ASX Announcement
24 May 2018

Wagtail Underground Mineral Resource and Ore Reserve

Pantoro Limited (**ASX:PNR**) (**Pantoro**) is pleased to advise the updated Mineral Resource and Ore Reserve for the Wagtail and Rowdies deposits (**Wagtail**), which are located only one kilometre south of the Nicolsons Processing plant.

Highlights

- Indicated and Inferred Mineral Resource of 574,000 tonnes @ 6.8 g/t Au for 126,000 ounces utilising a 2.5 g/t cut off grade.
- Maiden underground Probable Ore Reserve of 62,000 ounces at an average grade of 5.4 g/t Au.
- Mineral Resource is open along strike and at depth with a number of high grade drilling intercepts outside of the JORC 2012 Mineral Resource and Ore Reserve envelopes.

The Mineral Resource and Ore Reserve are made up of ore lodes from the Wagtail South, Wagtail North and Rowdies deposits. The Ore Reserve is to be accessed by decline development with portals in both the Wagtail North and Wagtail South open pits. It is intended to commence from the Wagtail North Open pit, with development from the Wagtail South pit due to shortly afterwards. First ore development is expected early in the December 2018 quarter.

Pantoro advises that it is awaiting final environmental approvals from the Department of Mines, Industry Regulation and Safety, with all other required approvals in place. Pantoro understands that actions required for completion of the environmental approvals are administrative, and that final approval is imminent. Work is planned to commence as soon as possible with all required equipment on site.

Installation of the ore sorter and associated infrastructure for the processing plant upgrade is nearing completion. The ore sorter has been installed and tested, however delays were experienced in delivery of critical components in the ore handling infrastructure required for project completion. The ore sorter and all associated infrastructure is expected to be fully operational by the end of May 2018. Normal processing operations have continued throughout the period with minor delays associated with infrastructure tie in as required.

Commenting on the maiden underground Ore Reserve at Wagtail, managing director Paul Cmrlec said

> "The development of an underground mine at Wagtail has formed part of our long term growth strategy for the Nicolsons project for some time. While the current Mineral Resource and Ore Reserve is relatively modest, it displays many similarities to the pre-mining model at Nicolsons. The Wagtail open pits revealed very consistent high grade mineralisation, and drilling for the underground mine has returned a number of very high grade results. We firmly believe that with time, underground development and further drilling, we will confirm a large system with characteristics similar to what we have experienced at Nicolsons to date.
>
> Mining Wagtail in parallel with Nicolsons will allow optimisation of mill feed including the use of the ore sorter which is in the final stages of installation and commissioning. While the minor delays in approvals and finalisation of the ore sorting circuit are frustrating, the focus on ramping production to 80,000 - 100,000 ounces per annum run rate by the end of 2018 remains unchanged."

Enquiries

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Mineral Resource Estimate

The Mineral Resource and Ore Reserve was calculated using a 2.5 g/t Au cut off, and includes ore zones from the Wagtail South, Wagtail North and Rowdies ore zones. Drilling is ongoing at Wagtail, and the number of recently reported very high grade intersections demonstrate increased understanding of the ore system, and strong potential for continued upgrading of estimates as sufficient data becomes available. The mineralised zones which include Indicated, Inferred and Unclassified zones of mineralisation is shown in oblique view in Figure 1. It is noted that only Indicated and Inferred blocks have been included in the Mineral Resource Estimate.

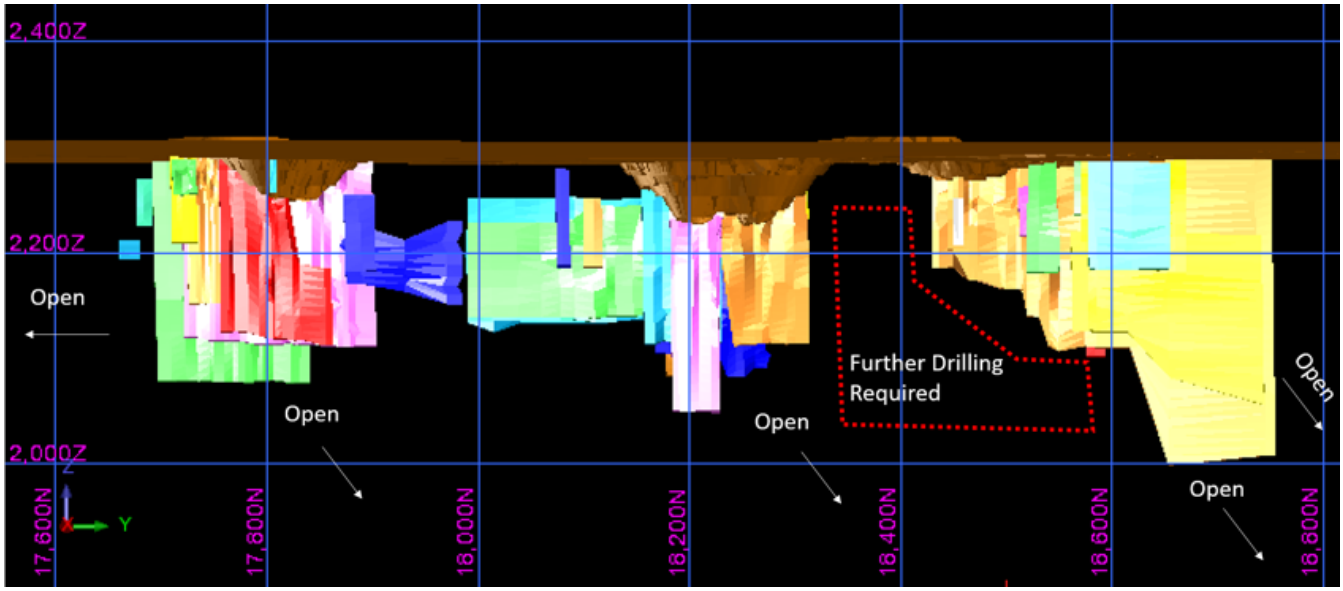

Figure 1 – Long view of the current mineralised domains modelled at Wagtail beneath the existing open pit mines

The zone between Wagtail North and Rowdies has not yet been effectively drilled due to restrictions in site topography. This zone will be drilled effectively from underground platforms and is considered to have strong potential for discovery of additional ore.

