ASX Announcement
5 April 2022

Scotia Mineral Resource and Ore Reserve Update

Pantoro Limited (**ASX:PNR**) (**Pantoro**) is pleased to announce an update to the Mineral Resource Estimates and Ore Reserve at the Scotia deposit, which forms part of the Scotia Mining Centre at the Norseman Gold Project (PNR: 50%).

Key Highlights:

- Increases in the Ore Reserve and Life of Mine Plan at Norseman will directly contribute to further mine life extension at Norseman. The Norseman Project Ore Reserve now stands at 12.9 Mt @ 2.2 g/t for 900,000 ounces, an increase of 49% since the October 2020 Definitive Feasibility Study (DFS).

Scotia Mining Centre

- Latest drill program focussed on Scotia Deeps, resulting in a 776% upgrade in the Scotia Underground Ore Reserve since completion of the DFS in October 2020. The Scotia Underground Ore Reserve now stands at 1.26 Mt @ 4.5g/t for 184,000 ounces.
- Current Life of Mine plan for the Scotia Underground mine, inclusive of blocks in the Inferred Mineral Resource category now stands at 1.44 Mt @ 5.1 g/t for 214,000 ounces. Mineralisation remains open in all directions.
- The total Scotia Mining Centre Mineral Resource now stands at 12.4 Mt @ 2.3 g/t for 906,000 ounces, a 119% increase since Pantoro acquired the project in July 2019. Mineral resources are well drilled with 70% of the Mineral Resource inventory in the Indicated category.
- The Scotia Deposit remains open to the north and at depth with no known geological features that could cause the orebody to terminate. Drilling along strike is ongoing.

Mainfield

- Additional work including verification of existing drill core and Mineral Resource modelling at the O'Brien's deposit has been completed. The O'Brien's deposit is due west of the Bullen underground mine with underground access substantially completed during previous operations. Development of O'Brien's will provide good access for drilling platforms for the high grade Crown Reef in the Mainfield.
- An updated O'Brien's Mineral Resource Estimate at Mainfield of 0.13 Mt @ 9.5 g/t Au for 40,000 ounces.
- O'Brien's Underground Reserve stands at 0.13 Mt @ 5.0 g/t Au for 21,000 ounces.

Commenting on the results, Managing Director Paul Cmrlec said:

"The sustained drilling campaign at the Norseman Gold Project continues to deliver excellent growth ahead of the recommencement of production in the third quarter of 2022. The Scotia Mining centre has provided a large portion of this early growth and remains open along strike and at depth. Pantoro expects ongoing upgrades from additional drilling at the Scotia Mining Centre for the foreseeable future. The current drilling focus is on conversion of Inferred Mineral resources at Green Lantern, and extension to the North of Scotia, and additional Ore Reserve updates are expected later in 2022.

Definition of economic Ore Reserves in the O'Brien's deposit provides another strategic entry point for redevelopment of the Mainfield, along with the St Patricks mine defined during the Phase 1 DFS. Additional drilling focus will return to the Main Field in the second half of 2022.

Construction activities at Norseman remain on track, with preliminary open pit mining activity now underway at Scotia, and work at the OK underground Mine to commence during April."

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Scotia

The Scotia gold deposit is located approximately 25 kilometres south of Norseman and was discovered in 1893, seven months after the original find at the Maybell deposit in the Dundas field. The historic production recorded from the Scotia mine from Central Norseman Gold Corporation production via open pit and underground mining between 1987 and 1996, was 811,000 tonnes @ 5.9 g/t Au for 155,000 ounces.

The Scotia Deposit is a key part of the Phase One DFS completed in October 2020, and since that time Pantoro has completed an extensive infill and extensional drilling program. During 2021 and into early 2022 an additional 55,647 metres of drilling from 91 reverse circulation and 85 diamond core drill holes has been completed. Drilling during 2021/2022 has targeted the underground mineral resources at the Scotia deposit.

The current drilling which is designed to achieve spacing suitable for Ore Reserve calculation (nominally 30 m x 30 m), has continued to increase resource confidence, infilling multiple lodes and further refining understanding of the controls on mineralisation.

The current Scotia Deposit Mineral Resource is detailed in Table 1 below:

Table 1: Scotia Deposit Mineral Resource

Reporting Group	Cut off (g/t)	Indicated			Inferred			Total		
		T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)
Open Pit	0.5	1,947	3.3	207	1,506	1.6	78	3,452	2.6	286
Underground	2	1,413	5.4	243	348	3.8	42	1,761	5.0	285
Total		**3,359**	**4.2**	**450**	**1,854**	**2.0**	**120**	**5,213**	**3.4**	**571**

Note: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

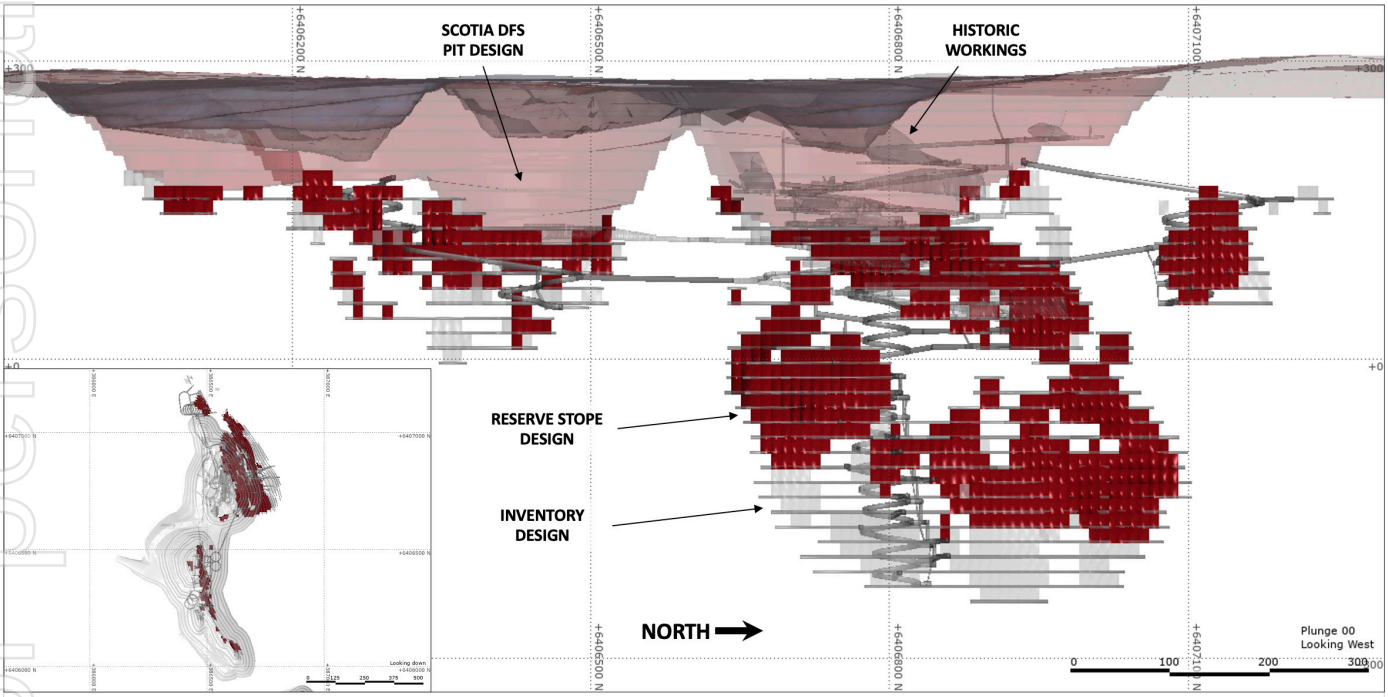

Figure: Long Section of Scotia

The Scotia Deposit is the key ore source within the Scotia Mining Centre. The Scotia Mining centre includes several Mineral Resource areas and a number of additional zones with mineralisation not yet classified as Mineral Resources. Ongoing growth within the Scotia Mining Centre is considered highly likely with drilling ongoing.

