	By products are not included in the resource estimate.
			•	No deleterious elements have been estimated.
Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	•	Tonnage was estimated on a dry basis.
Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Mineral Resource has been reported at a 0.5 g/t gold cut-off for material within 150m of topographic surface and 2.0 g/t gold for material greater than 150m of topographic surface being based upon economic parameters and depths (within 500 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	 The MRE extends nominally 500 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
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. 	 Scotia has previously been mined and by both Open pit and underground methods with all material treated through the existing Norseman plant with no issues noted for the 155,000 ounces produced historically. Scotia had a representative Fresh sample tested for metallurgical recovery by ALS in 2020 by PNRS, the recovery results were 92.57% recovery by gravity and leaching after 24 hours at P80 75 micron. No factors from the metallurgy have been applied to the estimates.
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	 The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.
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 measurements of ore were calculated from drill core and using the water displacement method and data from historical mining and regional exploration activities.
	• 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.	 Bulk densities for mineralisation applied are: 1.8, 2.4 and 2.91 for oxide, transitional and fresh material respectively. Bulk densities for waste material applied are: 1.8, 2.4 and 2.98 for oxide, transitional
	• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	and fresh material respectively.

Criteria	JORC Code explanation	Cor	mmentary
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in toppage/grade estimations, reliability of input data, confidence in 	•	This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.
D.	 continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the 	•	Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit and underground mining environment.
	deposit.	•	Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:
			» Drilling had a nominal spacing of 30 m, or was within 30 m of a block estimate, and estimation quality was considered reasonable.
		•	Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:
			» Drilling had a nominal spacing of 60 m, was within 60 m of the block estimate for the majority of the deposit, extending to 90 m at depth, on domain fringes and where estimation quality was considered low.
		•	Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.
		•	The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 500 m below surface.
		•	This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	•	The current Mineral Resource has been reviewed both internally by PNRS and externally by independent geological consultants Entech, with no fatal flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.

Criteria	JORC Code explanation	Сог	mmentary
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	•	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource	•	The statement reflects a global estimate of tonnes and grade.
P	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 historic production recorded from the Scotia mine from CNGC production via open pit an underground mining between 1987 and 1996, was 811,000t @ 5.9 g/t Au for 155,000 ounces.
	 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. 	•	No spatially comparable production data was available for this deposit at the time of MRE compilation.
	• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - SCOTIA (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	• If no site visits have been undertaken indicate why this is the case.	
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS
	• The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	Open Pit
		• Cut-off grade was estimated using a cost model developed specifically for the Scotia Open Pit DFS.
		The estimated open pit cut-off grade was 0.85g/t gold.
		Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
		Underground
		• Cut-off grades were estimated using a cost model developed specifically for the Scotia Underground DFS.
)		The estimated Stoping cut-off grade was rounded to 3.0g/t gold.
		An incremental development cut-off grade of 1.0g/t gold was applied to ore development necessarily mined to access each stoping block.
Mining factors or	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility	Open Pit
assumptions	Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	• The proposed Scotia Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground,
)	• The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip,	and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
	access, etc.	Mineral Resources were optimized using whittle 4D software followed by detailed
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope $^{\mid}$	open pit design using Surpac software.
	sizes, etc), grade control and pre-production drilling.	Pit wall angles were designed based on geotechnical recommendations and vary from 38 to 50 degrees
)	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	 Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	The mining dilution factors used.	Dilution varies between 10% and 20% and is depending on the ore width. Dilution
)	The mining recovery factors used.	was applied at zero grade.
1	Any minimum mining widths used.	Mining recoveries were set at 95%.
	The manner in which inferred Mineral Decourses are utilized in mining studies	Underground
	and the sensitivity of the outcome to their inclusion.	The DFS proposed a decline mine with mechanised jumbo development.
/	The infrastructure requirements of the selected mining methods.	• Capital development is performed by twin boom jumbo and ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive development has 15% dilution applied at zero grade.
)		• Production is by longhole stoping methods and are considered suitable by the Competent Person for the geotechnical conditions encountered at the mine.
		• Stope strike length will generally be limited to 15m prior to placement of a pillar to maintain geotechnical control. The typical level interval is 15m.
		• Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). Stope shapes were created using gold grade as the MSO optimisation field with the stoping cut-off grade applied (3.0g/t gold).

Criteria		JORC Code explanation	Commentary
			 A minimum mining width of 1.0m was applied. Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade. Mining recoveries were set at 100% for development activities and 85% for open stoping. Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate. All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.
Metallurg assumption	jical factors or ons	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	 The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralisation. The CIP process is the conventional gold processing method in Western Australia and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 µm. Metal-lurgical test work shows this will deliver recoveries of approximately 92.6% for ore from the Scotia Mining Centre when treated in the pro-posed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied. There are not any know deleterious elements. Not applicable.
Environm	nental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 Mining and processing operations are conducted wholly within granted Mining Leases. The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Scotia Mining Centre allowing for the extraction and use of water for mining operations. Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations. The waste rock comprises is non-acid forming.

Criteria	JORC Code explanation	Commentary
Infrastructure	The existence of appropriate infrastructure: availability of land for plan development, power, water, transportation (particularly for bulk commodities) labour, accommodation; or the ease with which the infrastructure can be	t • The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
D.	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
		Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
		An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study	 A financial model was created that contemplated all capital costs asso-ciated with the proposed mining operation, using supplier and contractor costs provided to
	The methodology used to estimate operating costs.	the Company for the purposes of completing the DFS.
	Allowances made for the content of deleterious elements.	 Operating costs were estimated using reasonable equipment productivi-ty and maintenance assumptions, contractor supplied costs and con-sumable price
	• The source of exchange rates used in the study.	inputs from suppliers provided to the Company for the purposes of completing
	Derivation of transportation charges.	the DFS.
	 The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	r There are no known deleterious elements, as such no allowances have been made.
The allowances made for royalties payable, bot		All costs were estimated in Australian dollars.
		Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
		Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
		• The ad valorem value-based state government royalty of 2.5% is ap-plied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatmen	 Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	 charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	• The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.
Market assessment	The demand, supply and stock situation for the particular commodity consumption trends and factors likely to affect supply and demand into the future.	 Gold sold at spot price.
	• A customer and competitor analysis along with the identification of likely marke windows for the product.	t
	• Price and volume forecasts and the basis for these forecasts.	
	 For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	
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	Criteria	JOI	RC Code explanation	Со	mmentary
	Economic	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	•	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
)			•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
				•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
\mathcal{D}	Social	•	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
2			licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
	Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 50% ownership of the Project through an unincorpo-rated joint venture with Central Norseman Gold Corporation. All project activities are
2		•	Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
)		•	The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
		•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory	•	The mineral and mining tenements remain in good standing.
			approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	•	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
)	Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
)		•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	-	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
	Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	• Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA – OK UNDERGROUND MINE

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	• This release relates to the Mineral Resource Estimate (MRE) for OK and Star of Erin prospects at the Norseman Gold Project.
		The diamond drill core sampled is NQ2.
		• All core is logged and sampled according to geology, with only selected samples
		assayed. Core is halved, with one side assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology.
	 Aspects of the determination of mineralisation that are Material to the Public Report. 	• Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks.
	 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. 	• Diamond drilling is completed to industry standard and various sample intervals based on geology (0.3m-1.2m) are selected based on geology.
		 Diamond samples - 0.8-2.5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of .3m.
		• Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted when appropriate.
		Historic Diamond Drilling
		 Assays prior to June 1996 were sent to the WMC laboratory in Kalgoorlie. From July 1996 assays were sent to Analabs in Perth. Assaying procedures changed with the change in laboratory.
1		 Samples that were expected to assay well, were subjected to bulk pulverisation with duplicate assays at the WMC Laboratory and Screen Fire assaying at Analabs. The routine assaying method for other samples was aqua regia digest at WMC and fire assay at Analabs.
		 The bulk pulverisation routine used at the WMC Laboratory involved milling the entire sample to a nominal -75µm. Duplicate samples were split from the milled material and the sample was analysed using aqua regia digest and an atomic absorption finish.

Criteria	JORC Code explanation	Commentary
		 At Analabs the total sample was dried and milled in an LM5 mill to a nominal 90% passing -75µm. An analytical pulp of approximately 200g was sub sampled from the bulk and the milled residue was retained for future reference. All the preparation equipment was flushed with barren feldspar prior to the commencement of the job. A 50 gram sample was fused in a lead collection fire assay. The resultant prill is dissolved in aqua regia and the gold content of the sample is determined by AAS. For samples that contained visible free gold the screen fire assay method was used. It involved a 1000g sample screened through a 106µm mesh. The resulting plus and minus fractions were then analysed for gold by fire assay. Information reported included size fraction weight, coarse and fine fraction gold content and calculated gold.
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	Underground diamond drilling is completed utilizing NQ2 (standard tube).
		Core is oriented routinely utilizing a Reflex Act3 orientation device.
	so, by what method, etc).	• Historic Underground drilling was completed using electric hydraulic drill rigs with standard core LTK46 and LTK48 both with the same nominal core size of 38mm.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	 All holes were logged at site by an experienced geologist. Recovery and sample quality were visually observed and recorded.
	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	 Diamond drilling practices result in high recovery in competent ground as part of the current drill program.
	• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse	 No significant core loss has been noted in fresh material. Good core recovery has generally been achieved in all sample types in the current drilling program.
	material.	• Historic holes have been inspected and core in the ore zones appears competent, with no evidence of core loss.
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. 	 Geological logging is completed by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments.
		Logging is quantitative and qualitative with all core photographed wet.
	The total length and percentage of the relevant intersections logged.	• 100% of the relevant intersections are logged.
		 Paper logs of historic drill holes have been cross checked to database as part of the validation.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Core samples were sawn in half utilising an Almonte core-saw, with one half used for assaying and the other half retained in core travs on site for future analysis
	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	 For core samples, core was separated into sample intervals and separately bagged for analysis at the cortifical laboratory. Core was sub-update the supervision of an
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	experienced geologist, was routinely cut on the orientation line.
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	All mineralised zones are sampled as well as material considered barren either side of the mineralised interval.
	 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. 	• Field duplicates i.e. other half of core or mcore has not been routinely sampled.
		Half core is considered appropriate for diamond drill samples.
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	• Visual inspection of the ~40% of historic holes which have been half cored and sampled either side of ore zones to define waste boundary.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are
	• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice.
	 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. 	No geophysical logging of drilling was performed.
		 Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification. In relation to the historic assay result it is assumed the procedures adopted at the at the WMC laboratory in Kalgoorlie and subsequently Analabs, post June 1996 were to industry standard for the time.
Criteria	JORC Code explanation	Commentary
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Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes	• Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth. Diamond drilling confirms the width of the mineralised intersections.
	Decumentation of primary data data entry procedures, data verification, data	There are no twinned holes drilled as part of these results
	storage (physical and electronic) protocols.	• All primary data is logged either digitally or on paper and later entered into the
	Discuss any adjustment to assay data.	SQL database. Data is visually checked for errors before being sent to an external database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		• No adjustments have been made to assay data unless in instances where standard tolerances are not met and reassay is ordered .
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.	 Drilling is surveyed using conventional survey. Downhole surveys are conducted during drilling using a Reflex Ez-Trac multi-shot electronic survey tool. All holes are surveyed down the hole at 15m, 30m and every 30m thereafter. When the hole is completed, multishots are taken every 6m from EOH when tripping rods.
))	Specification of the grid system used.	The project lies in MGA 94, zone 51
	Quality and adequacy of topographic control.	 Pre Pantoro survey accuracy and guality assumed to industry standard.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore. 	 Drill hole spacing is variable due to the nature of drilling fans from suitable underground drilling platforms. Spacing of centres with infill at O2 and SOE is generally targeted at between 25m by 25 m.
	Reserve estimation procedure(s) and classifications applied.	• The Competent Person is of the view that the drill/sample spacing, geological
	Whether sample compositing has been applied.	interpretation and grade continuity of the data will be appropriate for Mineral Resource and Ore Reserve estimation .
		No compositing is applied to diamond drilling.
		Core samples are sampled to geology of between 0.3 and 1.2m intervals.
Orientation of data in relation to geological	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	• Drilling is generally perpendicular to the orebody where possible, other than the limitations introduced by the need to drill fans and access limitations imposed by
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.	existing workings. All intervals are reviewed relative to the understanding of the geology and true widths calculated and reported in the tables attached in the body of the report.
		No bias of sampling is believed to exist through the drilling orientation
Sample security	The measures taken to ensure sample security.	• The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site in a secured area and delivered in sealed bags to the lab in Kalgoorlie and Perth
		Samples are tracked during shipping.
		CNGC sample security assumed to be consistent and adequate.