The ore zones which have been included in the Mineral Resource estimate are shown in the long section in Figure 2. The Mineral Resource is considered to be open along strike and at depth, and displays a similar style of mineralisation and structural control seen at the Nicolsons Mine. Drilling will be ongoing at Wagtail from both surface and underground platforms for the foreseeable future, and will be focussed on expansion of the Mineral Resource and Ore Reserve. This has been an effective growth strategy for the Nicolsons mine since commencement of operations.

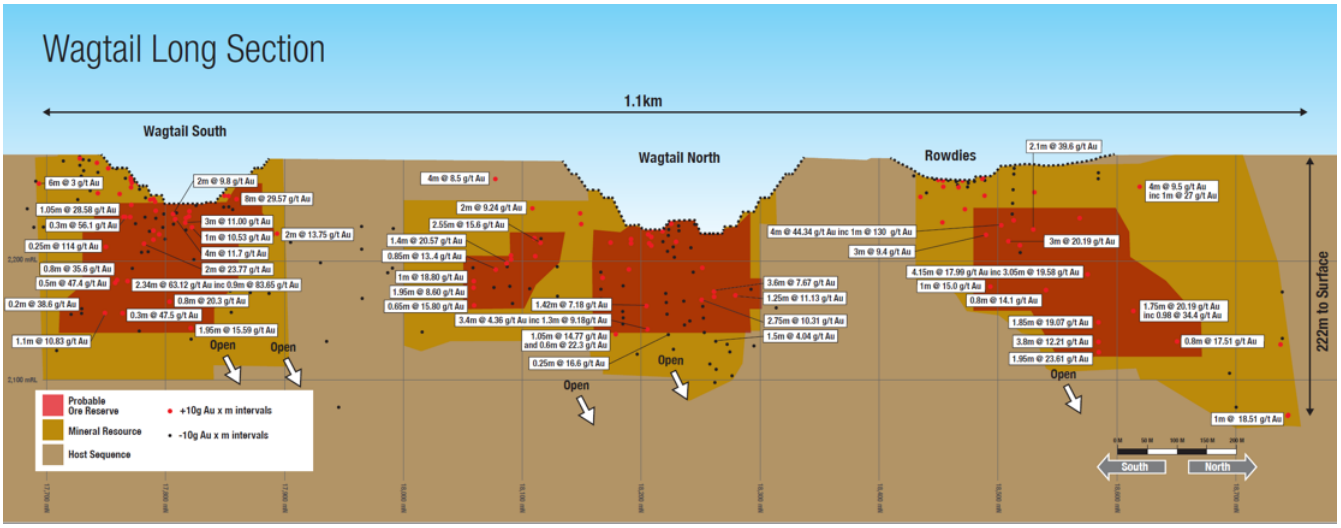

Figure 2 – Schematic long view of the Mineral Resource and Ore Reserve

Ore Reserve Calculation

The Wagtail Ore Reserve has been generated utilising functional mine designs, using the same mining techniques and cost structure as the Nicolsons mine. The Ore Reserve includes ore blocks to be mined at Wagtail South, Wagtail North and Rowdies deposits.

A number of low grade sections in the Mineral Resource estimate do not meet the requirements for conversion to Ore Reserves. Experience at Nicolsons and in the Wagtail open pits has demonstrated consistent mineralisation when mined, with a number of modelled sub grade areas at Nicolsons shown to be valuable ore blocks when accessed by development. Pantoro considers that strong potential exists for Ore Reserve upgrades once developed, however this is not certain until development has taken place. A long view of the current Wagtail Ore Reserve is shown in Figure 3. The current Ore Reserve spans approximately 100 m vertically at Wagtail South and Wagtail North, and 120 m vertical at Rowdies. The three ore zones are accessed from two separate declines developed from portals in the Wagtail South and Wagtail North open pits.

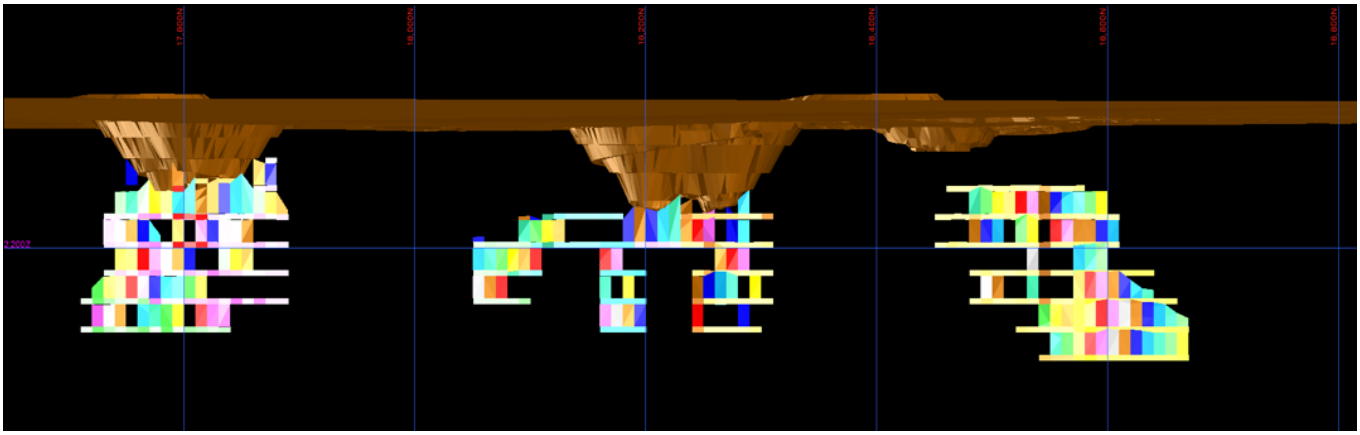

Figure 3 – Current Wagtail Ore Reserve blocks. Development levels are spaced 20 m apart from floor to floor.