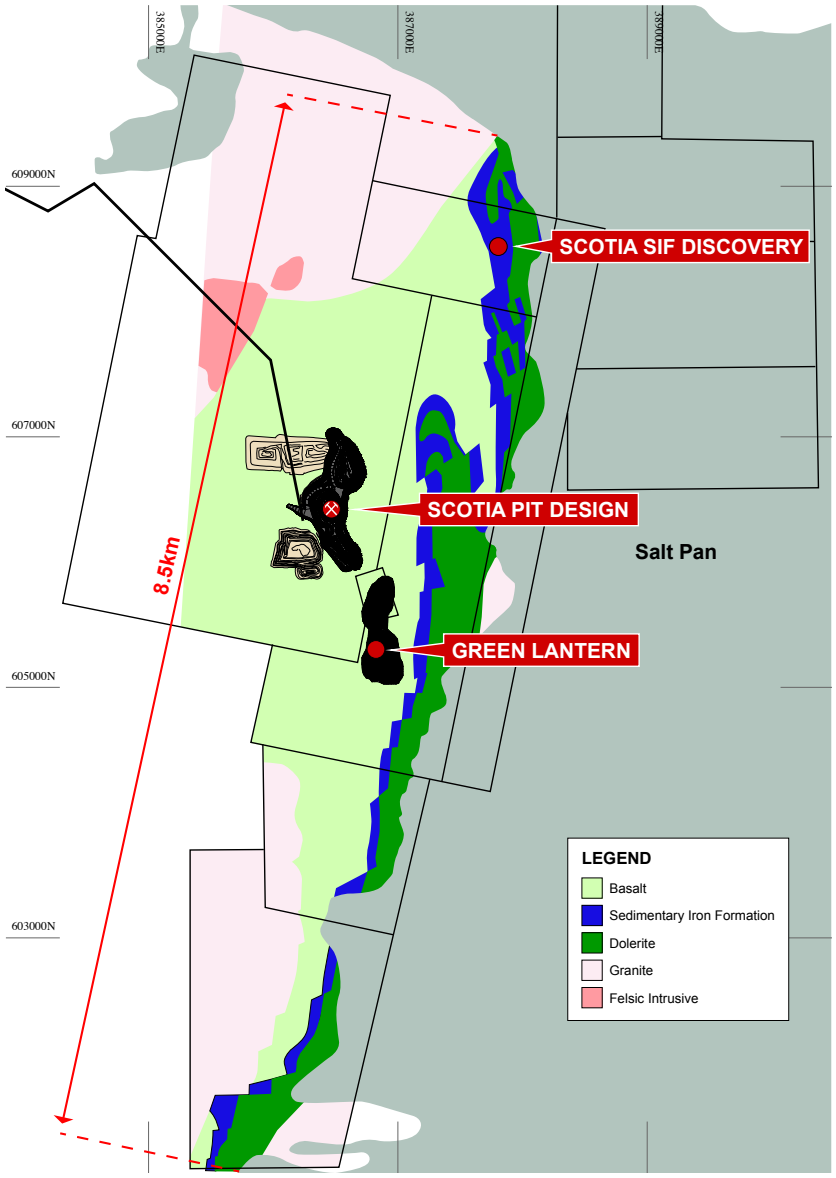

Figure: Plan of Scotia Mining Centre

The current Mineral Resource at the Scotia Mining Centre is shown in Table 2 below:

Table 2: Scotia Mining Centre Mineral Resource

Underground Mineral Resources	Indicated			Inferred			Total		
	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)
Scotia	1,413	5.4	243	348	3.8	42	1,761	5.0	285
Total Underground	**1,413**	**5.4**	**243**	**348**	**3.8**	**42**	**1,761**	**5.0**	**285**
Open Pit Mineral Resources	**Indicated**			**Inferred**			**Total**		
	T (Kt)	**Au (g/t)**	**Ounces (kOz)**	**T (Kt)**	**Au (g/t)**	**Ounces (kOz)**	**T (Kt)**	**Au (g/t)**	**Ounces (kOz)**
Scotia	1,947	3.3	207	1,506	1.6	78	3,452	2.6	286
Green Lantern	3,962	1.4	180	2,849	1.4	132	6,811	1.4	312
Freegift	-	-	-	254	1.5	13	254	1.5	13
Panda	68	2.8	6	65	1.9	4	133	2.4	10
Total Open Pit	**5,977**	**2.0**	**393**	**4,674**	**1.5**	**227**	**10,650**	**1.8**	**621**
Grand Total	**7,390**	**2.7**	**636**	**5,022**	**1.7**	**269**	**12,411**	**2.3**	**906**

Note: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

The Ore Reserve at the Scotia Mining centre is shown in Table 3 below:

Table 3: Scotia Mining Centre Ore Reserve									
Reporting Group	Proven			Probable			Total		
	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)
Scotia Underground	-	-	-	1,260	4.5	180	1,260	4.5	180
Scotia Open Pit	-	-	-	1,427	3.6	163	1,427	3.6	163
Panda Open Pit	-	-	-	14	6.7	3	14	6.7	3
Green Lantern Open Pit	-	-	-	2,646	1.3	111	2,646	1.3	111
Total	**-**	**-**	**-**	**5,347**	**2.7**	**457**	**5,347**	**2.7**	**457**

Note: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

O'Brien's

The O'Brien's deposit is located approximately 200 metres west and 160 metres below the Bullen West orebody within the Bullen Underground Mine. O'Brien's sits approximately 500 metres below surface in virgin ground. The O'Brien's Lode, was first identified in the 1950's by Norseman Gold Mines (NGM).

The O'Brien's Mineral Resource estimate was re-evaluated using 13,729 metres of historical diamond drilling from 51 drill holes with a visual review of available core conducted on 14 holes from 45 holes physically verified.

The Mineral Resource estimate is defined over an approximate down-dip extent of 330 metres, and is dipping 30 degrees to the east with a strike length of 460 metres. Extensions to the orebody through additional drilling are considered likely.

Table 4: O'Brien's Mineral Resource Estimate										
Reporting Group	Cut off (g/t)	Indicated			Inferred			Total		
		T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)
Underground	2	112	10.3	37	18	2.9	3	130	9.5	40

Note: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

The O'Brien's underground Ore Reserve includes an access strategy from the lower levels of the existing Bullen mine development, with previous Bullen infrastructure reinstated to support the mining activity. The geometry and size of the orebody is strongly aligned to small-scale mining methods. Importantly, accessing the O'Brien's underground will provide an ideal platform for further exploration in the highly prospective Crown Reef, which has been a major high grade contributor to historical production, but has yet to be significantly investigated at depth.

Table 5: O'Brien's Ore Reserve									
Total Ore Reserves	Proven			Probable			Total		
	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)
O'Brien's Underground	-	-	-	129	5.1	21	129	5.1	21