Criteria	JORC Code explanation	Commentary	
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audit or reviews of current sampling techniques have been undertaken however the data is managed by an offsite data scientist who ensures all internal checks/protocols are in place.	
		• In 2017 Cube Consulting carried out a full review of the Norseman database. Overall the use of QA/QC data was acceptable.	

SECTION 2: REPORTING OF EXPLORATION RESULTS – OK UNDERGROUND MINE

	Criteria	JORC Code explanation	Con	nmentary
000	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. 	•	The tenement related to this drilling is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd. This is : M63/68 Tenement transfers to Pantoro South are yet to occur as stamp duty assessments are under review by the office of state revenue. The tenement is in good standing and no known impediments exist.
2	Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
	parties		•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
リー			•	From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
)			•	The OK mine was originally worked in the 1930s, but lay idle until 1980 when the shaft was re-opened by CNGC to mine remnant ore from the OK Main reef. Underground drilling of the east striking tensional Main reef led to the discovery of the 300o striking O2 reef, which was developed via decline.

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	Deposit type, geological setting and style of mineralisation.
		 The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within met-amorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
		 The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intrud-ed by gabbros and the Mount Kirk Formation a mixed assemblage.
		 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Main-field strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena, sphaler- ite, chalcopyrite, pyrite and arsenopyrite.
		• The long running operations at Norseman have provided a good under- standing on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, how-ever large areas remain untested by drilling with the potential for new spurs and cross links high.
		 The gold in the OK reefs is free milling and typically hosted by a very narrow (0.3 m average width) laminated quartz vein which is commonly sur-rounded by a selvage of up to 2 m wide of predominantly biotite alteration. The veins are most commonly hosted by fine grained metamorphosed bas-alt or relatively fine grained porphyries. Accessory minerals include car-bonate, scheelite, pyrite, chalcopyrite and arsenopyrite. The O2 and Main reefs are among the most nuggety at Norseman.

Criteria	JORC Code explanation	Commentary
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	No assay results are reported as part of this announcement.
	» easting and northing of the drill hole collar	
	» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
1	» dip and azimuth of the hole	
1	» down hole length and interception depth	
)	» hole length.	
)	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
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.	No assay results are reported as part of this announcement.
	• 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.	
Relationship between mineralisation widths and	• These relationships are particularly important in the reporting of Exploration Results.	 Drilling from the underground is drilled from static locations which means there are variable dips and azimuths due to access limitations
intercept lengths	 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 	 Downhole lengths are reported and true widths are calculated in both 3D using trigonometry and cartographic planes (section and plan view) using a formulae in excel
	clear statement to this effect (eg 'down hole length, true width not known').	True widths are calculated and reported for drill intersections which intersect the lodes obliquely.
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.	No assay results are reported as part 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.	No assay results are reported as part of this announcement.

	Commentary	JORC Code explanation	Criteria
	No other meaningful data to report.	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.	Other substantive exploration data
taken to evaluate and test ore shoots for further MRE	• Further to this MRE, additional drilling will be undertaken to evaluate the potential for depth and Strike extensions of the ore shoots for fu	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work
	updates.	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	
taken to	 Further to this MRE, additional drilling will be undertaken to the potential for depth and Strike extensions of the ore show updates. 	 metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 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. 	Further work

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – OK UNDERGROUND MINE

Criteria	JC	DRC Code explanation	Co	ommentary
Database integrity	•	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	•	Data input has been governed by lookup tables and programmed import of assay data from lab into database. The database has been checked against the origina assay certificates and survey records for completeness and accuracy.
		Data validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	•	If no site visits have been undertaken indicate why this is the case.		
Geological interpretati	on •	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	•	Confidence in the geological interpretation is generally proportional to the dril density. Surface mapping confirms some of the orientation data for the main
	•	Nature of the data used and of any assumptions made.		mineralised structures.
	•	The effect, if any, of alternative interpretations on Mineral Resource estimation.	•	Data used for the geological interpretation includes surface and trench mapping and drill logging data. Underground face sampling, face geology and backs
Sendi	•	The use of geology in guiding and controlling Mineral Resource estimation.		mapping were also utilized from close spaced level development is also used
	•	The factors affecting continuity both of grade and geology.		where available.
			•	In general, the interpretation of the mineralised structures is clear.
			•	Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades.
			•	Geology and grade continuity are constrained by quartz veining within the quartz reefs and by parallel structures for adjacent reefs.

Criteria	JORC Code explanation	Commentary
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower	 The OK deposit is approximately 800m in strike length and generally 0.2 to 4m wide and extends nominally 700 metres below surface.
	limits of the Mineral Resource.	• The Star of Erin deposit is approximately 700 m in strike length and generally 0.2 to 7m wide and extends nominally 400 metres below surface.
Estimation and modelling Itechniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data	 A 3D block model was generated for each of the OK and Star of Erin deposits. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
	points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	• Four domains were estimated during the 2020 OK MRE, the main mineralisation being Domain 1 (02 Lode). Minor lodes included 2, 3 and 30.
	The availability of check estimates, previous estimates and/or mine production	• Six domains were estimated at Star of Erin. Domain 1, 2, 3, 4, 5 and 8.
	of such data.	 Geological interpretation forms the basis for the mineralisation domain wireframes; these were oriented along trends of grade continuity and form hard
	The assumptions made regarding recovery of by-products.	boundaries during estimation.
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	 A two-dimensional ("2D") Ordinary Kriging (OK) interpolation approach was selected to address some of the main issues encountered when estimating neurophysics relievely and approach approach and approach ap
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	narrow vein mineralisation, such as: Additivity issues due to non-uniform support and resulting grade bias. Instances of highly variable individual intercepts (e.g. 0.1 m to 9m) which would be difficult to incorporate and represent statistically using downhole composites of equal
	Any assumptions behind modelling of selective mining units.	
	Any assumptions about correlation between variables.	lengths (e.g. 0.5, 1.0 or 2.0 m);
	Description of how the geological interpretation was used to control the resource	Varying mineralisation geometry across lode, down dip, and along strike; and
	 estimates. Discussion of basis for using or not using grade cutting or capping. 	 Block size required for adequate volume fill of narrow geometry is generally too small, introducing conditional bias to the MRE outcome.
	 The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 Drillholes were composited for the full width of the domain intercept, followed by trigonometric calculation of true width ("TW") using the orientations of the drill hole intercept and ore domain defined by a digitized the Leapfrog reference (centreline) surface. A gold accumulation variable was then calculated by multiplication of intercept grade by true width.
-		 Composited sample data was transformed (removed rotation) pressed onto a cartographic plane and statistical analysis undertaken on accumulation, width, and grade variables, to assist with determining estimation search parameters, top cuts etc.
		 Assessment and application of top-cutting for the 2D estimate was undertaken on the gold accumulation variable within individual domains. Top cuts, where appropriate, were applied on an individual domain basis.
		 Top cuts were applied to the gram-meter accumulation variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain with cut values being:

Criteria	JORC Code explanation	Commentary
		• OK
		 Domain 1 = 150 g/m Accumulation, 25 composites capped and a 3.12% metal reduction,
		 Domain 2 = 30 g/m Accumulation, 3 composites capped and a 26.2% meta reduction.
)		• Domain 3 = 200 g/m Accumulation, 2 composites capped and a 14.4% meta reduction.
		• Domain 30 = 30 g/m Accumulation, 2 composites capped and a 13.2% meta reduction.
		Star of Erin
		 Domain 1 = 6 g/m Accumulation, 4 composites capped and a 17.1% metal reduction,
		• Domain 2 = 30 g/m Accumulation, 2 composites capped and a 79.5% meta reduction.
		• Domain 3 = 30 g/m Accumulation, 6 composites capped and a 36.1% meta reduction.
		• Domain 4 = 30 g/m Accumulation, 2 composites capped and a 20.4% meta reduction.
		Domain 5 = No Capping applied
		 Domain 8 = 6 g/m Accumulation, 1 composite capped and a 49.1% metal reduction.
		 Variography analysis of individual domains was undertaken on gold accumulation variables in 2D space, followed by Qualitative Kriging Neighbourhood Analysis to assist with determining appropriate search parameters.
		 The 2D block models for interpolation were created using a block size of 10 mN x 10 mRL x 1 mE with no sub-celling. Block size was determined primarily with the assumption of a relatively selective mining approach for underground operations.
		 OK - The search strategy was a maximum extrapolation distance of 45m over two search passes for all domains. A minimum of 4 and maximum of 10 composites was used in the first search pass and reduced to a minimum of 2 samples in the second pass.
		 Star of Erin - The search strategy was a maximum extrapolation distance of 55 m over two search passes for all domains. A minimum of 4 and maximum of 10 composites was used in the first search pass and reduced to a minimum of 2 samples in the second pass.
		 Post estimate. Gold ppm values for each block were calculated by dividing interpolated gold accumulation by interpolated TW, whereby for each block:

	Criteria	JOR	C Code explanation	Cor	mmentary
				•	Block Gold ppm = Block Gold Accumulation Value / Block TW Value
				•	Back calculated gold ppm values for each block were transformed from 2D to 3D space and pressed across the full width of the corresponding domain in the final host 3D compilation model.
	D			•	Check estimates for both domains were carried out in 3D using Inverse Distance Squared with Dynamic Anisotropy (DA). Both accumulation and true width were estimated before back calculation of the check estimate gold grade.
$\square \bigcirc$				•	Validation of the gold accumulation, TW estimations and gold ppm back- calculation was completed by global and local bias analysis, statistical and visual inspections in 2D and 3D space.
				•	By products are not included in the resource estimate.
				•	No deleterious elements have been estimated. Arsenic is known to be present, however metallurgical test work suggests that it does not adversely affect metallurgical recovery.
F	Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and	•	Tonnage was estimated on a dry basis.
	the met	he method of determination of the moisture content	•	The tonnages of material on stockpiles are quoted on a dry basis.	
GB	Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied	•	Underground. The global gold Mineral Resource has been reported at a 2.0 g/t gold cut-off.
				•	The cut-off grade and reporting constraints are based upon economic parameters historically mined and optimised by previous owners.
SOI	Mining factors or assumptions	•	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the	•	The OK MRE extends nominally 700 m below topographic surface and lies within 100 vertical metres of active level development. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an underground mining framework.
			assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	The Star of Erin (SOE) MRE extends nominally 400 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an underground mining framework.
	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.	•	Given the OK mine is an underground production source, only fresh material was considered for metallurgical testwork. The composite sample OK Fresh Pit #2 was created from 9 separate ore intersections which were selected and deemed representative of the ore on the basis of material type. A high head grade sample was selected which demonstrated recoveries of 96.45 % at 75 micron grind with a significant gravity recoverable component.

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.	 The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life. 		
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Bulk density measurements of ore were calculated from drill core using the water displacement method and data from historical mining. Bulk density was applied within the block model based upon weathering state and using values applied to adjacent Norseman deposits which have been historically mined and processed. 		
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 This Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to historical data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within underground mining environments. This approach considers all relevant factors and reflects the Competent Person's view of the deposit The OK MRE includes 49,382m of historical and recent diamond drilling from 268 drill holes and 1863 m of sampling from 1616 production faces. The OK deposit has been mined historically by underground methods since 1905. The SOE MRE includes 33,540m of historical and recent diamond drilling from 136 drill holes. No production face sampling is included. 		
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	The current Mineral Resource has been peer reviewed internally.		

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement reflects a global estimate of tonnes and grade. Factors which could affect the relative accuracy and confidence of the estimate include: Historical data quality and density information. Historical void, location and volumes. Simplified geology and continuity due to drill density (SOE). Unidentified felsic material depleting reef at intersection points (SOE). It is not known how the current global Mineral Resource estimate will perform against underground production. Additional data gathering (drilling and sampling) and increased data density is planned by PNR to ensure a localised estimation is completed prior to recommencement of production within these deposits.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - OK UNDERGROUND MINE

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	• If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Bre Feesibility Study level has been	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020.
	 The code requires that a study to at least Pre-reasibility study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	 Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	Cut-off grades were estimated using a cost model developed specifically for the OK Underground Mine DFS.
		• The estimated Stoping cut-off grade was rounded to 3.0g/t gold.
		An incremental development cut-off grade of 0.5g/t gold was applied to ore development necessarily mined to access each stoping block.

Criteria	JORC Code explanation	Commentary
Mining factors or	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility	 The DFS proposed a decline mine with mechanised jumbo development.
assumptions	of appropriate factors by optimisation or by preliminary or detailed design).	• Capital development is performed by twin boom jumbo and ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive
	• The choice, nature and appropriateness of the selected mining method(s) and	development has 15% dilution applied at zero grade.
P	access, etc.	 Production is by longhole stoping methods, which have been used historically and are suitable for the geotechnical conditions encountered at the mine.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	• Stope strike length will generally be limited to 15m prior to placement of a pillar to maintain geotechnical control. The typical level interval is 16m.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	 Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimizer (MSO) Stope shapes were created using gold grade as the MSO
	The mining dilution factors used.	optimisation field with the stoping cut-off grade applied (3.0g/t gold).
	The mining recovery factors used.	A minimum mining width of 1.0m was applied.
	Any minimum mining widths used.	• Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was
	• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade.
	The infrastructure requirements of the selected mining methods.	Mining recoveries were set at 100% for development activities and 85% for open stoping.
		• Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate.
		All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	 The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	• Whether the metallurgical process is well-tested technology or novel in nature.	The CIP process is the conventional gold processing method in Western Australia
	• The nature, amount and representativeness of metallurgical test work undertaken,	and is well tested and proven.
	the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	 The proposed milling circuit produces a grind size P80 of 75 μm. Metal-lurgical test work shows this will deliver recoveries of approximately 96.5% for ore
	Any assumptions or allowances made for deleterious elements.	from the OK Underground Mine when treated in the pro-posed new carbon in leach (CII) processing plant. For DES financial modelling purposes a processing
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orehody as a whole	recovery of 96% was applied.
	For minorals that are defined by a specification, has the ore reserve estimation	There are not any know deleterious elements.
	 For initialist that are defined by a specification, has the ofer reserve estimation been based on the appropriate mineralogy to meet the specifications? 	 Previous campaigns processing ore from the OK Underground have achieved recoveries consistent with calculated recoveries achieved dur-ing metallurgical test work.
		Not applicable.

Criteria	JORC Code explanation	Commentary
 Environmental The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options, considered and, where applicable 	Mining and processing operations are conducted wholly within granted Mining Leases.	
	the status of approvals for process residue storage and waste dumps should b	A Ground Water Extraction License is in place for the project and allows for the extraction and use of water for mining and processing operations.
		Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
3		The waste rock comprises is non-acid forming.
Infrastructure	Infrastructure • The existence of appropriate infrastructure: availability of land for plan development, power, water, transportation (particularly for bulk commodities labour, accommodation; or the ease with which the infrastructure can b	 The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
0	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
		Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
, j		An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study	 A financial model was created that contemplated all capital costs asso-ciated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DES.
<u>੫</u>	The methodology used to estimate operating costs.	Operating sects were estimated using reasonable equipment productivity and
	Allowances made for the content of deleterious elements.	maintenance assumptions, contractor supplied labour costs and consumable
The source of exchange rates used in the study.	price inputs from suppliers provided to the Company for the purposes of	
	Derivation of transportation charges.	There are a larger deletering algorithm of such as allowing the
<i>リ</i>	• The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	made.
))	• The allowances made for royalties payable, both Government and private.	All costs were estimated in Australian dollars.
		Transport charges are based on pricing supplied to the Company for the purpose of completing the DFS.
		Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
)		 The ad valorem value-based state government royalty of 2.5% is ap-plied during the economic analysis for the Ore Reserve estimate. No other royalties ar applicable to the project.
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	Underground Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	 charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	• The gold price assumption used to generate this Ore Reserve estimate is a average gold price projection from a sample group of banks and financia industry analysts.

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	Criteria	JORC Code explanation	Co	ommentary
	Market assessment	 The demand, supply and stock situation for the particular commodi consumption trends and factors likely to affect supply and demand into t future. 	y, • ie	Gold sold at spot price.
		 A customer and competitor analysis along with the identification of likely mark windows for the product. 	et	
)	Price and volume forecasts and the basis for these forecasts.		
		 For industrial minerals the customer specification, testing and acceptan requirements prior to a supply contract. 	e	
)))	Economic	 The inputs to the economic analysis to produce the net present value (NPV) in t study, the source and confidence of these economic inputs including estimat inflation, discount rate, etc. 	e • d	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
9		NPV ranges and sensitivity to variations in the significant assumptions and inpu	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
3			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
	Social	• The status of agreements with key stakeholders and matters leading to soc	al •	The Ore Reserve is located on granted mining leases.
)		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
	Other	• To the extent relevant, the impact of the following on the project and/or on t estimation and classification of the Ore Reserves:	e •	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are
굇		Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
2)		The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
		The status of governmental agreements and approvals critical to the viabil of the project such as minoral tenement status, and government and statute	ty .	The mineral and mining tenements remain in good standing.
リ シ コ	_	approvals. There must be reasonable grounds to expect that all necessa Government approvals will be received within the timeframes anticipated in t Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of a unresolved matter that is dependent on a third party on which extraction of t reserve is contingent.	ry ne ny ne	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
)	Classification	The basis for the classification of the Ore Reserves into varying confiden categories.	:e •	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
-		• Whether the result appropriately reflects the Competent Person's view of t deposit.	e •	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
		 The proportion of Probable Ore Reserves that have been derived from Measur Mineral Resources (if any). 	d •	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	• This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.

Criteria	JORC Code explanation	Commentary
Mining factors or	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility	 The DFS proposed a decline mine with mechanised jumbo development.
assumptions	of appropriate factors by optimisation or by preliminary or detailed design).	• Capital development is performed by twin boom jumbo and ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive
	• The choice, nature and appropriateness of the selected mining method(s) and	development has 15% dilution applied at zero grade.
P	access, etc.	 Production is by longhole stoping methods, which have been used historically and are suitable for the geotechnical conditions encountered at the mine.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	• Stope strike length will generally be limited to 15m prior to placement of a pillar to maintain geotechnical control. The typical level interval is 16m.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	 Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimizer (MSO) Stope shapes were created using gold grade as the MSO
	The mining dilution factors used.	optimisation field with the stoping cut-off grade applied (3.0g/t gold).
	The mining recovery factors used.	A minimum mining width of 1.0m was applied.
	Any minimum mining widths used.	• Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was
	• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade.
	• The infrastructure requirements of the selected mining methods.	Mining recoveries were set at 100% for development activities and 85% for open stoping.
		• Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate.
		All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	 The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	• Whether the metallurgical process is well-tested technology or novel in nature.	The CIP process is the conventional gold processing method in Western Australia
	• The nature, amount and representativeness of metallurgical test work undertaken,	and is well tested and proven.
	the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	 The proposed milling circuit produces a grind size P80 of 75 μm. Metal-lurgical test work shows this will deliver recoveries of approximately 96.5% for ore
	Any assumptions or allowances made for deleterious elements.	from the OK Underground Mine when treated in the pro-posed new carbon in leach (CII) processing plant. For DES financial modelling purposes a processing
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orehody as a whole	recovery of 96% was applied.
	For minorals that are defined by a specification, has the ore reserve estimation	There are not any know deleterious elements.
	 For initial are defined by a specification, has the ofer reserve estimation been based on the appropriate mineralogy to meet the specifications? 	 Previous campaigns processing ore from the OK Underground have achieved recoveries consistent with calculated recoveries achieved dur-ing metallurgical test work.
		Not applicable.