The Mineral Resource estimate and Ore Reserve calculation is shown in Table 1 below.

Mineral Resource	Tonnes	Grade (g/t Au)	Ounces
Indicated	450,000	6.8	98,000
Inferred	124,000	7.0	28,000
Total Mineral Resource	**574,000**	**6.8**	**126,000**

Ore Reserve	Tonnes	Grade (g/t Au)	Ounces
Proven	-	-	-
Probable	356,000	5.4	62,000
Total Ore Reserve	**356,000**	**5.4**	**62,000**

Table 1 – Mineral Resource Estimate at 2.5 g/t Au cut off grade and Ore Reserve Calculation

Changes in Mineral Resource

The Wagtail Mineral Resource update has been completed in accordance with JORC 2012 by Pantoro Geologists under the supervision and review of the Competent Person. Key changes in the Mineral Resource Estimate include:

- Identification and estimation of additional Mineral Resource through additional drilling programs.
- Depletion of Ore mined via open pit up to December 2017 from the model.
- April 2017 Mineral Resources were reported seperately for the Rowdies and Wagtail deposits. In this update Rowdies and Wagtail have been aggregated.

	Measured			Indicated			Inferred			Total		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
April 2017 Wagtail	-	-	-	340,000	3.9	43,000	138,000	2.9	13,000	478,000	3.6	56,000
May 2018 Wagtail	-	-	-	450,000	6.8	98,000	124,000	7.0	28,000	574,000	6.8	126,000

Changes in Ore Reserve

The Wagtail underground Ore Reserve is based on underground mine designs and costs. Only Indicated Mineral Resources have been included in the Ore Reserve. Changes to the Ore Reserve include:

- Maiden underground Ore Reserve compared with previously reported open pit Ore Reserve.
- Depletion of zones which have been mined via open pit.

	Proven			Probable			Total		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
April 2017 Wagtail Ore Reserve	-	-	-	93,000	5.2	16,000	93,000	5.2	16,000
May 2018 Wagtail Ore Reserve	-	-	-	356,000	5.4	62,000	356,000	5.4	62,000

Appendix 1 – Information relating to ASX Listing Rule 5.8.1

WAGTAIL UNDERGROUND MINERAL RESOURCE

Geology and Geological Interpretation

The Wagtail deposits including Wagtail South, Wagtail North and Rowdies are located within the Halls Creek Orogen (HCO) in the Kimberley region of Western Australia. Deposits are associated with north-northeast trending shear zones which form part of the Central belt of the HCO.

The principal units of the Central belt outcropping in the project area, are the Tickalara Metamorphics, comprising sediments and interspersed mafic zones, and the Koongie Park Formation (KPF), comprising tightly folded and highly metamorphosed volcaniclastic sediments and mafic units. The Central belt is also characterised by granitic intrusions related to the Bow River Batholith, and by mafic-ultramafic intrusions such as the Lamboo Complex, which outcrops to the south of the deposits. The observed strike-slip faulting common throughout the project area is interpreted to postdate the folding and metamorphism of the HCO and emplacement of the Bow River Batholith.

Wagtail mineralisation is hosted in quartz and quartz/sulphide veins with an average width of 1.2 metres wide in a range from 0.2 metres up to 3 metres, and are related to these NNE faults and the associated fault architecture as they pass through the Tickalara Metamorphics adjacent to their contact with the granites of the Bow River Batholith. The mineralisation which is analogous to the Nicolson's gold mineralisation located 900 metres to the North

Drilling Techniques

A variety of drilling techniques were used to test the Wagtail deposits, however the recent drilling has utilised diamond drilling, HQ3 and NQ2 diameter core from Reverse Circulation pre-collars. All pre-collars are sampled. Reverse circulation drilling was carried out using a face sampling hammer and a 130mm diameter bit.

Sampling Techniques, Sub-Sampling Techniques and Sample Preparation

Diamond

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

Reverse Circulation

Samples are collected via both a cone splitter and a rig-mounted static splitter used, with sample falling though a cone splitter and sampled every 1 m. Current Wagtail diamond hole pre-collars are sampled on 2 m composites with 1 metre splits retained for further assays as required.

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

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

Historical holes - RC drilling was used to obtain 1 m samples from which 2 - 3 kg was crushed and sub-split prior to pulverisation and then a 40 g aliquot for fire assay. Review of drilling programmes indicate all intervals were assayed and is considered to be to industry standard at that time

Sample Analysis Method

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

CRM standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up 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.

No assay data was adjusted.

Estimation Methodology

A 2D estimation methodology was employed with Ordinary Kriging utilised to estimate block grades. The 2D parent estimation block size selected and used in the model were 10 metres in the Y direction, 1 metre in the X direction and 10 metres in the Z direction. The parent block size was determined utilising vein dimensions and Kriging Neighbourhood Analysis, checked against the wireframes. The final block dimensions utilised for volume calculations were 1.25 metres in the Y direction, 0.125 metres in the X direction and 1.25 metres in the Z direction. No block rotation was applied. The gold mineralisation is hosted within multiple lodes within narrow quartz veins in the corridor of the main Nicolsons shear zone (NSZ). The estimation domains are hard boundary wireframes within 44 of these interpreted lodes over the 3 main ore zones in Wagtail North, South and Rowdies.

Variography was conducted on all domains which generated the parameters for the Ordinary Kriging. The parameters were graphically checked against the sample data and the known characteristics of the orebody. The maximum extrapolation distance was 110m in four search passes. The first pass search was two third of the maximum range the second pass search was the range, the third pass search was four thirds of the range and the fourth pass search was five thirds of the range.

Drill holes Assay data was composited by intersecting it with the wireframes in Surpac.

The intersection grade was calculated as a length weighted of the individual assays to provide a data point with a grade. Top cuts were was applied to gram meter basis of data from a mean and co-variance plot, if the co-variance was greater than 1.5 a top cut was applied to limit the influence of outliers. Check estimates were completed utilising standard Ordinary Kriging and results were comparable. Comparisons were also made to recent Open Pit reconciled grade and production records.