Note: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

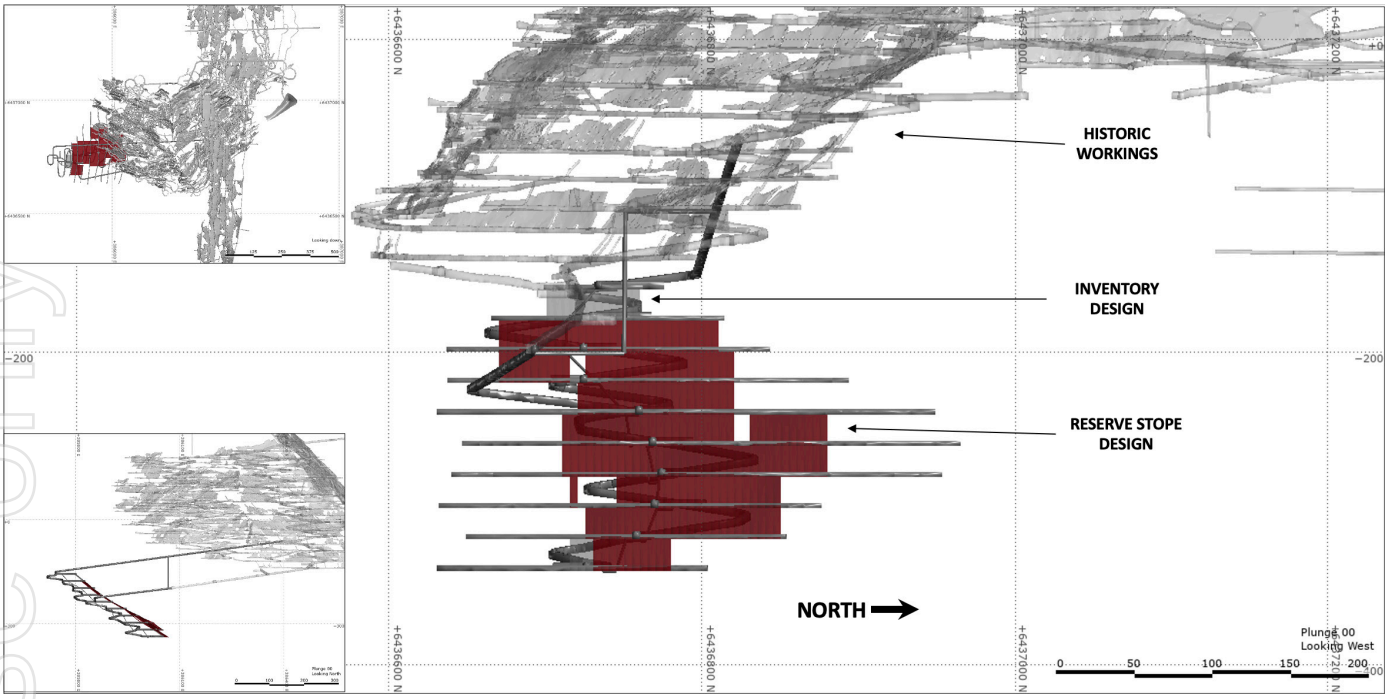

Figure: Long Section of O'Brien's

Global Mineral Resource and Ore Reserve

As a result of the Mineral Resource and Ore Reserve updates, the global Mineral Resource and Ore Reserve at Norseman has been substantially increased since completion of the DFS in October 2020. The current project Mineral Resource estimate and Ore Reserve are included in Tables 6 and 7 below:

Table 6: Norseman Gold Project Ore Reserve

Norseman Gold Project	Measured			Indicated			Inferred			Total		
	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)
Total Underground	267	14.4	124	3,203	10.7	1,101	2,510	11.1	896	5,980	11.0	2,121
Total Surface South	140	2.3	10	11,775	2.0	745	13,776	2.6	1,172	25,690	2.3	1,934
Total 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**	**19,185**	**3.4**	**2,121**	**19,611**	**3.7**	**2,332**	**43,354**	**3.4**	**4,694**

Note: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

Table 7: Norseman Gold Project Ore Reserve

Norseman Gold Project	Proven			Probable			Total		
	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)
Underground	-	-	-	2,048	4.9	319	2,048	4.9	319
Open Pit - Northern Mining Centres	-	-	-	2,058	2.4	161	2,058	2.4	161
Open Pit - Southern Mining Centres	-	-	-	4,612	2.1	317	4,612	2.1	317
Stockpiles	4,165	0.8	100	-	-	-	4,165	0.8	100
Total	**4,165**	**0.8**	**100**	**8,718**	**2.9**	**798**	**12,883**	**2.2**	**898**

Note: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

About Mainfield Mining Centre

Discovered in 1894, the Mainfield Mining Centre was the primary ore source for historic operations and is located adjacent to the town of Norseman. The historic production recorded from the Mainfield reef system was approximately three million ounces, primarily won from shaft and rail mines prior to the introduction of modern mechanised mine development.

The 5 km long Mainfield reef system was continuously mined for over a century from 1894, with the field acquired and developed on a large scale by WMC in 1936. The N-S striking Crown and Mararoa Reefs produced the majority of the historically mined gold, however a cross linking structure named Bullen was only initially mined in 1991 and produced approximately 500,000 ounces.

Internal technical reports by Western Mining reveal that within the Mararoa and Crown reefs economic mining blocks were able to be delineated where with wide spaced drilling approximately 30% of drill holes intersected high grade mineralisation due to the nuggety nature of the ore.

About the Norseman Gold Project

Pantoro Limited announced the acquisition of 50% of the Norseman Gold Project in May 2019 and completion occurred on 9 July 2019. Pantoro is the manager of the unincorporated joint venture, and is responsible for defining and implementing work programs, and the day to day management of the operation. Pantoro's interest in the Norseman Gold Project is secured through industry standard security arrangements over the entire project tenure as well as a priority deed ranking Pantoro's security interest first.

The Norseman Gold Project is located in the Eastern Goldfields of Western Australia, at the southern end of the highly productive Norseman-Wiluna greenstone belt. The project lies approximately 725 km east of Perth, 200 km south of Kalgoorlie, and 200 km north of Esperance.

The current Mineral Resource is 4.7 million ounces of gold with an Ore Reserve of 898,000 ounces.

Many of the Mineral Resources defined to date remain open along strike and at depth, and many of the Mineral Resources have only been tested to shallow depths. In addition, there are numerous anomalies and mineralisation occurrences which are yet to be tested adequately to be placed into Mineral Resources, with a number of highly prospective targets already identified.

The project comprises a number of near-contiguous mining tenements, most of which are pre-1994 Mining Leases. The tenure includes approximately 70 lineal kilometres of the highly prospective Norseman – Wiluna greenstone belt covering approximately 800 square kilometres.

Historically, the Norseman Gold Project areas have produced over 5.5 million ounces of gold since operations began in 1935, and is one of, if not the highest grade fields within the Yilgarn Craton.

The project is serviced by first class infrastructure at the project, local shire, and national infrastructure levels with everything required to commence mining already in place. Infrastructure is generally in good condition, and a new 1 MTPa processing plant is being constructed.

Pantoro has focused initial project planning on six initial mining areas containing multiple deposits which are amenable to both open pit and underground mining. A Phase 1 DFS was completed in October 2020 detailing an initial seven year mine plan with a centralised processing facility and combination of open pit and underground mining producing approximately 108,000 ounces per annum. Approvals for the project were received in October 2021, and construction of the project is underway with first production expected in the third quarter of 2022.

Enquiries

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This announcement was authorised for release by Paul Cmrlec, Managing Director.

Appendix 1 – Material Information Summaries – Mineral Resources

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

Scotia Mining Centre - Scotia Mineral Resource, March 2022

EXECUTIVE SUMMARY

The Scotia gold deposit is located approximately 25km south of Norseman and was discovered in 1893, 7 months after the original find at the Maybell Deposit in the Dundas field. 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.

Pantoro South Proprietary Limited ('Pantoro') completed an extensive infill and extensional drilling program during 2021 and into early 2022 which targeted the underground mineral resources at the Scotia deposit. The Scotia Mineral Resource Estimate was updated during March 2022 using all available drilling data as of March 5, 2022. The previous Scotia Mineral Resource Estimate was completed by Pantoro with a data cut-off date of June 24, 2020.

The Scotia Mineral Resource incorporates all drilling completed at the deposit by Pantoro since June 2020 which consists of an additional 55,657m of drilling from 91 Reverse Circulation and 85 Diamond Core drill holes. The Pantoro drilling has defined the Mineral Resource to an approximate vertical depth of 530m below the surface, along a strike length of 1,650m. The mineralised zones consist of multiple parallel lodes which range in true thickness from 0.2m to 18m (1.6m average thickness) and are hosted within a 120m wide alteration corridor. The average orientation of the mineralised zones is -60° dip towards 075° dip direction.

The Mineral Resource was reported using a 0.5 g/t Au cut off for open pit material and 2.0 g/t for underground split at 150m vertical depth below the topographic surface level. A total of 96 domains were interpreted as the basis of the 2022 Scotia Mineral Resource, with 7 being supergene domains and the balance being primary mineralisation.

The Mineral Resource was undertaken in accordance with JORC (2012) guidelines by Pantoro staff conducting the database validation, geological framework modelling, and estimations from the new and existing data.

The Mineral Resource is considered to be open along strike and at depth given the current understanding of mineralisation and structural controls. In time deeper drilling will be undertaken and will be focused on further expansion of the underground Mineral Resource and Ore Reserve.

Mineral Resource Statement

The Mineral Resource Statement for the Scotia Gold Mineral Resource Estimate was prepared during March 2022 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

3D geological and mineralisation models were interpreted and generated by Pantoro technical staff with 96 domains providing the basis for the Mineral Resource Estimate.