Criteria	JORC Code explanation	Commentary
 Environmental The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options, considered and, where applicable 	Mining and processing operations are conducted wholly within granted Mining Leases.	
	the status of approvals for process residue storage and waste dumps should b	A Ground Water Extraction License is in place for the project and allows for the extraction and use of water for mining and processing operations.
		Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
3		The waste rock comprises is non-acid forming.
Infrastructure	Infrastructure • The existence of appropriate infrastructure: availability of land for plan development, power, water, transportation (particularly for bulk commodities labour, accommodation; or the ease with which the infrastructure can b	 The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
0	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
		Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
, j		An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study	 A financial model was created that contemplated all capital costs asso-ciated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DES.
<u>੫</u>	The methodology used to estimate operating costs.	Operating sects were estimated using reasonable equipment productivity and
	Allowances made for the content of deleterious elements.	maintenance assumptions, contractor supplied labour costs and consumable
The source of exchange rates used in the study.	price inputs from suppliers provided to the Company for the purposes of	
	Derivation of transportation charges.	There are a larger deletering algorithm of such as allowing the
<i>リ</i>	• The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	made.
))	• The allowances made for royalties payable, both Government and private.	All costs were estimated in Australian dollars.
		Transport charges are based on pricing supplied to the Company for the purpose of completing the DFS.
		Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
)		 The ad valorem value-based state government royalty of 2.5% is ap-plied during the economic analysis for the Ore Reserve estimate. No other royalties ar applicable to the project.
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	Underground Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	 charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	• The gold price assumption used to generate this Ore Reserve estimate is a average gold price projection from a sample group of banks and financia industry analysts.

	Criteria	JORC Code explanation	Co	ommentary
	Market assessment	 The demand, supply and stock situation for the particular commodi consumption trends and factors likely to affect supply and demand into t future. 	y, • ie	Gold sold at spot price.
		 A customer and competitor analysis along with the identification of likely mark windows for the product. 	et	
)	Price and volume forecasts and the basis for these forecasts.		
		 For industrial minerals the customer specification, testing and acceptan requirements prior to a supply contract. 	e	
)))	Economic	 The inputs to the economic analysis to produce the net present value (NPV) in t study, the source and confidence of these economic inputs including estimat inflation, discount rate, etc. 	e • d	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
9		NPV ranges and sensitivity to variations in the significant assumptions and inpu	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
3			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
	Social	• The status of agreements with key stakeholders and matters leading to soc	al •	The Ore Reserve is located on granted mining leases.
\mathcal{I}		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
	Other	• To the extent relevant, the impact of the following on the project and/or on t estimation and classification of the Ore Reserves:	e •	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are
굇		Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
2)		The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
		The status of governmental agreements and approvals critical to the viabil of the project such as minoral tenement status, and government and statute	ty .	The mineral and mining tenements remain in good standing.
リ シ コ	_	approvals. There must be reasonable grounds to expect that all necessa Government approvals will be received within the timeframes anticipated in t Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of a unresolved matter that is dependent on a third party on which extraction of t reserve is contingent.	ry ne ny ne	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
)	Classification	The basis for the classification of the Ore Reserves into varying confiden categories.	:e •	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
-		• Whether the result appropriately reflects the Competent Person's view of t deposit.	e •	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
		• The proportion of Probable Ore Reserves that have been derived from Measur Mineral Resources (if any).	d •	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	 This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.

SECTION 1: SAMPLING TECHNIQUES AND DATA – SLIPPERS

	Criteria	JORC Code explanation	Commentary
	Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	This release relates to the Mineral Resource Estimate (MRE) for the Princess Royal/ Slippers deposits at the Norseman gold project.
	<		• RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
3	ע		• RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
)		 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 	• Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
)))))		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.	 All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of 15m where clearly defined mineralisation is evident.
1			• Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks .
)			 Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
)))))))	1	 Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal). 	
))	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).	 RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8 inch diameter bit Surface DD – HQ and NQ2 diamond tail completed on RC pre-collars, All core has orientations completed where possible with confidence and quality marked accordingly.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	 All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	 RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse	 RC drilling by previous operators to industry standard at the time
	material.	DD – No significant core loss has been noted in holes drilled
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.	 Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration minoralogy, subbide content, and composition, guartz, content, volping, and
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	general comments.
	The total length and percentage of the relevant intersections logged.	100% of the holes are logged
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	All RC holes are sampled on 1m intervals
and sample preparation	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled	RC samples taken of the fixed cone splitter, generally dry.
2	wet or dry.	Sample sizes are considered appropriate for the material being sampled
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples	analysis.
	 Measures taken to ensure that the sampling is representative of the in situ material 	• For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
	 Collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being 	• Core was cut under the supervision of an experienced geologist, it is routinely cut on the orientation line.
	sampled.	• All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
		• Field duplicates i.e. other half of core or ¹ / ₄ core has not been routinely sampled
		Half core is considered appropriate for diamond drill samples.
		RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	• Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company database. Data is visually checked for errors before being sent to company database.
	Discuss any adjustment to assay data.	Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

Criteria	JORC Code explanation	Commentary
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. Specification of the grid system used 	 Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
	Quality and adequacy of tanggraphic control	• The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
	Quality and adequacy of topographic control.	• A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
		Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
		The project lies in MGA 94, zone 51.
		Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
		Pre Pantoro survey accuracy and quality assumed to industry standard
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Original Continuity appropriate for the Mineral Continuity a	Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
	Reserve estimation procedure(s) and classifications applied.	No compositing is applied to diamond drilling or RC sampling.
	Whether sample compositing has been applied.	All RC samples are at 1m intervals.
		• Core samples are both sampled to geology of between 0.15 and 1.2m intervals
Orientation of data in	• Whether the orientation of sampling achieves unbiased sampling of possible	• No bias of sampling is believed to exist through the drilling orientation
relation to geological structure	structures and the extent to which this is known, considering the deposit type.	All drilling in this program is perpendicular to the orebody
	 If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, thi should be assessed and reported if material. 	y s
Sample security	The measures taken to ensure sample security.	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
		Samples are tracked during shipping.
		Pre Pantoro operator sample security assumed to be consistent and adequate
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS – SLIPPERS

	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	• The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/156.
	Ð	 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. 	• Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.
			The tenements are in good standing and no known impediments exist.
\bigcirc	Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	• Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
	parties		 In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
			• From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
			• Central Norseman acquired the tenure around princess Royal in 1935. Sporadic assessment of the area was undertaken until 1941, when underground development re-commenced in the old Princess Royal workings with small open pits excavated in 1986/1987. Pit Five, a shallow 30 metre deep pit centred over the main Princess Royal workings produced 148,836 tonnes @ 3.33 g/t Au for 15,937 ounces
	Geology	Deposit type, geological setting and style of mineralisation.	• The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
			• The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria		JORC Code explanation	Commentary		
			 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick , these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena , sphalerite, chalcopyrite, pyrite and arsenopyrite. 		
			 The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied. 		
	Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	No assay results are reported as part of this announcement.		
\		 easting and northing of the drill hole collar 			
)		 » elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 			
1		» dip and azimuth of the hole			
)		» down hole length and interception depth			
		» hole length.			
_		 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 			
)	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. 	No assay results are reported as part of this announcement.		
		• 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.	Appendix 3: Page 204		

	Criteria	JORC Code explanation	Commentary
	Relationship between	 These relationships are particularly important in the reporting of Exploration Popular 	Surface RC drilling of the pits is perpendicular to the orebody
	intercept lengths	 If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	Downhole lengths are reported and true widths are not known at this time as the orebodies in the Princess/North Royal area do demonstrate dip changes
	D	 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'). 	
	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. 	 No assay results are reported as part 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. 	No assay results are reported as part of this announcement.
S	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 meaningful data to report.
Ð	Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). 	• Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE
		 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – SLIPPERS

Criteria	JORC Co	de explanation	Cor	mmentary
Database integrity	• Mea tran: Resc	asures taken to ensure that data has not been corrupted by, for example, scription or keying errors, between its initial collection and its use for Mineral purce estimation purposes.	•	Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	• Data	a validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	Com outc	nment on any site visits undertaken by the Competent Person and the come of those visits.	•	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	• If no	o site visits have been undertaken indicate why this is the case.		

Criteria	JORC Code explanation	Commentary
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main
	Nature of the data used and of any assumptions made.	mineralised structures.
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	 Data used for the geological interpretation includes drill logging data and where available, face sampling was also utilized from close spaced level development in
	The use of geology in guiding and controlling Mineral Resource estimation.	the historic underground portions of the deposit.
1	The factors affecting continuity both of grade and geology.	• In general, the interpretation of the mineralised structures is clear.
)		 Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
)		 Geology and grade continuity are constrained by quartz veining hosted within a number of east dipping gabbroic dykes which intrude the bluebird gabbro.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Slippers portion of the Princess Royal deposit is approximately 1200m in strike length, consists of several parallel lodes generally 0.5 to 2m wide and extends nominally 220 m metres below surface.

Criteria	JORC Code explanation	Cor	nmentary
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data 	d• g, a n•	A single block model was generated for the Slippers deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
	points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.		Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard
	• The availability of check estimates, previous estimates and/or mine production		boundaries during estimation.
	records and whether the Mineral Resource estimate takes appropriate account of such data.	•	A total of 39 domains were interpreted during the 2020 Slippers MRE, with 6 being paleo-channel domains and the balance being primary mineralisation.
	The assumptions made regarding recovery of by-products.	•	A 3D volume block model "3DBM" was utilised with all optimised and validated
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).		interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated and/or available for coding.
	 In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	•	Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate domain
	Any assumptions behind modelling of selective mining units.	•	volume definition and honour wireframe geometry. Considerations related
	Any assumptions about correlation between variables.		to appropriate block size include: drill hole data spacing, conceptual mining method, variogram continuity ranges and search neighbourhood optimisation.
	 Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. 		Diamond and reverse circulation data was utilised during the estimate
		•	Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.		domain were completed. Based on the analysis, individual top cuts were applied to each domain.
		•	Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. 6 reference variograms from well informed domains were applied as estimate proxies to domains across the deposit with domains grouped on statistical, geometric and spatial proximity similarities.