Classification

This current Mineral Resource Estimate has been classified as Indicated and Inferred Mineral Resources. The Wagtail deposits have been mined by Open Pit methods over the 18 months up to December 2017, with recent data from grade control and in pit mapping supporting both grade and geological continuity. The bulk of the data utilised in the current Mineral Resource estimate is from recently acquired drilling data with 186 new diamond and reverse circulation holes for 25,086 metres.

Blocks in the resource model have been allocated a confidence category based on a combination of various estimation derived parameters, data support and geological / mining knowledge.

Cut-off Parameters

The Mineral Resource has been reported at a plus 2.5g/t Au cut-off and is based on economic assumptions currently utilised at the operating Nicolsons Underground mine where the same style of orebodies are being mined.

Mining and Metallurgical Factors or Assumptions

The material to be mined as part of the Wagtail Mineral Resources is considered representative of material mined in the most recent phase of open pit mining. This includes fresh material mined and processed in the current Nicolson processing facility where recoveries have been consistently achieved 93 % and support recovery of the in situ Mineral Resource via conventional gravity and cyanidation methodology. No factors were applied to the Mineral Resource estimate.

WAGTAIL UNDERGROUND ORE RESERVE

Material Assumptions for Ore Reserves

The Wagtail Underground Ore Reserve was calculated utilising sectional mine design methods. Sections orientated east-west, approximately perpendicular to the defined mineralisation were generated using Surpac software. The sections were generated 10m apart.

Functional development designs were completed for zones within the Indicated Mineral Resource, and utilised as the basis for up hole bench stope design. Development was designed at 3m W x 4.2m high, and suitable factors to allow for split firing of the development drives were utilised to calculate the ore development tonnage and grade included within the Ore Reserve. Development was designed at 20 m floor to floor vertical intervals.

Uphole bench stopes were designed with a minimum width of 1.5 m, with an additional 20% dilution at 0 g/t was allowed for in the calculation of the ore reserve. Stopes were wireframed in discrete 10 m blocks between designed levels. Each block was analysed using Surpac software, and individual stopes of less than 3 g/t in-situ grade were excluded from the Ore Reserve calculation. Stope blocks of 3 g/t or higher met the incremental cut off grade for inclusion in the Ore Reserve after dilution factors were applied.

Preliminary mine infrastructure designs were completed to ensure that the designed ore blocks could be accessed practically and economically.

It is assumed that mining costs will be equal to the mining costs currently achieved at the Nicolsons underground mine. Nicolsons mine is only located 1km from Wagtail, ore is of a similar nature, and the same management philosophy is utilised.

Ore Reserve Classification

All of the insitu mineralisation is currently classified as Indicated, Inferred or Unclassified within the block model. Blocks have not been classified as Measured, pending the completion of ore development.

Only Indicated Mineral Resources have been utilised for conversion to Probable Ore Reserves. Since no ore blocks have been included in the Measured category, no Proven Ore Reserve has been defined. No Inferred Mineral Resource or unclassified ore blocks were included in the Conversion to Ore Reserve.

Mining Method

The proposed Underground mining method includes the development of two underground declines with portals in the Wagtail North and Wagtail South Open pits. Declines are developed at a gradient of 1:-7, with level cross cuts spaced 20m vertically apart. The level cross cut is developed approximately perpendicular to the ore.

Once the ore is accessed, ore drives are developed along the strike of the ore body under geological control. All gold mineralization is contained within visible quartz veins. Where the ore is less than 60% of the drive width, spilt firing is utilised in development. Was is fired and bogged prior to blasting the ore zone. 25% dilution is assumed when split firing is undertaken to allow for ore/waste mixing during the process.

Once development is completed, the level is prepared for uphole bench stoping methods. The orebody is drilled using 64mm upholes and blasted using ANFO. Burden and spacing in blast holes is variable depending on the width and dip of the orebody.

Depending on the geometry of the ore zones, other methods including conventional stoping using hand held methods and mechanical cut and fill may also be employed. Experience at Nicolsons mine has demonstrated that similar economic outcomes are achieved with the various methods and control of dilution is the critical factor in determining the method used within different zones of the orebody.

Processing method

The ore is processed through the Nicolsons Find processing plant and utilises a standard CIP method. This technology is well tested globally for gold bearing orebodies and the successful treatment of Nicolsons ores.

There are no deleterious elements identified.

A total gold recovery of 93% was assumed in calculation of the Ore Reserve. This recovery has been consistently achieved in the Nicolsons processing plant at the current throughput rates, and test work on Wagtail ore completed to date demonstrates that 93% is a conservative but suitable factor.

Recent operating history since commissioning supports the metallurgical parameters used in the Ore Reserve estimation. No allowance has been made for the process improvements which are expected from ore sorting which is currently being installed. Ore sorting may positively impact the amount of material able to be included in the ore reserve once the method is proven.

Cut-off Grade

Cut-off grades were calculated utilising current costs at Nicolsons underground mine. Ore blocks were first assessed in several iterations to ensure full levels are able to be economically extracted. The diluted ore cut off grade for fully costed mining is 4.3 g/t Au, allowing for a suitable profit margin.

The incremental diluted ore cut off grade for development and stoping of ore on a level which is shown to be economic in its own right is approximately 2.6 g/t. Ore with a grade lower than 2.6 g/t is only developed if required to access higher grade blocks.

Estimation Methodology

The development and stope designs completed using Surpac software were wireframed in valid three dimensional objects. The three dimensional objects were analysed using the block model reporting function in Surpac. Individual stope blocks of approximately 10m x 20m x ore width were reported separately. Stope blocks lower than 3g/t insitu grade were excluded from the Ore Reserve.

Once the economic stope blocks had been identified, development designs were modified to accommodate only the economic portions. Final development designs were reported using the block model reporting function.

The insitu ore reported as a result was modified with suitable ore dilution and recovery factors applied using Microsoft Excel software. Diluted ore and stope blocks were aggregated to calculate the Probable Ore Reserve.