The Scotia Mineral Resource was updated to include an additional 55,657m of drilling completed by Pantoro consisting of 91 Reverse Circulation and 85 Diamond Core drill holes. The Pantoro drilling has defined the Mineral Resource to an approximate vertical depth of 530m below the surface, along a strike length of 1,650m.

The mineralised estimation domains at Scotia were informed by Reverse Circulation drilling (571 drill holes inclusive of RC grade control holes) and Diamond Core drilling (381 drill holes inclusive of diamond core tails and underground diamond core holes).

In the opinion of Pantoro, the reported mineral resource estimate is a reasonable representation of the global gold mineral resources within the deposit, based on Reverse Circulation and Diamond Drilling sampling data available as of March 5, 2022. The Mineral Resource comprises both open pit and underground resources, separated at a reference plane 150m below topographic surface and detailed in Table 1 below.

Table 1: Scotia Deposit Mineral Resource										
Reporting Group	Cut off (g/t)	Indicated			Inferred			Total		
		T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)
Open Pit	0.5	1,947	3.3	207	1,506	1.6	78	3,452	2.6	286
Underground	2	1,413	5.4	243	348	3.8	42	1,761	5.0	285
Total		**3,359**	**4.2**	**450**	**1,854**	**2.0**	**120**	**5,213**	**3.4**	**571**

Note: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This Mineral Resource 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 utilised Reverse Circulation and Diamond Core drilling, consisting pre-dominantly of NQ2 and to a lesser extent HQ/PQ diameter core from RC pre-collars.

Reverse circulation drilling was carried out using a face sampling hammer and a 5 ¾ inch diameter bit. All pre-collars were sampled.

Diamond Core Drilling

All diamond core was orientated and logged by a qualified geologist and generally sampled according to geology through the main mineralised envelopes. The core was cut in half under the supervision of an experienced geologist utilising an Almonte diamond core-saw. Core from the right hand side (RHS) of the cutting line was routinely sampled and 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 1.2m, with shorter intervals utilised according to geology to a minimum interval of 0.15m where clearly defined mineralisation is evident.

All diamond core is stored in core trays and was 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 were conducted during drilling, initially using a CHAMP GYRO north seeking solid state survey tool sampling every 5m. From October 2019, a Devi Gyro (Deviflex non-magnetic) survey tool was used with measurements taken every 3m.

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.

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.

Reverse Circulation Drilling

Samples were 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 were sampled at 1m intervals. Samples of 2-5 kg in weight were dispatched to an external accredited laboratory Bureau Veritas in Kalgoorlie or Perth (BVA) for routine fire assay analysis.

All RC holes were geologically logged by a qualified geologist and following logging parameters recorded: 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 were 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.

Review of drilling programs indicate all relevant intervals were assayed and is considered to be to industry standard at that time.

The RC drill holes used a REFLEX GYRO with survey measurements every 5m.

Sample Analysis Method

Reverse Circulation samples of 2-5 kg in weight were 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). Where other elements were assayed, either AAS base metal suite or acid digest with ICP-MS finish were utilised.

Historical drill sampling by CNGC from the commencement of the mine until late 1995 were assayed on site until the closure of the onsite laboratory when the samples were sent to Silver Lake lab at Kambalda. From November 2001, CNGC drill samples were sent to Analabs in Kalgoorlie, which was 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 (pulverise, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal). Review of the drilling programs indicated all mineralised intervals were assayed and were considered to be to industry standard at that time. Visible gold is encountered at the project and where observed during logging, Screen Fire Assays were conducted. A 500g sub-sample was screened to 106 microns and the plus fraction was fire assayed for gold and a duplicate assay was performed the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported.

The analytical techniques utilised approach total mineral consumption and are typical of industry standard practice.

CRM standards, field and pulp duplicates, 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 of the primary assay data has been demonstrated given the nature of the deposit and the level of the resource classification.

Review of previous drilling programs indicated all mineralised intervals were assayed and that the drilling, sampling and assaying processes and protocols that have been applied are considered to be to industry standard at that time.

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.

The geology of the Woolyeenyer, Noganyer and Penneshaw Formations has a N-S to NNE-SSW strike with a steep dip towards the West which is cut by corridors of subvertical mafic dykes and faults that strike NNW-SSE and NW-SE.

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.

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 gold mineralisation is characterised by diversity of styles, geometry, and gold tenor. Primary gold is hosted within laminated to massive quartz-amphibole-chlorite-carbonate-pyrrhotite-chalcopyrite bearing veins that are strongly discontinuous, boudinaged (i.e. pinch & swell) and display parasitic folds. The veins all sit within biotite-pyrrhotite-pyrite altered shear zones and are shear bounded veins.

The dominant gold trend is represented by NNW-SSE-striking lode shear zones and quartz reefs commonly oriented at 65-70°/150-175°. Basalt and basalt-dolerite contacts are the preferred host-rocks to the lode shear zones. Biotite-amphibole-sulphide (pyrrhotite-chalcopyrite-arsenopyrite) wallrock alteration of the lode shear zones is critical for gold mineralisation.

Several large 'post-mineralisation' cross-faults cause significant offsets of the stratigraphy and the gold mineralisation at Scotia. The cross-faults typically strike NE-SW (Death Valley Fault & Dambo Fault), E-W to WSW-ENE (Judge Dredd and Terminator Faults) and WNW-ESE (Judge Drokk Fault), and they can result in offsets of up to 2.5km (Dambo Fault) and 0.35km (Judge Dredd). The nature of these faults and the 'Scotia Diorite Dyke' were 'ground-truthed' by detailed mapping.

A total of 96 mineralised estimation domains were defined over a strike length of 1,650m within a 120m wide north-south alteration corridor. Seven of the mineralised zones are supergene domains with the balance being primary mineralisation.

The mineralised zones consist of multiple parallel lodes which range in true thickness from 0.2m to 18m (1.6m average thickness) and are hosted within a 120m wide alteration corridor. The average orientation of the mineralised zones is -60° dip towards 075° dip direction, but there can be significant local geometry variations between and within each domain depending on structural complexities.

The estimation domains are cross-cut and displaced by the late-stage Scotia Diorite Dyke which splits the deposit into Scotia North (includes Scotia Deeps) and Scotia South (includes Scotia Belly). The Dyke is probably associated with the Judge Dredd and Terminator Faults and results in a 200m dextral offset of mineralisation between Scotia North and Scotia South.

Mineralised zones remain open along strike to the north and down plunge at depth.

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 the residuals reviewed and incorporated 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 10 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. Seven 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 variograms were defined by two spherical structures where the average range varied from 23m to 69m. An average relative nugget effect of 46% was defined for the grouped domains ranging from 37% to 58%.

The search strategy used a maximum extrapolation distance ranging from 69 to 189 metres over three search passes for the primary domains, with a maximum extrapolation distance of 120 and 207 metres over three passes for the supergene domains. The first pass search was equal to the variogram maximum range (ranged from 23m to 69m) with the second pass search double the variogram range (ranged from 46m to 138m) and the third pass triple the variogram range (ranged from 69m to 207m). 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 group (i.e. ranged from 23m to 69m).

Check estimates were completed utilising both Ordinary Kriging with Dynamic Anisotropy (DA), Inverse Distance Squared (ID2) and also 2D Ordinary Kriging (2D) estimation of six selected main domains. Although outcomes for individual domains varied widely, globally the DA, ID2 and 2D check estimate average grades were within 0.3%, 1% and 10% respectively of the OK estimate average grade.

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

Bulk densities for both the mineralisation and waste were applied as follows;

- Fresh Mineralised = 2.83 g/cm^3
- Transitional Mineralised = 2.4 g/cm^3
- Oxide Mineralised = 1.8 g/cm^3
- Waste = 2.90 g/cm^3
- Scotia Diorite Dyke = 2.95 g/cm^3
- Dumps/Fill = 1.65 g/cm^3

Classification Criteria

The 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 60m, was within 60m of the block estimate for the majority of the deposit, 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 530 m below surface.

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

Grade 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. The cut-off grades were based upon economic parameters and depths (to 550m vertical depth below 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 and Metallurgical Factors and Assumptions

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

The Mineral Resource extends nominally 530m 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.

Mainfield Project Area – O'Brien Underground Mineral Resource, March 2022.