	Criteria	JORC Code explanation	Commentary
			• The search strategy used a maximum extrapolation distance of 208, 122, 266 and 182 metres over three search passes for the primary domains (Domains 1, 2, 10, 11 and 32 respectively), with a maximum extrapolation distance of 150 metres over three passes for the paleochannel domain (Domain 21). The first pass search was equal to two thirds of the variogram maximum range (68, 40, 88, 69 and 60 metres for Domains 1, 2, 10, 11 and 32 respectively) with the second pass search equal to the variogram range (104, 61, 133, 105 and 91 metres for Domains 1, 2, 10, 11 and 32 respectively) and the third pass double the variogram range (208, 122, 266 and 182 metres for Domains 1, 2, 10 and 32 respectively). For the paleochannel domain (Domain 21) The first pass search was equal to the variogram maximum range (50 metres) with the second pass search double the variogram range (100 metres) and the third pass triple the variogram range (150 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the all three search passes.
)			• Average sample spacing at Slippers is nominal 25 metre spaced sections with majority 1m downhole spaced sampling.
5			All estimates were undertaken using Surpac mining software.
			Check estimates were completed utilising Inverse Distance Squared (ID2) interpolation.
			• Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
			By products are not included in the resource estimate.
)			No deleterious elements have been estimated.
)	Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	Tonnage was estimated on a dry basis.
)))	Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	• The global gold Mineral Resource has been reported at a 0.7 g/t gold cut-off for material within 150m of topographic surface and 2.0 g/t gold for material greater than 150m of topographic surface being based upon economic parameters and depths (within 220 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted.
	Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	• The MRE extends nominally 220 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Slippers has previously been mined and milled at the Norseman Gold Project since the 1930's. This included oxide and fresh material where recent metallurgical test work recoveries demonstrated 96.1 % and 97.69% respectively supporting recovery of the in situ Mineral Resource via conventional gravity and cyanidation methodology. No factors from the metallurgy have been applied to the estimates.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Bulk density values for ore were assumed based on data from previous resource reports as well as data from historical mining and regional exploration activities. Bulk densities for mineralisation and waste applied are: 1.8, 2.4 and 2.65 for oxide, transitional and fresh material respectively.

Criteria	JORC Code explanation	Commentary
Classification	 The basis for the classification of the Mineral Resources into varying confider categories. Whether appropriate account has been taken of all relevant factors (i.e. relat confidence in toppage/grade estimations, reliability of input data, confidence 	 This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.
	 continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.
		 Indicated Mineral Resources were defined where a moderate level of geologica confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:
15		» Drilling had a nominal spacing of 25 m, or was within 25 m of a bloc estimate, and estimation quality was considered reasonable.
		 Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 50 m, was within 50 m of the block estimat and where estimation quality was considered low.
Ø		Mineralisation within the model which did not satisfy the criteria for Mineralise Resource remained unclassified.
		The reported Mineral Resource was constrained at depth by the available dr hole spacing outlined for Inferred classification, nominally 220 m below surface
		This approach considers all relevant factors and reflects the Competent Persor view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	 The current Mineral Resource has been reviewed both internally by PNRS an externally by independent geological consultants Entech, with no fatal flaw highlighted and results as expected for the nature and style of the mineralisatic with the current estimation techniques applied.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence le in the Mineral Resource estimate using an approach or procedure deem appropriate by the Competent Person. For example, the application of statistic or geostatistical procedures to quantify the relative accuracy of the resources	 The relative accuracy of the Mineral Resource estimate is reflected in the reportin of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement reflects a global estimate of tonnes and grade.
5	within stated confidence limits, or, if such an approach is not deemed appropri a qualitative discussion of the factors that could affect the relative accuracy a confidence of the estimate.	 The Princess Roylal deposit has been mined through several campaigns from th turn of the century (1897). Recent workings include small open pits excavate in 1986/1987 where Pit Five, a shallow 30-metre-deep pit centred over the ma
-	The statement should specify whether it relates to global or local estimates, a if local, state the relevant tonnages, which should be relevant to technical a economic evaluation. Documentation should include assumptions made and the statement of the sta	 Princess Royal workings produced 148,836 tonnes @ 3.33 g/t Au for 15,93 ounces. No spatially comparable production data was available for this deposit at the spatial comparable production data was available for the spatial comparable production data was available production data was available for the spatial
	 procedures used. These statements of relative accuracy and confidence of the estimate should 	time of MRE compilation.
	compared with production data, where available.	Appendix 3: Page 2

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - SLIPPERS

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	• The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
=	• If no site visits have been undertaken indicate why this is the case.	
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	 The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020.
	• The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	Cut-off grade was estimated using a cost model developed specifically for the Slippers Open Pit DFS, this grade was 0.9g/t.
		• Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	 The proposed Slippers Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit.
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	 Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	 Pit wall angles were designed at 40 degrees based on geotechnical recommendations.
	 The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). 	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	The mining dilution factors used.	 Dilution varies between 10% and 20% and is depending on the ore width. Dilution was applied at zero grade.
	The mining recovery factors used.	Mining recoveries were set at 95%.
U Contraction of the second se	Any minimum mining widths used.	
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	
	The infrastructure requirements of the selected mining methods.	

	Criteria	JO	RC Code explanation	Cor	nmentary
	Metallurgical factors or assumptions	•	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	•	The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
		•	Whether the metallurgical process is well-tested technology or novel in nature.	•	The CIP process is the conventional gold processing method in Western Australia
)	•	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	•	and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 96.2% for oxide and
		•	Any assumptions or allowances made for deleterious elements.		97.7% for fresh ore from the Slippers Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery
2		•	The existence of any bulk sample or pilot scale test work and the degree to which		of 92% for oxide and 95% for fresh ore was applied.
リ			such samples are considered representative of the orebody as a whole.	•	There are not any know deleterious elements.
)		•	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	•	Not applicable.
))	Environmental	•	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	•	Mining and processing operations are conducted wholly within granted Mining Leases.
3)			of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported	•	A Ground Water Extraction License is in place for Slippers and allows for the extraction and use of water for mining operations.
□ 1))				•	Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
				•	The waste rock comprises is non-acid forming.
	Infrastructure	•	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	•	The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
))			provided, or accessed.	•	Power generation, water and transportation infrastructure is in place at the site.
⊐))				•	Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
	1			•	An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.

Criteria	JORC Code explanation	Commentary
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs. 	 A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	 Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Operating costs were estimated using reasonable equipment productivity and maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing the DFS. There are no known deleterious elements, as such no allowances have been made. All costs were estimated in Australian dollars. Transport charges are based on pricing supplied to the Company for the purposes
		 of completing the DFS. Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS. The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including hear grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 Ore Reserve estimates were generated using a gold price assumption of \$2,00 per ounce. The gold price assumption used to generate this Ore Reserve estimate is a average gold price projection from a sample group of banks and financia industry analysts.
Market assessment	 The demand, supply and stock situation for the particular commodit consumption trends and factors likely to affect supply and demand into th future. A customer and competitor analysis along with the identification of likely mark windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	y, • Gold sold at spot price. et ce
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimate inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and input 	 A financial model was created that contemplated all capital and operating cost associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. NPV analysis performed in the process of estimating the Ore Reserve utilised 5% discount rate. Financial modelling and NPV analysis showed the operation meets the company requirements for investment.

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Criteria	JORC Code explanation	Commentary
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	The Ore Reserve is located on granted mining leases.
		• The Company maintains a good relationship with key stakeholders and with the local community.
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	• The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are conducted in accordance with the joint venture agreement.
1	Any identified material naturally occurring risks.	
	The status of material legal agreements and marketing arrangements.	• The Company has management control of the site, and mineral and mining tenements.
	• The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	The mineral and mining tenements remain in good standing.
		 The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	• The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	• This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA – ST PATRICK'S

Criteria	JORC Code explanation	Commentary	
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the 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. 	This release relates to the Mineral Resource Estimate (MRE) for the St Patrick's prospect at the Norseman Gold Project.	
		All data utilised in the updated St Patrick's MRE is historic in nature, with no new data added at the time of resource compilation.	
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	 Information on Drilling, Sampling and Geological Interpretation has been drawn from a report 'St Patricks and Norseman Reef Resource Report, March 2008 (Turner, B J). 	
	 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 (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 of diamond drill core is completed using half core and sampled so that the sample intervals match geological intervals and veins. Small veins, less 	
		than 15cm core length, have insufficient sample for assay. These intersections are bulked out to 15cm core length and dilution is included in the assay. The recen- move towards the use of HQ core has enabled samples as small as 10cm core length to be taken, while still retaining an adequate sample size.	
2	sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Historic Diamond Drilling:	
		 Assays prior to June 1996 were sent to the WMC laboratory in Kalgoorlie. From July 1996 assays were sent to Analabs in Perth. Assaying procedures changed with the change in laboratory. 	
		 Samples that were expected to assay well, were subjected to bulk pulverisation with duplicate assays at the WMC Laboratory and Screen Fire assaying at Analabs The routine assaying method for other samples was aqua regia digest at WMC and fire assay at Analabs. 	
		 The bulk pulverisation routine used at the WMC Laboratory involved milling the entire sample to a nominal -75µm. Duplicate samples were split from the milled material and the sample was analysed using aqua regia digest and an atomic absorption finish. 	
		 At Analabs the total sample was dried and milled in an LM5 mill to a nomina 90% passing -75µm. An analytical pulp of approximately 200g was sub sampled from the bulk and the milled residue was retained for future reference. Al the preparation equipment was flushed with barren feldspar prior to the commencement of the job. A 50 gram sample was fused in a lead collection fire assay. The resultant prill is dissolved in aqua regia and the gold content of the sample is determined by AAS. For samples that contained visible free gold the screen fire assay method was used. It involved a 1000g sample screened through a 106µm mesh. The resulting plus and minus fractions were then analysed fo gold by fire assay. Information reported included size fraction weight, coarse and 	
Criteria	JORC Code explanation	Com	mentary
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		•	Historic Face Data:
		•	Underground faces are routinely sampled, with the spacing (known as a cut) nominally being 2m for the St Pats and Norseman Reef orebodies. A scaled drawing (sketch) of the face is done on the CNGC mining department underground face sampling sheet (cns515) along with the measurements and other revellent details. The quartz vein is chip representing a channel sampled, with a final sample weight in the order of 2 kg. The assays are plotted on 1:500 development "spotty dogs", grade runs are calculated from these plans and transferred to the mine over view plans. Furthermore the assays and their location are recorded on the computer database (they are recorded as miniature drill holes and given the prefix of BUFR) for use in estimating the resource (a variety of different programs and procedures has been used but the end result has been the same).
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). 	•	The principal drilling technique for St Patrick's is diamond with surface drilling prior to January 2002 being NQ2 (79mm) diameter and post January 2002 being a mixture of HQ, NQ2 and in several instances BQ diameter due to drilling difficulties.
		•	Underground drilling was completed with electric hydraulic drill rigs using a standard core size of either LTK46 and LTK48, both with a nominal core size of 38mm.
5		•	Historic holes prior to Croesus are either BQ or AX size for holes drilled prior to 1968.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	•	RC sample recoveries were monitored by company representatives during drilling operations.
	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	•	The maximum sample interval for gold bearing veins is 1 metre, to ensure the assayed interval is not over weighted when calculating the total face grade.
	• 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.	•	The majority of underground drilling had good recovery. Some holes drilled from underground encountered voids associated with the weathering profile causing some core loss.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation,	•	All logging records are historical, it is assumed standard industry practices were followed by WMC, Croesus and CNGC.
	 mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	•	Geological logging is completed by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments.
		•	Logging is quantitative and qualitative with all core photographed wet.
		•	100% of the relevant intersections are logged.