Material Modifying Factors

Modifying factors utilised in the Ore Reserve calculation are as follows:

Mineral processing recovery – 93% recovery of gold was assumed in the calculation of cut off grades. It is noted that the calculated Ore Reserve has not been modified as a result of processing recovery, except for calculation of cut off grades.

Development split firing - it is assumed that when ore is less than 60% of the width of the ore drive, split firing of development is utilised. When split firing is utilised, ore dilution of 25% is assumed.

Stoping dilution - it is assumed that stope ore incurs 20% dilution at 0 g/t.

Stope Recovery – it is assumed that 90% of the diluted ore is recovered from stopes. The recovery allows for both ore left unrecovered from stopes and for rib pillars left insitu.

Appendix 2 – JORC Code 2012 Edition – Table 1

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 update of the Mineral Resource and Ore Reserve statement for Wagtail deposit at the Nicolsons gold project. • The Wagtail deposit has been sampled predominantly by RC, diamond, open pit grade control chip sampling, and minor historical RABand aircore around the Wagtail open pit area. RC – Rig-mounted static splitter used, with sample falling though a cone splitter, splitting the sample in 87.5/12.5 ratio sampled every 1m • RC samples 2-5kg 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). • Diamond samples 2-5kg 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). • All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of 0.15m where clearly defined mineralisation is evident. • Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks . • Visible gold is encountered at the project and where observed during logging, Screen Fire Assays are conducted Chip Sampling, each bench in the pit was chip sampled across strike and perpendicular to mineralization on 5m spaced sample lines. The sampling intervals are domained by geological constraints (e.g. rock type, veining and alteration / sulphidation etc.). The majority of exposures within the orebody are sampled • No information has been recorded for historic sampling of air core and RAB in terms of the sample sizes and method of splitting. The lack of the information is not considered material to the estimation due to the hole depths • Historical holes - RC and aircore drilling was used to obtain 1 m samples from which 2 - 3 kg was crushed and sub-split for pulverisation and then a 40g aliquot for fire assay. Upper portions of deeper holes were composited to 3m sample intervals and sub-split to 1 m intervals for further assay if an anomalous composite assay result was returned. For later drilling programs all intervals were assayed

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 – All recent reverse circulation drilling was carried out using a face sampling hammer and a 130mm diameter bit • Surface DD – HQ3 and NQ2 diamond tail completed on RC precollars, all core has orientations completed • Channel samples, were chipped from the desired domain (lithological domain). A number of chips were taken from the geological domain to obtain a representative sample. The chips were put in a pre numbered sample bags. • Historic RC drilling was completed over a number of generations. All RC rigs between 2011 and 2014 used face sampling hammers. Historic aircore drilling was completed by the RC rig with an aircore bit assembly. RAB drilling is historical and details are unknown. • The historic RAB holes are shallow and are not considered to be material to the current estimation .
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 post 2011 have been logged at site by an experienced geologist. Recovery and sample quality are visually observed and weights recorded at the laboratory. Recovery for older (pre 2011) holes is unknown. • RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed. • Post 2011 pre 2014- Surface Rigs used auxiliary air boosters when appropriate to maintain sample quality and representivity. Where aircore drilling could not provide sufficient penetration an RC drilling set-up was used. RC drilling by previous operators is considered be to industry standard at the time • DD – No significant core loss has been noted in fresh material. Good core recovery has generally been achieved in all sample types in the current drilling programs.

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 on all holes and parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments. • Pit benches and batters were mapped geologically. • Geotechnical logging of diamond holes includes the recording of recovery, RQD, structure type, and for identified structures dip, dip direction, alpha and beta angles, shape, roughness and fill material of fractures • Drill chips were logged on 1 m increments, the minimum sample size. A subset of all chip samples is kept on site for reference. • Diamond drilling was logged to geological boundaries and is considered quantitative. Core was photographed. • All drilling has been 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.	• All RC holes are sampled on 1m intervals, Wagtail diamond hole pre-collars are sampled on 2m composites with 1m splits retained for further assays as required • RC samples are taken off the rig splitter, no significant water is encountered and are typically dry • 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 was routinely cut on the orientation line. • All mineralised zones are sampled as well as material considered barren either side of the mineralised interval • Duplicates i.e. other half of core or ¼ core has not been routinely sampled • Half core is considered appropriate for diamond drill samples.Sample sizes are considered appropriate for the material being sampled and weights are recorded and monitored by project geologists. • RC drilling by previous operators is considered to be to industry standard at that time

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• Assays are completed in a certified laboratory in Perth WA • Gold assays are determined using fire assay with 40g charge and AAS finish. Other elements were assayed using acid digest with ICP-MS finish. Screen fire assays consist of screening 500g of the sample to 106 microns. The entire plus fraction is fire assayed for gold and a triplicate 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. • Chip samples are assayed in the site lab utilising Leachwell bottle roll methodology representing CN recoverable gold. • No geophysical logging of drilling was performed. This is not relevant to the style of mineralisation under exploration. • Lab standards, blanks and repeats are 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 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. QA/QC review on previous drilling shows a negative bias with several of the external certified standards.
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. Diamond drilling confirms the width of the mineralised intersections. • All primary data is logged digitally on tablet or on paper and later entered into the SQL database. Data is visually checked for errors before being sent to an external database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office. • No adjustments have been made to assay data. • Visual checks of the data are completed in Surpac mining software as further validation.