EXECUTIVE SUMMARY

Pantoro South Pty Ltd ('Pantoro') compiled an underground Mineral Resource Estimate for the O'Brien deposit, within the Mainfield Project area, during March 2022.

The O'Brien deposit is located to the west of the Bullen West orebody within the Bullen Underground Mine. The O'Brien was previously known as the Crown Hanging Wall Structure (CHWS) and was first identified in the 1950's by Norseman Gold Mines (NGM).

Whilst situated within the Bullen Mine Complex, the O'Brien is located at a reasonable distance from most Bullen's mining areas on the Norseman, Mararoa and St. Patrick's reefs. The O'Brien can be accessed via the decline from the existing Bullen West area that passes directly under the Bullen West orebody. The O'Brien deposit was confirmed via drilling in 1997 during the drilling of the Bullen West orebody.

The O'Brien underground Mineral Resource was re-evaluated to include all 13,729 m of drilling from the historical 51 diamond holes with the intent of reassessing the economic viability of the orebody. Historical drilling which was designed to test the extent of the O'Brien Orebody demonstrated the continuation of high-grade ore within the system, with similar high grades to proximal orebodies within the Bullen Mine Complex.

Norseman Gold Operations submitted 62 certified reference materials (CRM's) for analysis to Kalgoorlie and Ultratrace Laboratories during the period between 1997 and 2007. Out of the 62 standards and blanks there were 6 failures. Three of the failed standards including the blank are a result of control sample misclassification probably due to accidental sample swapping while placing the standards in the sample bags. The remaining 3 failed standards are very close to the 3-standard deviation. A slight negative bias of 1% average bias was observed for some standards.

The QAQC findings do not represent a material risk and the veracity of the primary assays are considered sufficient for the purposes of resource estimation. The high nugget nature of gold deposits generally results in non-ideal QAQC duplicate performance.

The Mineral Resource was reported using a 2.0 g/t Au cutoff grade. The MRE was undertaken within JORC (2012) guidelines with Pantoro South staff conducting database validation, geological interpretation and estimation under the supervision and review of the Pantoro Competent Person (CP).

Key points to note for the MRE include:

- The review process of the O'Brien Reef drill core reconfirmed the existence of the O'Brien deposit as a quartz dominated vein system with disseminated sulphides mainly pyrite and pyrrhotite.
- The database validation process did not identify any errors in the system. Some of the samples were analysed using both Aqua Regia and Screen Fire Assay. In such cases the fire assay results took precedence over the Aqua Regia method as the fire assay method is considered a more accurate method for analysing gold.

The O'Brien Mineral Resource is open along strike and at depth. Further drilling from underground platforms may help to fully delineate the extend of the ore body and to fully define the plunge of the high-grade ore shoot.

Mineral Resource Statement

The Mineral Resource Statement for the O'Brien deposit Mineral Resource Estimate (MRE) is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

In the opinion of Pantoro, the resource evaluation reported herein is a reasonable representation of the global gold mineral resources within the deposit, based on Diamond Drilling sampling data available as of March 2022.

The O'Brien Underground Mineral Resource was reviewed to include all the available historical 51 diamond holes for a total of 13, 729 m of drilling. The estimated resource for the O'Brien Orebody is detailed in Table 1 below.

Table 1: O'Brien's Mineral Resource Estimate

Reporting Group	Cut off (g/t)	Indicated			Inferred			Total		
		T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)	T (Kt)	Au (g/t)	Ounces (kOz)
Underground	2	112	10.3	37	18	2.9	3	130	9.5	40

Note: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This Mineral Resource 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.

Geology and Geological Interpretation

The O'Brien has previously been known as Crown Hanging Wall Structure (CHWS), which has been defined by drilling only. It is an approximately north-south striking east dipping structure sitting below Bullen West that was originally drill intersected in the 1950's by Norseman Gold Mines (NGM) and was confirmed in 1997 during the drilling of Bullen West.

The O'Brien deposit may be a cross-linking structure similar to Bullen West, which is narrow with no obvious structure controlling mineralization. Free gold is commonly observed in drill core and accessory sulphides are like the Blue Bird Link structure. The bounding structures to the O'Brien are not well understood but are thought to be a combination of E fault (to the north), South Crown Fault (which may possibly terminate E fault) and the Crown Reef. The E2 Fault may be the O'Brien bounding the structure to the south. Mineralization within the O'Brien is a combination of laminations and massive quartz. The average vein thickness is 0.5 m with typical range from 0.1 m to 1.4 m.

The stratigraphy is dominated by monotonous pillow basalts of the Woolenyer formation, which dip to the west at approximately 60 degrees, and have a northerly strike. Intrusive felsic porphyries postdate and cut the basalts, and typically have 60 degrees strike with a 40–50-degree dip to the north-west. Gold mineralization is associated with laminated quartz, found as fine gold on the sulphide grain boundaries and occasionally as coarse free gold commonly associated with accessory sulphides such as pyrite, pyrrhotite, galena, sphalerite, biotite and scheelite.

Drilling Techniques

NQ2 Diamond drill core was used to test the nature of mineralization along the O'Brien Reef Structure. A total of 51 diamond holes that included 47 underground and 4 surface diamond holes were drilled to test the extend of the mineralization along the O'Brien structure.

Diamond Core Drilling

All the historical diamond core was logged by qualified geologists. The drill core was sampled according to geology, with only selected samples assayed. Core was split into half under the supervision of an experienced geologist utilizing an Almonte diamond core-saw. All mineralized zones were sampled including the material considered barren either side of the mineralized intervals. Samples of maximum lengths of 2.0 m, and minimum intervals of 0.15 m were collected according to geology. All the diamond drill core is stored in core trays, measured and marked up in metre intervals referenced back to downhole core blocks recording run meterage and any core loss encountered. Downhole surveys were conducted using single shot Eastman camera at collar, 15 m then every 50 m thereafter. No significant core loss has been noted from the historical drilling. Visible gold encounters within the drill core were noted during the logging process and Screen Fire Assays are conducted.

Diamond samples 0.5-3.5 kg samples were dispatched to Kal Lab (Kalgoorlie) and an external accredited laboratory (Ultratrace, Perth) where they were crushed and pulverized to a pulp (P90 75 micron) for fire assay (50g charge). The processes applied are industry standard for this type of sample.

Sample Analysis Method

Samples that were expected to return high gold grades were subjected to bulk pulverization with duplicate assays at the Kal Laboratory and Screen Fire Assaying at the Ultratrace (Perth). The routine assay method for other samples was aqua regia digest at Kal Laboratory and fire assay at the Ultratrace.

The bulk pulverization routine used at Kal Laboratory involved milling the entire sample to a nominal -75 micron. Duplicate samples were split from the milled material and the sample was analyzed using aqua regia digest and an atomic absorption finish. At the Ultratrace the total sample was dried and milled in a LM5 mill to a nominal 90% passing 75 microns. An analytical pulp of approximately 200g was sub sampled from the bulk sample and the milled residue was returned for future reference.

All the preparation equipment was flushed with barren feldspar prior to the commencement of a new job. A 50-gram sample was fused in a lead collection fire assay. The resultant prill was dissolved in aqua regia and the gold content of the sample was determined by AAS. For samples that contained free visible gold another method of screened fire assay was used. It involved 1000g sample screened through a 106-micron mesh. The resultant plus and minus fractions were then analyzed for gold by fire assays. Information reported includes size fraction weight, coarse and fine fraction gold content and the calculated gold. 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 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 are noted in results given the nature of the deposit and the level of classification.

Estimation Methodology

The O'Brien deposit consists of one estimation domain that was reassessed during March 2022 period.

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 mineralization within the O'Brien deposit is a combination of laminated and massive quartz veins. The interpreted mineralized domain was utilized as a hard boundary during the estimation process. A top cut grade was applied to the gram-metre accumulation variable after statistical, spatial analysis and assessment of percentage of metal reduction within the mineralized domain.

The 2D parent estimation block size selected for interpolation was equidimensional being 15 metres in the Y (mN), X (mE) and Z (mRL) directions. The parent block size was determined through kriging neighborhood analysis, review of vein dimensions, drilling density and mining selectivity. Block sub-celling size was selected for appropriate volume fill within the mineralization wireframe. No block rotation was applied.