Criteria	JC	DRC Code explanation	Co	mmentary
Sub-sampling techniques	ampling techniques • If core, whether cut or sawn and whether quarter, half or all core taken.	•	Sampling of diamond drill core is completed using half core and sampled so	
and sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.		that the sample intervals match geological intervals and veins. Small veins, less than 15cm core length, have insufficient sample for assay. These intersections are bulked out to 15cm core length and dilution is included in the assay. The recent
	•	For all sample types, the nature, quality and appropriateness of the sample preparation technique.		move towards the use of HQ core has enabled samples as small as 10cm core length to be taken, while still retaining an adequate sample size.
	•	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	•	For core samples, it is assumed that core was separated into sample intervals and separately bagged for analysis at the certified laboratory. Core is assumed to have
	•	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.		been cut under the supervision of an experienced geologist, following industry standard practices.
15	•	Whether sample sizes are appropriate to the grain size of the material being sampled.	•	It is assumed that all mineralised zones are sampled as well as material considered barren either side of the mineralised interval.
			•	No record of field duplicate procedures at St Patrick's have been located at the time of MRE compilation.
			•	Half core is considered appropriate for diamond drill samples.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	•	Assays prior to June 1996 were sent to the WMC laboratory in Kalgoorlie. Very old assays would have been done on site in CNGC's own assay lab using fire	
	•	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and		procedures changed with the change in laboratory.
		model, reading times, calibrations factors applied and their derivation, etc.	•	Samples that expected to assay well, were subjected to bulk pulverisation with duplicate assays at the WMC Laboratory and Screen Fire assaying at Analabs. The
$\overline{\mathbf{D}}$	•	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.		routine assaying method for other samples was aqua regia digest at WMC and fire assay at Analabs.
Ó			•	The bulk pulverisation routine used at the WMC Laboratory involved milling the entire sample to a nominal -75 um. Duplicate samples were split from the milled
				material and the sample was analysed using aqua regia digest and an atomic absorption finish.
			•	At Analabs the total sample is dried and milled in an LM5 mill to a nominal 90% passing 75um. An analytical pulp of approximately 200g is sub sampled from the
				bulk and the milled residue is retained for future reference. All the preparation equipment is flushed with barren feldspar prior to the commencement of the
				job. A 50 gram sample is fused in a lead collection fire assay. The resultant prill is
				AAS. For samples that contained visible free gold another method of screened
				fire assay was used. It involved a 1000g sample screened through a 106um mesh. The resulting plus and minus fractions are then analysed for gold by fire assay.
				Information reported includes size fraction weight, coarse and fine fraction gold content and calculated gold.

Criteria	JORC Code explanation	Commentary
		• From early 2000 to January 2002 the drill core samples have been sent to Kalgoorlie Assay Labs to be sampled using a accelerated cyanide leach on the a hierarchy of sample sizes depending on initial sample weight, if insufficient sample is present a fire assay is performed. A fire assay on the tails is done on all assays over 1 g/t and any others to have a minium of 10% with a fire assay on the tails.
		 Since January 2002 the drill core samples have been sent to Ultratrace Laboratories in Perth, where the Leachwell technique is used. After drying and pulverising, samples are rolled for 12 hours in a cyanide solution, before gold in the resultant solution is determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (MS). Samples that assay greater than 0.100 ppm Au are then re-analysed using the Mini-BLEG technique, where a 50 gram sub-sample is subjected to a 2 hour semi-static leach in a cyanide solution. Again, ICP-MS is used to determine gold. Samples that assay over 1.00 ppm Au are subjected to a 40 gram fire assay "tail" using a sub-sample of the dried Leachwell residue, in order to pick up any gold that was missed during the cyanide leaching process.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 All drilling data associated with Mineral Resources have been entered into a Master Database constructed and managed by Cube Consulting and underwent an updated validation process in 2017. The master database has built in referential integrity to prevent inaccurate data entry while the CNGC database administrator runs multiple validation processes on a weekly basis. All down hole parameters are recorded and entered into the central SQL database (Master Database). Twinned holes have not been systematically used at Norseman.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole	 Assay values are cuts. See Appendix 1 to this table 1 discolsure for a list of high grade cuts applied. Becent surface diamond drilling collars have been picked up using differential
	 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. Specification of the grid system used. 	GPS or conventional electronic total station, underground diamond drilling collars are picked up by the site surveyors using a conventional electronic total station. Older drill holes would have been picked up by conventional theodolites
	Quality and adequacy of topographic control.	 Prior to January 2002, down hole surveys on surface holes were carried out at 50m intervals using an Eastman camera to give down hole direction (azimuths and dips) with a shot being taken every 50 metres beyond the casing. Since that time, shots have been taken using the same techniques, but at 30m intervals. No highly magnetic lithologies were encountered which might invalidate the azimuth readings. Some older holes would have been down hole surveyed by the acid tube technique, and some by camera surveys.
		 The project lies in MGA 94, zone 51 Pre Pantoro survey accuracy and quality assumed to industry standard

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	• Numerous drill programs over the years have been carried out both underground and on surface at Norseman. The spacing of drilling has been broad on an exploration scale (up to 1km apart) given the large strike extent of mineralized structures at Norseman. When mineralized shoots have been identified, the drilling has been closed up to a nominal spacing of 20m by 20m or less depending on the width of the ore shoot. A number of sampling studies conducted at Norseman over the years, indicate a 20m by 20m spacing together with underground development is sufficient in identifying the continuity of mineralization for modeling purposes for Measured Resources. Wider spacing (up to 40m x 40m) is used for the Indicated category.
		 Historically, drilling (usually on a sparse grid of 40m x40m) has been shown to understate the mineable areas. Historically at Norseman for every 10 holes drilled in what later proved to be ore zones (through development and mining) only 3-4 holes showed values >1g/t. Hence estimation based on drilling only, tends to understate the estimated Resource. For this reason up to 80m extensions have been used on some of the Inferred category to compensate for the undervaluation caused by wide spaced drilling. The images in Appendix 2 (with the exception of Taurus) show the Inferred category for Underground Resources based on widely spaced drilling only. This component of Inferred constitutes only approximately 10% of the total reported Resource.
		• Compositing of samples (up to 5m) has been carried out in exploration drilling with splitting/resampling and re-assaying of composites occurring where required.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	• Drilling is generally perpendicular to the orebody where possible, other than the limitations introduced by the need to drill fans and access limitations imposed by existing workings. All intervals are reviewed relative to the understanding of the geology and true widths calculated and reported in the tables attached in the body of the report.
		No bias of sampling is believed to exist through the drilling orientation
		• A number of the reported historic holes are drilled at a high angle to the strike of the ore and true widths have been calculated and reported in the table accompanying this report
Sample security	The measures taken to ensure sample security.	 Historical drilling (once validated) has been progressively entered into the Master Database over an extended period, as well as more recent drilling. The data entry has been overseen by a site based data administrator as well as by an external database consultant (Cube Consulting). Pulps of samples that have been submitted to labs are cataloged and kept in a storage facility on site. Diamond core is cataloged and stored in a core yard onsite. There has been an on-going validation of data linking the database data with pulps. This work is continuing.CNGC sample security assumed to be consistent

	Criteria	JORC Code explanation	Con	nmentary
	Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	•	The sampling and data processes have been reviewed periodically by site and head office personnel for many years, to ensure continuity, repeatability and maintenance of standards, and from time to time has been reviewed by outside parties. Regular external reviews were conducted by Resource Evaluations Pty Ltd (REPL), SRK Consulting, Australian Mining Consultants (AMC) and Carras Mining Pty Ltd. WMC conducted some polygonal estimates.
			•	In 2017 Cube Consulting carried out a full review of the Norseman database. Overall the use of QA/QC data was acceptable.
2	SECTION 2: REPORTIN	IG OF EXPLORATION RESULTS – ST PATRICK'S		
リ	Criteria	JORC Code explanation	Con	nmentary
)	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 	•	The tenement related to this drilling is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd. This is : M63/14
)		environmental settings.	•	Tenement transfers to Pantoro South are yet to occur as stamp duty assessments are under review by the office of state revenue. The tenement is in good standing
Ŋ		• 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.		and no known impediments exist.
_	Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
	parties		•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
)			•	From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
	Geology	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
-			•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria	JORC Code explanation	Commentary
		 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Main-field strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick , these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena , sphalerite, chalcopyrite, pyrite and arsenopyrite.
		 The long running operations at Norseman have provided a good under- standing on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, how-ever large areas remain untested by drilling with the potential for new spurs and cross links high.
		 The Norseman and St. Patrick's reefs are separate shear/vein systems located at the northern end of the Mainfield area and are examples of north-south and crosslink reefs, respectively.
		 The Norseman reef strikes north-south, dips moderately to the east, and has a strike length in excess of 4 kilometres. In the area covered by this report the structure is oriented approximately 006/35E, and comprises a 10-15 metre shear zone with the Norseman reef at the core. In the northern parts the structure is hosted by the gently south-dipping Crown Main Dyke, while to the south it progresses out of the dyke and into an overlying se-quence of moderately west- dipping pillow basalt and fine- to medium-grained dolerite.
		 The shear zone is expressed as a margin-parallel ductile deformation fabric and is usually affected by gradational, foliation-controlled biotite-chlorite-carbonate- pyrrhotite alteration, though in places the shear is narrow and al-teration can be almost non-existent. The reef is generally a massive to weakly-laminated milky white quartz vein that reaches up to 3 metres in width, and though visible gold is common, sulphide content is generally very low. In places the reef can become very narrow, or pinch out altogether.
		 Variable vein behaviour, such as folding or splitting, is apparent in places, and seems to be localised around the reef's intersection with the St. Pat-rick's reef. Structural observations suggest that proximal to their intersec-tion, the Norseman reef approaches parallelism with St. Patrick's.