Criteria	JORC Code explanation	Commentary
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• RC/DD drilling is downhole surveyed utilizing surveyed electronic single shot survey tool at collar, 10 metres then 30m thereafter. No Gyro DH surveys were undertaken on this program. • Surface RC and Diamond drilling is marked out using GPS and final pickups using DGPS collar pickups. • Rock chip locations are recorded by a DGPS. • The project lies in MGA 94, zone 52. Local coordinates are derived by conversion: GDA94_EAST =NIC_EAST * 0.9983364 + NIC_NORTH * 0.05607807 + 315269.176 GDA94_NORTH = NIC_EAST * (-0.05607807) + NIC_NORTH * 0.9983364 + 7944798.421 GDA94_RL =NIC-RL + 2101.799 • Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use. • Pre Pantoro survey accuracy and quality assumed to industry standard.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Drill hole spacing at Wagtail is generally between 10 m by 10 m and 40 m x 40 m in the upper areas of the deposits and extends to 50 m x 50 m at depths greater than 150 m. The deepest drilling is to approximately 300m below surface. • The Competent Person is of the view that the drill spacing, geological interpretation and grade continuity of the data supports the resource categories assigned. • Where samples were composited in pre collars in holes above predicted mineralized zones. Composite samples were re-assayed in their 1 m increments if initial assay results were anomalous.
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.	• Surface Drilling is predominantly at 270o to local grid at a dip of -60o. Local structures strike north-south on the local grid and dip at 60oE. No bias of sampling is believed to exist through the drilling orientation • Pit sampling is nominally undertaken normal to the various orebodies.
Sample security	• The measures taken to ensure sample security.	• The chain of custody is managed by Pantoro employees and consultants. Samples are stored on site and delivered in sealed boxes and bags to the lab in Perth. Samples are tracked during shipping. Samples are reconciled at the assay lab.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No independent review has been undertaken on the current dataset.

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.	• Tenements containing Mineral Resources and Ore Reserves are 100% held by Pantoro subsidiary company Halls Creek Mining Pty Ltd. This is: M80/503 and M80/362. Partial tenement transfers to HCM have occurred as stamp duty assessments have not been completed by the office of state revenue. The tenements lie on a pastoral lease with access and mining agreements and predate native title claims. • The tenements are in good standing and no known impediments exist.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• The deposits were discovered by prospectors in the early 1990s. After an 8,500 m RC program, Precious Metals Australia mined 23 koz at an estimated 7.7g/t Au from Nicolsons Pit in 1995/96 before ceasing the operation. Rewah mined the Wagtail and Rowdy pits (5 koz at 2.7g/t Au) in 2002/3 before Terra Gold Mines (TGM) acquired the project, carried out 12,000 m of RC drilling and produced a 100 koz Mineral Resource estimate for the Nicolsons Find deposit. GBS Gold acquired TGM and drilled 4,000 m before being placed in administration. Bulletin Resources Ltd acquired the project from administrators and conducted exploration work focused on Nicolsons and the Wagtail Deposits and completed regional exploration drilling and evaluation and completed a Mining Study in 2012 which included Mineral Resource and Ore Reserves prior to entering into a JV with PNR in 2014.Review of available reports show work to follow acceptable to standard industry practices.
Geology	• Deposit type, geological setting and style of mineralisation.	• Gold mineralisation in the Nicolsons Find area is structurally controlled within the 400 m wide NNE trending dextral strike slip Nicolsons Find Shear Zone (NFSZ) and is hosted within folded and metamorphosed tur-biditic greywackes, felsic volcaniclastics, mafic volcanics and laminated siltstones and mudstones. This zone forms part of a regional NE-trending strike slip fault system developed across the Halls Creek Orogen (HCO). • The NFSZ comprises a NNE-trending anastomosing system of brittle-ductile shears, characterised by a predominantly dextral sense of movement. The principal shear structures trend NNE to N-S and are linked by NW, and to a lesser extent, by NE shears. Individual shears extend up to 800m along strike and overprint the earlier folding and penetrative cleavage of the HCO. • The overall geometry of the system is characterized by right step-overs and bends/jogs in the shear traces, re-flecting refraction of the shears about the granite contact. Within this system, the NW-striking shears are interpreted as compressional structures and the NE-striking shears formed within extensional windows.

Criteria	JORC Code explanation	Commentary
		• Mineralisation is primarily focussed along NNE trending anastomosing systems of NNE-SSW, NW-SE and NE-SW oriented shears and splays. The NNE shears dip moderately to the east, while the NW set dips moderately to steeply to the NE. Both sets display variations in dip, with flattening and steepening which result in a complex pattern of shear intersections.. • Mineralisation is strongly correlated with discontinuous quartz veining and with Fe-Si-K alteration halos developed in the wall rocks to the veins. The NE shears are associated with broad zones of silicification and thicker quartz veining (typically white, massive quartz with less fracturing and brecciation); however, these are typically poorly mineralized. The NW-trending shears are mineralized, with the lodes most likely related to high fluid pressures with over-pressuring and failure leading to vein formation. Although the NE structures formed within the same shear system, the quartz veining is of a different generation to the mineralized veins. • Individual shears within the system display an increase in strain towards their centres and comprise an anastomosing shear fabric reminiscent of the pattern on a larger scale.
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 exploration results are reported as part of this release, results relating to the deposits have been previously released.
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 exploration results are reported as part of this release, results relating to the deposit have been previously released.

Criteria	JORC Code explanation	Commentary
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').	• Drilling is predominantly at 270o to local grid at a dip of -60o. Local structures strike 0o to the local grid and dip at 60oE (i.e. having a 60o intersection angle to lode structures). Deeper holes have some drill hole deviation which decreases or increases the intersection angle, but not to a significant extent. • Pit mapping data supports widths interpreted from drill holes • Downhole lengths are reported and true widths are approximately 60 – 90% of down-hole length. True widths are calculated and reported for any drill intersections > 1 ppm Au.
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 exploration Results are reported as part of this release, and therefore only schematic diagrams are included.
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 exploration Results are reported as part of this release
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• No other relevant exploration other than those previously reported have been conducted in the reporting period.
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.	• Surface drilling in the Rowdies area is still ongoing. • Updates will be provided once underground development has been established and underground drilling has commenced.