Omni variography was conducted from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to the interpreted domain.

The search strategy for the O'Brien used a maximum extrapolation distance of 103 and 115 metres over three search passes for the primary domain. The first search pass was equal to the variogram maximum range of 75 metres, with the second search pass of 103 metres and the third search pass at 115 metres. A constant minimum of 4 composites was used across the first and second search passes, dropping to a minimum of 3 on the third pass. A maximum of 14 composites was maintained across all the search passes.

Check estimates were completed utilising Inverse Distance Squared 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.

Bulk densities for both the mineralisation and waste were applied as follows;

- Mineralised Fresh = 2.7 t/m^3
- Waste Fresh = 2.98 t/m^3

Classification

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, mineralization volumes 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 an underground mining environment. The O'Brien deposit remains undeveloped but several orebodies within its vicinity such as Crown Regent, Mararoa, Bullen Main (Bluebird Shear) and Bullen West Orebodies etc. have been mined for decades. The bulk of the data utilised in the current Mineral Resource estimate is from 51 diamond drill holes totaling 13,729 metres.

Blocks in the resource model have been allocated a confidence category of Indicated or Inferred based on a combination of various estimation quality derived parameters, data support, data quality, mineralization continuity and historical mining knowledge from the exploited orebodies in the vicinity of the O'Brien.

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

Grade Cut-off Parameters

The global gold Mineral Resource has been reported at a 2.0 g/t gold cut-off and is based upon economic parameters derived from optimization study including historical information from the surrounding orebodies with similar mineralization style, commodity, comparable size and potentially similar mining methodology.

Mining and Metallurgical Factors and Assumptions

The material reported in the O'Brien Mineral Resource is considered to meet Reasonable Prospects for Eventual Economic Extraction based on the following considerations:

Mineralised material of similar characteristics was previously exploited at similar cutoff grade from the surrounding orebodies such as Crown Regent, Mararoa, Bullen Main (Bluebird Shear) and Bullen West Orebodies. The ore that was exploited from these orebodies was processed in the historic Norseman Gold Project processing facility where optimum recoveries were consistently reported via conventional gravity and cyanidation methodology.

The O'Brien Mineral Resource extends nominally to a vertical depth of 500 m below the surface. Pantoro South considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an underground mining framework.

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

Appendix 2 – Material Information Summaries – Ore Reserves

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

Scotia Underground

MATERIAL ASSUMPTIONS FOR ORE RESERVES

The Ore Reserve estimate is based on the March 2022 Mineral Resource estimate. The Ore Reserve is based on the parameters applied in the 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, with cost inputs updated where appropriate to reflect current contracted rates for the OK Mine.

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 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 (2.5g/t gold). 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 95% 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, with costs increased where necessary utilising current contract rates for the OK underground mine. The estimated Stoping cut-off grade was rounded to 2.5g/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 $2,500 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. These models have been updated to reflect the 2022 Mineral Resource Estimate, and adjusted costings as contracted for the OK Mine and recognition of capital works already completed. 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.

O'Brien Underground

MATERIAL ASSUMPTIONS FOR ORE RESERVES

The Ore Reserve estimate is based on the March 2022 Mineral Resource estimate. The Ore Reserve is based on a preliminary mine design and schedule for the mine area. Mining factors and costs used to generate this Ore Reserve estimate are based on the parameters used for the Norseman Gold Project DFS, known conditions in previous mining at the site and current contracted costs for the neighbouring OK Mine and air leg mining rates at other Pantoro operations.

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 mine design proposes a twin decline access from the existing Bullen mine workings. Airleg stoping has been selected as the production method, reflecting the narrow and moderately flat-lying nature of the ore. Ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high).

A production level interval of 20 metres has been applied to support productive airleg stoping panels. Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). A minimum stoping width of 0.8m was applied to the stope design process. Additional stope dilution of 0.3m was applied in the MSO shape parameters to account for unplanned dilution outside of the 0.8m minimum airleg stoping width, for a total minimum mining width of 1.4m which is reflective of current airleg mining widths being mined at other Pantoro operations. No additional dilution was applied to this minimum width. 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 the Bullen mine processing campaigns through the existing CIL plant indicate that ore treated in the proposed new CIL processing plant will achieve recoveries in excess of 95%. For 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 O'Brien Underground Mine. 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 $2,500 per ounce.

ESTIMATION METHODOLOGY

A mine design and mining schedule was created based on the O'Brien Mineral Resource. A financial model was created that contemplated 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 Norseman Gold Project DFS and where appropriate, utilising current contracted costs. 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. Costs were adjusted on the basis that extensive progress and expenditure has already been spent to the operational restart at Norseman.

Appendix 3 – JORC Code 2012 Edition – Table 1 – Scotia Mineral Resources and Ore Reserves

SECTION 1: SAMPLING TECHNIQUES AND DATA

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. • 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 problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• This release relates to the Mineral Resource estimate for the Scotia deposit within the Norseman Gold Project. • Reverse Circulation drilling (RC) samples - Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m. The 2-7kg samples were dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). • Diamond Core Drilling (DD) 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). • All drill 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. • 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 were conducted when appropriate. • 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 whereafter 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	JORC Code explanation	Commentary
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or 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 and 5/8 inch diameter bit • Surface Diamond Core drilling – 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. • 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. • 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 noted. • 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. • The total length and percentage of the relevant intersections logged.	• Geological logging is completed or supervised by a qualified geologist and logging parameters included: 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. • Diamond core holes were logged to geological boundaries and is considered quantitative. All drill core was photographed and digitally recorded. • 100% of the holes are logged

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • 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.	• All RC holes are sampled on 1m intervals • 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 for DD drilling have not been undertaken due to the inherent variability of this sampling method (i.e. other half of core or ¼ core). • Field duplicates for RC drilling are routinely collected • 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.
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.	• Gold assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA using fire assay with 40g charge. Where other elements were assayed, either AAS base metal suite or acid digest with ICP-MS finish was utilised. The analytical 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.

Criteria	JORC Code explanation	Commentary
		• Historical RC drill samples from the commencement of the mine until late 1995 were assayed on site until the closure of the onsite laboratory after which 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. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth. Some significant intersections have been resampled and assayed using different analytical methods to validate results. • There are no twinned holes drilled as part of these results. • 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 are completed in Surpac mining software. • No adjustments have been made to assay data unless in instances where standard tolerances were not met and a re-assay was 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. • Specification of the grid system used. • Quality and adequacy of topographic control.	• 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 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. • 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.

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.	• 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 diamond drilling or RC sampling. • 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 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.	• No bias of sampling is believed to exist through the drilling orientation • All drilling in this program is currently interpreted to be perpendicular to the orebody.
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. • 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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The tenement where the drilling has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. These are: M63/36 and M63/112-I • Tenement transfers to Pantoro South are currently being finalised with the OSR review and stamp duty payable resolved. The tenements predate native title claims. • The tenements are in good standing and no known impediments exist.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• 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 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 Scotia deposit was 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. • 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.

Criteria	JORC Code explanation	Commentary
		• 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 » 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.	• No assay results are reported as part of this announcement.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No assay results are reported as part of this announcement.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• Surface RC and Diamond drilling of the pits is perpendicular to the orebody. • Downhole lengths are reported and true widths are calculated using a formula in excel based on orebody dip and strike relative to drilling angle. • The average orientation of the mineralised zones is -60° dip towards 075° dip direction. There can be significant local geometry variations between and within each domain depending on structural complexities.

Criteria	JORC Code explanation	Commentary
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.	• Completion of high-resolution drone magnetic surveys over the Scotia and Green Lantern deposits has helped to further define and confirm the geological framework that formed the basis of the Mineral Resource.
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 Mineral Resource, additional drilling will be undertaken to evaluate and test the potential for depth and strike extensions to the defined mineralised zones for future Mineral Resource updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• 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 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. • 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. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• Confidence in the 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 includes surface and trench mapping and drill logging data. Where available, backs mapping was also utilized from close spaced level development in the historic underground portions of the deposit.