Criteria	JORC Code explanation	Commentary
		• The St. Patrick's structure is oriented 060/30SE, and lies in the footwall (western side) of the Norseman structure – the intersection of the two plunges moderately to the southeast. The structure is a 6-8-metre-wide shear zone with the St. Patrick's reef at its centre, and is strongly confined to just within the basal contact of the Crown Main Dyke gabbro. Beneath this gabbro lies a sequence of moderately west-dipping pillow basalt.
		 The structure is defined by a moderate shear fabric, which is affected by gradational foliation-controlled biotite-chlorite-carbonate-sulphide alteration, and is remarkably consistent in both thickness and orientation. The vein it-self reaches up to 2 metres in width, has a moderately- to strongly-laminated or breccia texture, and often has a smoky grey colour due to fine contained sulphide. The most common sulphide assemblage is pyrite-chalcopyrite-arsenopyrite-galena (in order of abundance), and again, visible gold is common. As with the Norseman reef, and most other reefs in the Norseman Goldfield, the St. Patrick's reef can become very narrow in plac-es, or pinch out altogether. The St. Patrick's reef is interpreted to be a crosslink-style deposit, formed between the Mararoa structure to the west, and the Norseman structure to the east, though the width of shearing around the reef is relatively wide in comparison to other crosslink deposits (HV1, Bluebird Link), prohibiting its classification as a purely tensional structure. The reef abuts against both the Norseman and Mararoa structures, though recent drill hole evidence suggests that St. Patrick's is opened as a weak foliation in the hearing used of the Nerseman and St.
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	No assay results are reported as part of this announcement.
	» easting and northing of the drill hole collar	
	 » elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
U .	» dip and azimuth of the hole	
	» down hole length and interception depth	
	» hole length.	
	 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	

Criteria	JORC Code explanation	Commentary
Data aggregation 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.	No assay results are reported as part of this announcement.
	• 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.	
1	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and	• These relationships are particularly important in the reporting of Exploration Results.	 Drilling from the underground is drilled from static locations which means there are variable dips and azimuths due to access limitations.
Intercept lengths	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	 Downhole lengths are reported and true widths are calculated in both 3D using trigonometry and cartographic planes (section and plan view) using a formulae
	 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'). 	 In excel True widths are calculated and reported for drill intersections which intersect the lodes obliquely.
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.	No assay results are reported as part 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.	No assay results are reported as part of this announcement.
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 meaningful data to report.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	• The dataset will be utilised in an update to the current Mineral Resource for the St Patrick's Deposit.
1	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – ST PATRICK'S

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	• Data input has been governed by lookup tables and programmed import of assa data from lab into database. The database has been checked against the origin assay certificates and survey records for completeness and accuracy.
	Data validation procedures used.	 Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personne. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	Confidence in the geological interpretation is generally proportional to the dr density.
	Nature of the data used and of any assumptions made.	Data used for the geological interpretation includes surface and undergroun
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	drill logging data. Underground face sampling were also utilized from clos spaced level development.
	The use of geology in guiding and controlling Mineral Resource estimation.	In general, the interpretation of the mineralised structures is clear.
	The factors affecting continuity both of grade and geology.	Interpretation of the data based upon mineralisation occurrences identified lode which were utilised as hard boundaries during estimation.
		Geology and grade continuity are constrained by mineralisation intercepts an mining orientation of key deposit structures.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The St Patrick's deposit is approximately 800m in strike length and generally 0 to 4m wide and extends nominally 500 metres below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data 	 A 3D block model was generated for the St Patrick's deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
	points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	• Four domains were utilised during the 2020 St Patrick's MRE, these being Domain 3 (St Patrick's Norseman Updip), Domain 4 (St Patrick's Norseman Central), Domain
)	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	 5 (St Patrick's 2) and Domain 7 (St Patrick's Norseman Downdip). The above domains originated from the Central Norseman Gold Corporation (CNGC) 2013 Minoral Pasauros data files Minoralization occurrences forms the
	The assumptions made regarding recovery of by-products.	basis for the mineralisation domain wireframes; these were oriented along trends of grade continuity (particularly Domain 4) and form hard boundaries during
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	estimation.
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	 A two-dimensional (2D) Ordinary kriging (OK) compositing approach was selected to address some of the main issues encountered when estimating narrow vein mineralisation, such as:
	Any assumptions behind modelling of selective mining units.	Additivity issues due to non-uniform support and resulting grade bias. Instances
	Any assumptions about correlation between variables.	of highly variable individual intercepts (e.g. 0.1 m to 21m) which would be difficult to incorporate and represent statistically using downhole composites of equal
	• Description of how the geological interpretation was used to control the resource	lengths (e.g. 0.5, 1.0 or 2.0 m);
	estimates.	Varying mineralisation geometry across lode, down dip, and along strike; and
	Discussion of basis for using or not using grade cutting or capping.	 Block size required for adequate volume fill of narrow geometry is generally too small introducing conditional bias to the MPE outcome.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	 Drillholes were composited for the full width of the domain intercept, followed by trigonometric calculation of true width ("TW") using the orientations of the drill hole intercept and ore domain defined by a digitized the Leapfrog reference (centreline) surface. A gold accumulation variable was then calculated by multiplication of intercept grade by true width.
		 Composited sample data was pressed onto a cartographic plane and statistical analysis undertaken on accumulation, width, and grade variables, to assist with determining estimation search parameters, top caps etc.
1		 Assessment and application of top-cutting was undertaken on the gold accumulation variable within individual domains. Top caps, where appropriate, were applied on an individual domain basis.

Criteria	JORC Code explanation	Commentary
		 Top caps were applied to the gram-meter accumulation variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain with cut values being:
		St Patrick's
		• Domain 3 = No cut value with a 0% metal reduction.
		• Domain 4 = 170 g/m Accumulation and a 19% metal reduction.
1		• Domain 5 = No cut value with a 0% metal reduction.
		• Domain 7 = No cut value with a 0% metal reduction.
		• Variography analysis of individual domains was undertaken on gold accumulation variables in 2D space, followed by Qualitative Kriging Neighbourhood Analysis to assist with determining appropriate search parameters.
		• The block models for interpolation were created using a block size of 10 mN x 10 mE x 5 mRL with sub-celling down to a minimum of 0.3125 m in all three orientations. Block size was determined primarily with the assumption of a relatively selective mining approach for underground operations.
		• The search strategy was a maximum extrapolation distance of 67 m over two search passes for all domains. A minimum of 4 and maximum of 10 composites was used in the first search pass and reduced to a minimum of 2 and a maximum of 10 composites in the second pass.
1		• Post estimate. Gold ppm values for each block were calculated by dividing interpolated gold accumulation by interpolated TW, whereby for each block:
)		Block Gold ppm = Block Gold Accumulation Value / Block TW Value
)		 Back calculated gold ppm values for each block were transformed from 2D to 3D space and pressed across the full width of the corresponding domain in the final host 3D compilation model.
)		• Check estimates for both domains were carried out in 3D using Inverse Distance Squared with Dynamic Anisotropy (DA) and Ordinary Kriging with grade limiting (search). Both accumulation and true width were estimated before back calculation of the check estimate gold grade.
		• Validation of the gold accumulation, TW estimations and gold ppm back- calculation was completed by global and local bias analysis, statistical and visual inspections in 2D and 3D space.
/		By products are not included in the resource estimate.
1		• No deleterious elements have been estimated. Arsenic is known to be present, however metallurgical test work suggests that it does not adversely affect metallurgical recovery.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and	Tonnage was estimated on a dry basis.
	the method of determination of the moisture content	The tonnages of material on stockpiles are quoted on a dry basis.

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	Criteria	JORC Code explanation	Commentary
	Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	 Underground. The global gold Mineral Resource has been reported at a 2.0 g/t gold cut-off and below -120m RL (greater than 100 m below topographic surface).
			 Open Pit. The global gold Mineral Resource has been reported at a 0.7g/t gold cutoff and above -120m RL (0-100 m below topographic surface).
	D		• Both the above cut off grades and reporting constraints are based upon economic parameters historically mined and optimised by previous owners.
00	Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	• The MRE extends nominally 500 m below topographic surface and lies within 100 vertical metres of historical level development. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within both an underground and open pit mining framework.
nal us	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. 	 Ore at Norseman is generally free milling with the majority of the gold being recovered by the gravity circuit. Some ore processed in the past (from satellite pits) has been associated with elevated amounts of pyrite leading to lower recoveries. The milling process is as follows: Run of mine (ROM) ore from stockpiles is fed into a primary crusher by front end loader. Crushed ore feeds a two stage milling circuit made up of a SAG mill, ball mill and also includes a pebble crusher for SAG mill oversize. Coarse gold is removed during grinding by two centrifugal gravity concentrators. The gravity gold recovered accounts for typically over 60% of gold in ore feed.
			• Lime and sodium cyanide additions are made to the ground slurry and gold is leached from the ore in six air agitated Pachuca style tanks. Carbon is used in the last five tanks for absorption of soluble gold from the slurry. Gold is recovered from carbon in a conventional elution and electrowinning circuit. CIL gold together with the gravity gold is smelted to produce gold dore bars for export from the site.
	Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	The deposit is on a granted mining lease with existing mining disturbance and infrastructure present.