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 lab into 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.
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 and data gathered during mining confirms the orientation data for the main mineralised structures. • Data used for the geological interpretation includes surface pit wall and bench mapping and drill logging data. • In general the interpretation of the mineralised structures is clear. • Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. • Geology and grade continuity is constrained by quartz veining within the NFSZ and by parallel structures for the other prospects. • Variography analyses of the assay data endorses the geological interpretations
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 Wagtail deposit is approximately 1000m in strike length and generally 0.5 to 4m wide. Deepest drilling is currently approximately 300 metres below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • 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.	• Variography analysis using both Supervisor and Surpac software were completed, The domains were modelled using a nugget and two spherical structures. For Wagtail's Main domains the maximum grade continuity ranges are between 30 m and 110m down plunge in the plane • Due to the narrow vein nature of the orebody a 2D modeling method was utilised. A 2D estimation method was used. Gram meters per ton were estimated using Ordinary Kriging (OK), Apparent wireframe width was estimated using inverse distance due to data density. Once the estimations were completed Au (Gold gram per ton) was back calculated by dividing (Gold gram metres per ton) by Width meters. • To control the influence of outlying data in the estimation a top cut was applied to the gram metres per ton data. A bottom cut was applied to the apparent width data. The bottom cut controls the creation of artificially high grades within pinch points in the model. • A soft boundary condition was used when estimating the blocks below the current pits, the soft boundary condition controls the influences the composite data within the pits has on the rest of the model. The conditions allows the estimation to use either 2 or 3 composite from the pit data set. • Drillholes used in the global Wagtail Mineral Resource estimate included 373 RC, 82 diamond drill holes, 1128 chip samples, 46 Blast hole holes, 36 Aircore and 44 RAB for a total of 4,033m within the wireframes. • A review of previous Mineral Resource have been reviewed and the current estimate is considered consistent with this notwithstanding extensive diamond drilling that has been undertaken. • Biproducts are not included in the resource estimate including silver. • No deleterious elements have been estimated. Arsenic is known to be present, however treatment of the ore through the current plant from the Open pits and metallurgical test work has not shown any adverse affects on metallurgical recovery. • Model validation was conducted by a review of visual comparison between composite and estimated block grades and statistical comparison against the input drill data and graphical profile (swath) plots. Checks for negative and missing grades were also undertaken.

Criteria	JORC Code explanation	Commentary
		• Models were interpolated with a block model cell size of 10 mN x 1 mE x 10 mRL, with sub-celling for volume representation only to 1.25 mN x 0.25 mE x 1.25 mRL. Estimations used 4 passes. The 1st pass used a search radius 2/3 of the maxium range for the domain with a minimum of 5 and maximum of 10 samples. The search radius was increased by 1/3 for second pass and the minimum number of samples was decreased to 3 sample. For the 3rd pass the search radius was increased by 1/3 and the minimum number of samples was decreased to 2 sample. The search radius was increased by 1/ 3 and the minimum number of samples decreased to 1 for the 4th pass at Nicolsons. • The size of the blocks was determined by a Kriging Neighbourhood Analysis in conjunction with the assumption of a relatively selective mining approach for underground operations. • Gold and apparent width has been estimated. • Geological interpretation constrained initial wireframes; these were oriented along trends of grade continuity and were constrained further by cut- off grades and form hard boundaries during estimation. • Grade width distribution statistics were used to generate top cuts, along with the analysis of distribution graphs and disintegration analysis.Top cuts vary by domain.
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. • The tonnages of material on stockpiles are quoted on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	• Cut-off grades for reporting were (2.5 g/t Au). based on review of current mining cost parameters for the operating Nicolsons underground operations
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 same mining methods utilized at the Nicolsons deposit have been assumed for this Mineral Resource model. • The Mineral Resource Estimate extends to 250m deep and is above current levels of mining at the Nicolsons deposit 1km to the North
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• Metallurgical test work has been undertaken historically. Oxide transitional and fresh material from the deposits has been processed through the existing plant, and gold recovery using CIP technology and calculated recoveries from the current operating period from the Open pits and Nicolsons underground mine have averaged above 93% at current throughput rates. No metallurgical factors have been applied to the estimates.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• The deposits are on granted mining leases with existing mining disturbance and infrastructure present.
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 actual data from current mining reconciliations utilising truck factors.
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.	• The Mineral Resource is classified as Indicated and Inferred. Recent mining supports grade and geological continuity. • Resources are classified utilising a combination of various estimation derived parameters, input data density and geological / mining knowledge. • 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.	• Internal reviews have been undertaken to verify technical inputs, methodology, and results of the Mineral Resource estimate.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The 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 estimates of tonnes and grade. • No statistical or geostatistical procedures have been undertaken to quantify the relative accuracy of the Mineral Resource however the global grade for the Mineral Resource estimate is comparable with that previously reported and reconciled to what was mined from the open pits.

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 was calculated using detailed mine designs applied to the current Mineral Resource estimate. The Mineral Resource estimate was completed by experienced geologists familiar with the deposits, overseen by the competent person. • The Mineral Resources reported are 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 preparation of the overall operations plans which are the basis for the Ore Reserve.
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.	• Actual functional mine designs were completed using the Mineral Resource as the basis for the conversion to Ore Reserves and is considered to be at a Feasibility level of study. • Cut off grades were relevant to actual costs at the operation. • Modifying Factors applicable to actual results from operations are utilised. • The mine is adjacent to the currently operating Nicolsons Mine which is operating on a profitable basis. Cut off grades were chosen according to actual costs at Nicolsons.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	• The fully costed cut off grade is approximately 4.3 g/t. incremental cut off grades for necessary activities were calculated separately, and insitu stope grades (pre dilution) were cut off at 3.0 g/t for underground mining at Wagtail.

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.	• Detailed ore stopes and development drives were designed using Surpac software. It was assumed that stopes would suffer 20% dilution at 0g/t and achieve 90% recovery of diluted tonnes. The recovery assumption is inclusive of additional rib pillars left insitu. Ore drives were designed on the basis that drives with less than 50% ore would be resue mined with 25% dilution at 0g/t and 100% recovery. Drives not resue mined were recovered with 0% dilution and 100% recovery. • Ore Reserve tonnes are extracted using underground methods. Uphole benching with rock fill is the primary mining method and is considered suitable for the type and geometry of the deposit. Geotechnical factors were estimated by expert geotechnical consultants.In narrow ore zones, manual hand held mining methods are undertaken to maximize control of the excavation. • Stopes are to be 30m along strike maximum. Where stopes are high grade they will be filled with cemented a nd loose waste, depending on sequence requirements, to maximise extraction. In low grade areas, pillars are left as necessary. Stope spans are in accordance with geotechnical parameters. • Stopes were designed with a minimum width of 1.5m. All dilution is assumed to have zero gold value. • Mining is by owner operator using leased equipment. Actual lease rates and manning costs are utilised • For development 100% of diluted ore mined is recovered. For stoping 90% of diluted ore is recovered. • The minimum mining width is 1.5m for stopes. • Inferred Mineral Resources are excluded from the Ore Reserve. The Ore Reserve is considered feasible without the inclusion of Inferred Mineral Resource. • The costs used in the model include all required infrastructure including fixed plant, buildings and magazines, and mine excavations.