Criteria	JORC Code explanation	Commentary
		• 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 has a drilling defined strike length of 1,650m, to a vertical depth of 530m below surface. The mineralised zones consist of multiple parallel lodes which range in true thickness from 0.2m to 18m (1.6m average thickness) and are hosted within a 120m wide alteration corridor. • Mineralised zones remain open along strike to the north and down plunge at depth.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• 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. • Geological interpretation forms the basis for the mineralisation domain wireframes, which were oriented along trends of grade continuity and form hard boundaries during estimation. • A total of 96 domains were interpreted as the basis for the Mineral Resource, with 7 being supergene domains and the balance being primary mineralisation. • 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 and/or available for coding. • Block dimensions for interpolation were Y=10 mN, X=5 mE, and Z=10mRL with sub celling of Y=0.625 mN, X=0.3125 mE, and Z=1.25 mRL to provide adequate domain volume definition and honour wireframe geometry. Considerations relating to appropriate block size included: drill hole data spacing, conceptual mining method, variogram continuity ranges and search neighbourhood optimisation. • Diamond Core and Reverse Circulation drilling data was utilised for the 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.

Criteria	JORC Code explanation	Commentary
		• 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 ranging from 69 to 189 metres over three search passes for the primary domains, with a maximum extrapolation distance of 120 and 207 metres over three passes for the supergene domains. The first pass search was equal to the variogram maximum range (ranged from 23m to 69m) with the second pass search double the variogram range (ranged from 46m to 138m) and the third pass triple the variogram range (ranged from 69m to 207m). 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 Au to a range equal to the first pass of the domain group (i.e. ranged from 23m to 69m) • 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), Inverse Distance Squared (ID2) and also 2D Ordinary Kriging (2D) estimation of six selected main 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. • 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 550 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 530m 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 material type 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. • 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 and regional exploration activities. • Bulk densities for both the mineralisation and waste were applied as follows: » Fresh Mineralised = 2.83 t/m3 » Transitional Mineralised = 2.4 t/m 3 » Oxide Mineralised = 1.8 t/m 3 » Waste = 2.90 t/m 3 » Scotia Diorite Dyke = 2.95 t/m 3 » Dumps/Fill = 1.65 t/m 3

Criteria	JORC Code explanation	Commentary
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 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 30m, or was within 30m 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 530 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	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. • The historic production by CNGC recorded from the Scotia mine by open pit and underground mining between 1987 and 1996, was 811,000t @ 5.9 g/t Au for 155,000 ounces. • No spatially comparable production data was available for this deposit at the time of MRE compilation.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES

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. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• The Underground Ore Reserve estimate is based on the Mineral Resource estimate at 1st March 2022. • 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. • If no site visits have been undertaken indicate why this is the case.	• The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
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. Cost inputs have been updated where appropriate to reflect current contracted rates for the OK Mine. • Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study and operationally appropriate estimates from other Company operations.
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 Scotia Underground DFS. • The estimated Stoping cut-off grade was rounded to 2.5g/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.

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 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. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used. • The mining recovery factors used. • 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.	• The DFS proposed a decline mine with mechanised jumbo development. • 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 anticipated at the mine based on historic reports from previous mining. • 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 (2.5g/t gold). • 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 95% 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 as 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. • 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. Metallurgical test work shows this will deliver recoveries of approximately 92.6% for ore from the Scotia Mining Centre when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied. • There are no known deleterious elements. • 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, 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.
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.	• 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. • 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 • 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.	• 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. • 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.

Criteria	JORC Code explanation	Commentary
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 $2,500 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.
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 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, and from current operating costs at other comparable operations within the Company. • 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 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: • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • 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 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. • The Company has management control of the site, and mineral and mining tenements. • 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.

Criteria	JORC Code explanation	Commentary
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. • Proven Ore Reserves are derived from Measured Mineral Resources. 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 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 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.

Appendix 4 – JORC Code 2012 Edition – Table 1 – O'Brien Mineral Resources and Ore Reserves

SECTION 1: SAMPLING TECHNIQUES AND DATA

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. • 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 problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• This report relates to the annual update of the Mineral Resource and Ore Reserve statement for the O'Brien deposit at the Norseman gold project. • The O'Brien deposit has been sampled by Surface and underground diamond sampling. • All core is logged and sampled according to geology, with only selected samples assayed. Drill core was halved, with one side assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 2m, with shorter intervals utilised according to geology. • Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks. • Diamond drilling is completed to industry standard and various sample intervals based on geology (0.15m-2m) are selected based on geology. • Diamond core 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). • Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
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).	• Underground diamond drilling is LTK60 core drilled with an Atlas Copco carrier mounted U8 DH Rig with Rod Handler and wire line. • NQ and HQ Diamond drilling was conducted for all surface diamond drilling. Diamond holes were oriented using a Reflex orientation tool. Diamond holes were geologically logged.
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. Recovery and sample quality assessments were undertaken with visual observation of split reject and lab weight samples are recorded and reviewed. • All drilling was completed within rig capabilities. Rigs used auxiliary air boosters when appropriate to maintain sample quality and representivity. • There is no known relationship between recovery and grade.

Criteria	JORC Code explanation	Commentary
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 included: 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. • Diamond core holes were logged to geological boundaries and is considered quantitative. All drill core was photographed and digitally recorded. • 100% of the holes were logged
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • 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.	• Core samples were sawn in half utilising an Almonte core-saw, with one half used 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, was routinely cut on the orientation line. • All mineralised zones are sampled as well as material considered barren either side of the mineralised interval • Half core is considered appropriate for diamond drill samples. • Sample sizes are considered appropriate • Field duplicates i.e., other half of core or ¼ core has not been routinely sampled. The high nugget nature of gold deposits generally results in non-ideal QAQC duplicate performance.
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.	• Gold assays were completed in a certified laboratory in Kalgoorlie WA. using fire assay with 40g charge and AAS finish. Other elements were assayed using 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. • No geophysical logging of drilling was performed. • Blind submission of Certified Reference Materials (CRM) and blanks was undertaken, and repeats are also included as part of the QAQC system. In addition, the laboratory had 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.

Criteria	JORC Code explanation	Commentary
		• Norseman Gold Operations submitted 62 certified reference materials (CRMs) for analysis to Kalgoorlie and Ultratrace Laboratories during the period between 1997 and 2007. Out of the 62 standards and blanks there were 6 failures. Three of the failed standards including the blank are a result of control sample misclassification probably due to accidental sample swapping while placing the standards in the sample bags. The remaining 3 failed standards are very close to the 3-standard deviation. A slight negative bias of 1% average bias was observed for some standards. • The QAQC findings do not represent a material risk and the veracity of the primary assays are considered sufficient for the purposes of resource estimation. The high nugget nature of gold deposits generally results in non-ideal QAQC duplicate performance.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth. Some significant intersections have been resampled and assayed using different analytical methods to validate results. • There are no twinned holes drilled as part of these results • All primary data is logged and entered into the Access database. Data was visually checked for errors before being sent to the company database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs were kept onsite. • No adjustments have been made to assay data.
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. • Quality and adequacy of topographic control.	• Drilling is surveyed using conventional survey. Downhole surveys are conducted during drilling using a Reflex survey tool. All holes are surveyed down the hole at 15m, and every 50m thereafter. When the hole is completed, multi-shots are taken every 6m from EOH when tripping rods. • All underground development is routinely picked up by conventional survey methods and faces referenced to this by measuring from underground survey stations prior to entry into the database • 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

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.	• Drill hole spacing underground is variable due to the nature of drilling fans from suitable underground drilling platforms. • Historical drilling informing the current MRE is based on spacing of centres nominally between 40 m by 40 m spacing on drill lines. • The Competent Person is of the view that the drill spacing, geological interpretation and grade continuity of the data supports the resource categories assigned. • No sample compositing was undertaken. • Core samples were sampled to geology of between 0.15 and 1.2m intervals
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 other than the limitations introduced by the need to drill fans. 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.	• 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.	• Review of the current data has been undertaken by Pantoro personnel as part of the current Mineral Resource. • The historic data including the QAQC was thoroughly checked during the review of the current Mineral Resource estimate.