Criteria	JORC Code explanation	Commentary
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.	s. Bulk density measurements were not located for this deposit. Bulk density was applied within the block model based upon weathering state and using values applied to adjacent Norseman deposits (e.g. Bullen) which have been historically
ð	• The bulk density for bulk material must have been measured by methods tha adequately account for void spaces (vugs, porosity, etc.), moisture and difference between rock and alteration zones within the deposit.	nt mined and processed.
	 Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	of
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 This Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to historical data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, recent and historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within open pit and underground mining environments. The St Patrick's series of deposits have been mined historically by underground methods during the early 2000's The St Patrick's Mineral Resources (MRE2020) were estimated using 52,398 m of historical diamond drilling from 312 drill holes and 1501 m of sampling from 2223 production faces. This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	The current Mineral Resource has not been reviewed.
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	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	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	The statement reflects a global estimate of tonnes and grade. Factors which could affect the relative accuracy and confidence of the estimate include:
	a qualitative discussion of the factors that could affect the relative accuracy and	d • Historical data quality and density.
	confidence of the estimate.	Historical mineralisation interpretation.
	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	H, Historical voids, location and volumes.
	economic evaluation. Documentation should include assumptions made and the procedures used.	e It is not known how the current global Mineral Resource estimate will perform against open pit or underground production. Additional data gathering (drilling
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	e and sampling) and increased data density is planned by PNR to ensure a localised estimation is completed prior to recommencement of production within these deposits.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - ST PATRICK'S

Criteria	JORC Code explanation	Со	mmentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
3	• If no site visits have been undertaken indicate why this is the case.		
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	•	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020
	• The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	•	Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.		Open Pit
		•	Cut-off grade was estimated using a cost model developed specifically for the St Pats Open Pit DFS.
)		•	The estimated open pit cut-off grade was 0.7g/t gold.
2		•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
			Underground
		•	Cut-off grades were estimated using a cost model developed specifically for the St Pats Underground DFS.
		•	The estimated Stoping cut-off grade was rounded to 3.0g/t gold.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	 Open Pit The proposed St Pats Open Pit is to be operated using conventional oper pit mining methods with drill and blast employed to break the ground, and
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip	excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
	 The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling 	 Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software. Pit wall angles were designed based on geotechnical recommendations and vary
)	 The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). 	 from 47 to 50 degrees. Optimisation was completed using supplier and contractor costs provided to the Company for the purpose of completing the DEC.
	The mining dilution factors used.	 Dilution of 10% was applied. Dilution was applied at zero grade.
	The mining recovery factors used.	Mining recoveries were set at 95%.
)	Any minimum mining widths used.	Underground
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	 Capital development is performed by twin boom jumbo and ore development performed by single boom jumbo (profile: 2.5m wide x 3.3m high).
	The infrastructure requirements of the selected mining methods.	 Production is by airleg stoping methods which were used during the last phas of mining at St Pats and are considered suitable by the Competent Person for th geotechnical conditions encountered at the mine.
) 1		• The production level interval varies between 20 and 30 metres due to latera offset of the ore shoots, the existing development infrastructure and the declin position.
)		• Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). Stope shapes were created using gold grade as the MSC optimisation field with the stoping cut-off grade applied (3.0g/t gold).
)		• A stoping height of 2.0m was applied to the stope design process. No additional stope dilution was applied in the MSO shape parameters to account for unplanned dilution outside of the conservative 2.0m minimum airleg stoping height.
		• Mining recoveries were set at 100% for development activities and 85% for ope stoping.
)		 Inferred Mineral Resources are included in the mine plan and economic analysi for the site, however Inferred Mineral Resources are not included in any Or Reserve estimate.
1		All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	• The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralisation.
	• Whether the metallurgical process is well-tested technology or novel in nature.	The CIP process is the conventional gold processing method in Western Australia and is well tested and proven
	The nature, amount and representativeness of metallurgical test work undertaken,	
	metallurgical recovery factors applied.	 The proposed milling circuit produces a grind size P80 of 75 μm. Historical records from previous St Pats processing campaigns through the existing CIL plant
1	Any assumptions or allowances made for deleterious elements.	indicate that ore treated in the proposed new CIL processing plant will achieve reveries in excess of 95%. For DFS financial modelling purposes a processing
	• The existence of any bulk sample or pilot scale test work and the degree to which	recovery of 95% was applied.
)	such samples are considered representative of the orebody as a whole.	There are not any know deleterious elements.
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	Not applicable.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	Mining and processing operations are conducted wholly within granted Mining Leases.
	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• A Ground Water Extraction License is in place covering the project and allowing for the extraction and use of water for mining operations.
		• Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
)		The waste rock comprises is non-acid forming.
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	• The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
1		• Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
)		An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.

Criteria	JORC Code explanation	Commentary
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs. 	 A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	 Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Operating costs were estimated using reasonable equipment productivity and maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing the DFS. There are no known deleterious elements, as such no allowances have been made. All costs were estimated in Australian dollars. Transport charges are based on pricing supplied to the Company for the purposes
		 of completing the DFS. Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS. The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including hear grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 Ore Reserve estimates were generated using a gold price assumption of \$2,00 per ounce. The gold price assumption used to generate this Ore Reserve estimate is a average gold price projection from a sample group of banks and financia industry analysts.
Market assessment	 The demand, supply and stock situation for the particular commodit consumption trends and factors likely to affect supply and demand into th future. A customer and competitor analysis along with the identification of likely mark windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	y, • Gold sold at spot price. et ce
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimate inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and input 	 A financial model was created that contemplated all capital and operating cost associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. NPV analysis performed in the process of estimating the Ore Reserve utilised 5% discount rate. Financial modelling and NPV analysis showed the operation meets the company requirements for investment.

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Criteria	JORC Code explanation	Cor	nmentary
Social	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
	licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are conducted in accordance with the joint venture agreement
	Any identified material naturally occurring risks.		The Company has management control of the site, and minoral and mining
	The status of material legal agreements and marketing arrangements.	•	tenements.
	• The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory	•	The mineral and mining tenements remain in good standing.
	approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	•	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.

Criteria	JORC Code explanation	Commentary
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories.	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	 Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	• The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	 This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within 	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS.
	stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	• No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. 	
	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	
	 It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	

SECTIONS 1, 2 & 3 - MAYBELL MINING CENTRE

The Mineral Resource Estimate for the Maybell Mining Centre has not changed from previously announced. Refer to ASX Announcement 'Pantoro Acquires a 50% Share in the World-Class Central Norseman Project' dated 14 May 2019.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - MAYBELL MINING CENTRE

	Criteria	JORC Code explanation	Cor	mmentary
	Mineral Resource estimate for conversion to Ore	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
) -	Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
2	Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
))		If no site visits have been undertaken indicate why this is the case.		
	Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	•	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
	Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	•	Cut-off grade was estimated using a cost model developed specifically for the Maybell Open Pit DFS.
))			•	The estimated open pit cut-off grade was 0.81g/t gold.
			•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Criteria	JO	PRC Code explanation	Cor	mmentary
Mining factors or assumptions	•	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	•	The proposed Maybell Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m beigh and will be mined in two 2 5m flitches.
	•	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	•	Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
	•	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	•	Pit wall angles were designed at 43 degrees based on geotechnical recommendations.
	•	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	•	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	•	The mining dilution factors used.	•	Dilution of 10% was applied. Dilution was applied at zero grade.
)	•	The mining recovery factors used.	•	Mining recoveries were set at 95%.
	•	Any minimum mining widths used.		
5	•	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.		
	•	The infrastructure requirements of the selected mining methods.		
Metallurgical factors or assumptions	•	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	•	The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	•	Whether the metallurgical process is well-tested technology or novel in nature.	•	The CIP process is the conventional gold processing method in Western Australia
	•	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	•	and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 μm. Metallurgical test work shows this will deliver recoveries of approximately 94.9% for ore from
	•	Any assumptions or allowances made for deleterious elements.		the Maybell Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 94% was applied
	•	The existence of any bulk sample or pilot scale test work and the degree to which	•	There are not any know deleterious elements.
	•	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	•	Not applicable.
Environmental	•	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	•	Mining and processing operations are conducted wholly within granted Mining Leases.
		of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	•	The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Maybell Mining Centre allowing for the extraction and use of water for mining operations.
			•	Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
			•	The waste rock comprises is non-acid forming.

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Criteria	JORC Code explanation	Commentary
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant • development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	• The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
		• Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
3		• An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs 	• A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	 Allowances made for the content of deleterious elements. The source of exchange rates used in the study. 	 Operating costs were estimated using reasonable equipment productivity and maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing the DEC
	Derivation of transportation charges.	the DFS.
_	The basis for forecasting or source of treatment and refining charges, penalties for failure to most specification atc	made.
Ŕ	The allowances made for royalties payable both Government and private	All costs were estimated in Australian dollars.
2	The allowances made for royantes payable, both Government and private.	• Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
		• Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
		• The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate.
		• The Mining Lease M63/2004 is held 10% by a private syndicate and 90% by the Norseman JV, which is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. A royalty is payable at a rate of \$10/oz up to the first 150,000 ounces produced. This is: M63/204.
		No other royalties are applicable to the project.
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns. etc.	Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	 The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.

	Criteria	JORC Code explanation	Co	ommentary
	Market assessment	 The demand, supply and stock situation for the particular commodi consumption trends and factors likely to affect supply and demand into t future. 	y, • ie	Gold sold at spot price.
		 A customer and competitor analysis along with the identification of likely mark windows for the product. 	et	
)	Price and volume forecasts and the basis for these forecasts.		
		 For industrial minerals the customer specification, testing and acceptan requirements prior to a supply contract. 	e	
)))	Economic	 The inputs to the economic analysis to produce the net present value (NPV) in t study, the source and confidence of these economic inputs including estimat inflation, discount rate, etc. 	e • d	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
9		NPV ranges and sensitivity to variations in the significant assumptions and inpu	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
3			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
	Social	• The status of agreements with key stakeholders and matters leading to soc	al •	The Ore Reserve is located on granted mining leases.
\mathcal{I}		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
	Other	• To the extent relevant, the impact of the following on the project and/or on t estimation and classification of the Ore Reserves:	e •	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are
굇		Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
2)		The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
		The status of governmental agreements and approvals critical to the viabil of the project such as minoral tenement status, and government and statute	ty .	The mineral and mining tenements remain in good standing.
リ シ コ	_	approvals. There must be reasonable grounds to expect that all necessa Government approvals will be received within the timeframes anticipated in t Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of a unresolved matter that is dependent on a third party on which extraction of t reserve is contingent.	ry ne ny ne	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
)	Classification	The basis for the classification of the Ore Reserves into varying confiden categories.	:e •	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
		• Whether the result appropriately reflects the Competent Person's view of t deposit.	e •	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
		 The proportion of Probable Ore Reserves that have been derived from Measur Mineral Resources (if any). 	d •	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	 This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits 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'.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.