Criteria	JORC Code explanation	Commentary
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 existing processing plant at Nicolsons uses a conventional CIP circuit, which is appropriate for the style of mineralization, and has achieved approximately 93% recovery during the past year. • The CIP process is the conventional gold processing method in Western Australia and is well tested and proven. • The site is an operating mine with recovery of 93% a usual operating condition. The site has undertaken ongoing testing of new ore samples, with similar results achieved in the laboratory. • There are not any know deleterious elements • The 93% recovery is consistent with calculated recoveries from the current operating period and from metallurgical test work. • Not applicable
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 Nicolsons site has been operational since September 2015, and all infrastructure and services necessary to operate the mine are in place and functioning. Where necessary infrastructure has been upgraded to accommodate the additional mine.
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.	• Major project capital for the project is already in place at the mine. Ongoing sustaining capital is identified in site budgets and scheduled as required. • Operating costs are calculated using a combination of actual unit costs at the mine and first principals as appropriate. Actual labour costs are utilized in site budgets. • There are no known deleterious elements and no adjustments have been made. • All costs were estimated in Australian dollars, and a gold price of $1600/Oz was utilized. • Transport charges were based on actual costs during the past year. • The orebody has produced adequate silver to cover all treatment and refining charges, which are not material to overall costs. No silver revenue has been allowed for and it is assumed that silver produced 100% off sets treatment and refining costs.The 2.5% state government royalty was included in the detailed budget. 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.	• Production, Grade, and cost is scheduled monthly in a detailed operations budget schedule. • Gold price was assumed to be A$1,600 per ounce.

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 prices can be volatile and there are many conflicting positions on the future price of Gold. Pantoro believes that A$1,600 per ounce is a conservative forward price forecast for gold over the life of the proposed mine. Pantoro holds a number of gold hedge positions with the average hedge price well above $1600 per ounce, with an average hedged price of approximately $1724/Oz. • Gold is sold into existing hedge positions or on the spot market and customer/ competitor analysis is unnecessary.
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.	• As the mine is in operation with a relatively short mine life and all major capital cost elements already in place, a NPV analysis was not required. • Ore grade and gold price are the key sensitivities for the project.
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 and the company has an access agreement with the pastoral lease owner who is also the local aboriginal corporation.
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.	• Pantoro is the 100% owner of the Project. Titles have not yet been fully transferred to Pantoro due to delays in stamp duty assessment. • Signed transfer documents for 100% of the tenements are held by Pantoro, however transfers for the full interest have not occurred as the Department of State Revenue has not completed a Stamp Duty Assessment for part of the transaction, and Stamp Duty must be paid prior to transfer of tenements. The Acquisition Agreement protects PNR's interest in the period prior to transfer. • PNR has the required government and stakeholder approvals required to mine and process the Ore Reserve with the exception of final Mining Proposal approval. Pantoro understands that delays in approving the Mining Proposal are administrative and that final approval is imminent.
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 has been derived from Indicated Mineral Resources. Inferred Mineral Resource has been excluded from the Ore Reserve. • Probable Ore Reserves are derived from Indicated Mineral Resource. No Proven Ore Reserves have been calculated as there are no Measured Mineral Resources included in the block model. • The Competent Person has been closely involved in operations and planning at the mine since commencement in 2015. The Competent Person is satisfied the Ore Reserve reflects the actual results from the operation.
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• The Ore Reserve has been internally audited by Geologists and Mining Engineers involved with operations at the mine. No external audit or review has been undertaken.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • 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.	• The Probable Ore Reserve is primarily based on a combination of Diamond and RC drilling. Diamond drilling and mine development indicates that ore is generally narrower, but higher grade than indicated by RC drilling. Historically this has resulted in upgrades to the Ore Reserve when actually mined, however no Modifying Factors to account for potential upgrades have been applied. • The Ore Reserve is noted to be consistent in grade and nature compared with historical operations at the mine. This assessment was undertaken by way of a general review and is not based on statistical analysis. • No Modifying Factors apart from those set out in this Table 1 have been included. • Stopes were designed using sectional design on 10m spacing which is considered appropriate for the style of deposit. The designs reflect current mine planning practice at the mine.

Competent Persons Statement

Exploration Targets, Exploration Results, Mineral Resources

The information in this report that relates to Exploration Targets, Exploration Results and Mineral Resources is based on information compiled by Mr Scott Huffadine (B.Sc. (Hons)), a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Huffadine is a Director and full time employee of the company. Mr Huffadine is eligible to participate in short and long term incentive plans of and holds shares, options and performance rights in the Company as has been previously disclosed. Mr Huffadine has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Huffadine consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Ore Reserves

The information in this report that relates to Ore Reserves is based on information compiled by Mr Paul Cmrlec (B. Eng (Mining) (Hons), a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy. Mr Cmrlec is a Director and full time employee of the company. Mr Cmrlec is eligible to participate in short and long term incentive plans of and holds shares, options and performance rights in the Company as has been previously disclosed. Mr Cmrlec 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 Cmrlec consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Previous drill results are extracted from the reports entitled "High Grade Results Underwrite Wagtail Underground Development" created on 08/11/2017, "Drilling Beneath Wagtail Pits Confirms High Grade Depth Extensions" created on 16/03/2017 and "Nicolsons Project Exploration Update" created on 31/07/2017 and are 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 announcements.