SECTION 2: REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The tenement where the Mineral Resource estimate has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/13. • Tenement transfers to Pantoro South have been registered with DMIRS and transfer is expected to occur shortly. The tenements predate native title claims. • The tenements are in good standing and no known impediments exist.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• 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. • The O'Brien deposit has previously been known as the Crown Hanging Wall Structure (CHWS), is only known from drilling. The O'Brien was originally drill intersected in the 1950's by Norseman Gold Mines (NGM) and was confirmed in 1997 during the drilling of Bullen West.
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.

Criteria	JORC Code explanation	Commentary
		• 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 » 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.	• No assay results are reported as part of this announcement.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No assay results are reported as part of this announcement.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• Diamond drilling is generally perpendicular to the orebody.

Criteria	JORC Code explanation	Commentary
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 geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Further additional drilling may be undertaken to evaluate and test the O'Brien's potential for depth and strike extensions

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• 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 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. • 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. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• Confidence in the geological interpretation is generally proportional to the drill density. The review of the historical diamond drill core confirmed the existence of the O'Brien deposit. The historical drill core was rephotographed during the review. • The Interpreted wireframe that was created utilizing Leapfrog TM was utilised to constrain the Mineral Resource estimate. These are based on coding of mineralised drilling intersections and geological constraints. The wireframe has been conducted to a 0.5 ppm Au cut –off grade for inclusion based on the above parameters.

Criteria	JORC Code explanation	Commentary
		• The mineralisation is consistent with narrow high grade gold lodes and drill intercepts clearly define mineralisation and lode position. • In general, the interpretation of the mineralised structures is clear, however short strike splay structures have been observed in the nearby mined out ore bodies. • In general, the controls on mineralisation and grade continuity are constrained by quartz veining. • Geological interpretation of the data was used as a basis for the O'Brien Lode which was then constrained by cut-off grade. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
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 O'Brien deposit occur over a strike length of approximately 460m. Mineralised widths in plan vary between 0.1m and 1.4m and mineralisation starts 500m below the surface and has not been closed off.

Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.
	• The assumptions made regarding recovery of by-products.
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
	• Any assumptions behind modelling of selective mining units.
	• Any assumptions about correlation between variables.
	• Description of how the geological interpretation was used to control the resource estimates.
	• Discussion of basis for using or not using grade cutting or capping.
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.
		• 51 Diamond core holes totaling 13,729 m were used in the Mineral Resource estimate update for O'Brien.
		• The O'Brien block models used primary block sizes of Y=15mN, X=15mE and Z=15m RL. Sub-celling to 0.243m in all directions was utilised at domain boundaries to allow adequate representation of the domain geometry and volume. Block size was determined primarily with the assumption of a relatively selective mining approach for underground operations.
		• One domain was updated during the 2022 O'Brien MRE.
		• Grade distribution statistics were used to generate top cuts by domain, along with the analysis of distribution graphs and disintegration analysis in order to limit the influence of outliers in the estimate.
		• A two-dimensional (2D) Ordinary Kriging (OK) interpolation approach was selected to address some of the main issues encountered when estimating narrow vein mineralisation, such as:
		  • Additivity issues due to non-uniform support and resulting grade bias. Instances of highly variable individual intercepts (e.g. 0.3 m to 5.0 m) which would be difficult to incorporate and represent statistically using downhole composites of equal lengths (e.g. 0.5, 1.0 or 2.0 m);
		  • Varying mineralisation geometry across lode, down dip, and along strike; and
		  • Block size required for adequate volume fill of narrow geometry is generally too small, introducing conditional bias to the MRE outcome.
		• 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 digitised reference (centre-line) surface. A gold accumulation variable was then calculated by multiplication of intercept grade by true width.

Criteria	JORC Code explanation	Commentary
		• Composited sample data was transformed (grid rotation removed) before being pressed onto a cartographic plane and statistical analysis undertaken on grade 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 the O'Brien domain. A top cut of 30 g/t Au was applied to the O'Brien domain. • Variography analysis of the O'Brien domain 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 model for interpolation was created using a block size of 15 mN x 15 mE x 1 mZ with no sub-celling. Block size was determined primarily with the assumption of a relatively selective mining approach for the underground operations. • The search strategy used a maximum extrapolation distance of 75, 103 and 115 metres over three search passes. The O'Brien domain search strategy used a maximum extrapolation distance of 103 and 115 metres over three search passes. The first pass search was equal to the variogram maximum range with the second pass search at 103 metres and the third pass at 115 metres. A constant minimum of 4 and maximum of 14 composites was maintained across the first two search passes, dropping to a minimum of 3 composites on the third pass. • Gold grades for every estimated block were back-calculated by dividing interpolated gold accumulation by interpolated true width for each block: • Block Gold Grade = Block Gold Accumulation Value / Block TW Value • Back calculated gold grades 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 were carried out in 3D using Inverse Distance Squared. Both accumulation and horizontal width were estimated before back calculation of the check estimate gold grade. • Validation of the gold accumulation, true width estimations and gold grade 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
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.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	• The Mineral Resource cut-off grade for reporting of the Mineral Resource was at a 2.0 g/t gold cut-off for the O'Brien deposit. This was 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 are being 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 500m 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.	• Ore bodies proximal to the O'Brien deposit have previously been exploited through underground methods with all material treated through the old Norseman processing facility with no issues note. • No metallurgical factors from the have been applied to the estimates as this will be addressed during the application of modifying factors during Ore Reserve conversion.
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 O'Brien deposit is 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 and waste were adopted from historical test work from drill core using the water displacement method and data from historical mining.
		• Bulk density estimates used for O'Brien (mineralized) were:
		  • Fresh = 2.7 t/m^3
		• Bulk density estimates for O'Brien 'un-mineralised' material was:
		  • Fresh: 2.98 t/m^3

Criteria	JORC Code explanation	Commentary

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 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 40 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:
		  • Drill spacing was averaging a nominal 60 m or less, or where drilling was within 60 m of the block estimate; and estimation quality was considered low.
		• 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 Resources 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 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 Mineral Resource statement reflects a global estimate of tonnage and grade. • No formal confidence intervals nor recoverable resources were undertaken or derived.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES

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. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• The Ore Reserve estimate is based on the Mineral Resource estimate at 1st March 2022. • 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. • If no site visits have been undertaken indicate why this is the case.	• The Competent Person makes regular visits to the site and is involved in the DFS and mine design work which is the basis for the Ore Reserve estimate.
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 mine design and schedule specific to the mine, which utilises inputs derived from 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 and operationally appropriate estimates from other Company operations.
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 O'Brien Underground mine. • 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). • 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. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used. • The mining recovery factors used. • 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.	• The mine design proposes a dual decline access mine with mechanised jumbo development, extending from the existing Bullen underground mine workings with separate intake and exhaust ramps. • 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). • Production is by airleg stoping methods which have been successfully applied previously at the Norseman Gold Project and are also currently employed at other Pantoro operations. These methods are considered suitable by the Competent Person for the anticipated geotechnical conditions encountered at the mine. • A production level interval of 20 metres has been applied to support effective airleg mining within the required stope geometry. • 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). • A stoping width of 0.8m was applied to the stope design process. Additional stope dilution of 0.3m on both the hangingwall and footwall was applied in the MSO shape parameters to account for unplanned dilution outside of the 0.8m minimum airleg stoping width, giving a total minimum mining width of 1.4m. • 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 as 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. • 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. Historical records from previous Bullen 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. • There are no known deleterious elements. • 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, 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. • 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 provided, or accessed.	• 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. • 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 • 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.	• 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, as well as existing Company operating cost information. • 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, and from current operating costs from other Company operations. • 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 $2,500 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	Commentary
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 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, and from current operating costs at other comparable operations within the Company. • 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 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: • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • 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 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. • The Company has management control of the site, and mineral and mining tenements. • 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. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve. • Proven Ore Reserves are derived from Measured Mineral Resources. 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 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 financial model. • No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.

Exploration Targets, Exploration Results

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Scott Huffadine, 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. 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.

Exploration Targets, Exploration Results and Mineral Resources

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

Ore Reserves

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

Additional Information on Norseman Gold Project Mineral Resources & Ore Reserves

Additional information is extracted from the report entitled 'Annual Mineral Resource & Ore Reserve Statement ' created on 23 September 2021 and is available to view on Pantoro's website (www.pantoro.com.au) and the ASX (www.asx.com.au). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modifed from the original market announcement.

Forward Looking Statements

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.