BURBANKS GOLD RESOURCE UPGRADE INITIATES MINING STUDY

ASX ANNOUNCEMENT

2rd August 2019

BARRA RESOURCES LIMITED

A.B.N. 76 093 396 859

Corporate Details:

ASX Code:	BAR
Market Cap:	$12.9M @ 2.3c
Cash:	$1.5M (Jun)

Issued Capital:

530.89M Ordinary Shares
50M Options

Substantial Shareholders:

FMR Investments 15.4%
Mineral Resources Ltd 10.8%

DIRECTORS

MD & CEO: Sean Gregory
Chairman: Gary Berrell
Non-Exec: Jon Young
Non-Exec: Grant Mooney

PROJECTS

Mt Thirsty Co-Ni (50%)
Coolgardie Au (100%)

CONTACT DETAILS

www.barraresources.com.au
info@barraresources.com.au

HIGHLIGHTS

- **Maiden Inferred Mineral Resource Estimate of approximately 20,400 Oz at 1.76 g/t gold declared for the Burbanks North Trend**
- **Total Mineral Resources at Burbanks increases a further 16% to 145,700 Oz**
- **Shallow oxide resources amenable to open-pit mining now added to resource base**
- **Mineral Resource Estimate overlies largely untested depth potential along Burbanks North Trend**
- **Mining study commenced to assess potential development pathway for the Burbanks Project ahead of further drilling campaigns**

Barra's Managing Director and CEO Sean Gregory said, *"Barra's commitment to its gold strategy to grow the Mineral Resources at Burbanks is delivering results. With gold now trading above A$2,000 per ounce and with Burbanks status as a granted mining lease, Barra now has an outstanding opportunity to consider mining options for this historically productive high-grade gold mining centre."*

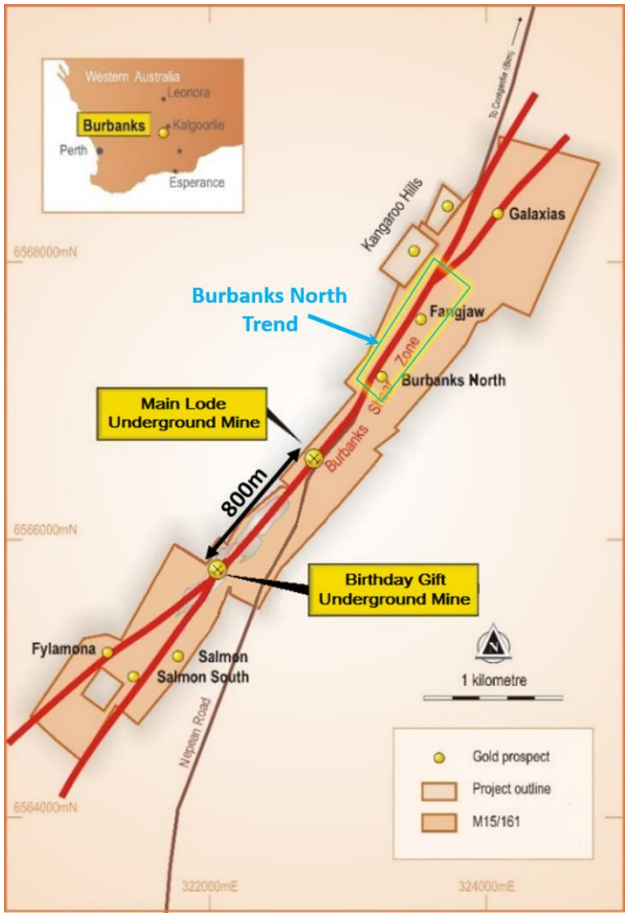

Figure 1 – Burbanks Location Plan

INTRODUCTION

Barra Resources Limited (Barra or the Company) is pleased to announce a maiden Inferred Mineral Resource of approximately 20,400 Oz at 1.76 g/t gold, reported in accordance with the 2012 JORC Code, for the Burbanks North Trend at its 100% owned Burbanks Gold Project, 9 km south of Coolgardie in Western Australia.

The Burbanks North Trend is located just 700m north of the Company's Burbanks Mining Centre which includes the Birthday Gift and Main Lode Underground Mines and several open pits that are currently in care and maintenance. Barra has been steadily increasing its Mineral Resources at its Coolgardie Gold Projects following a strategic update to its gold strategy ahead of a sustainable re-start in mining operations.

Adding the Burbanks North Mineral Resource together with existing Resources at Birthday Gift and Main Lode, the Burbanks Project total Mineral Resource now spans over 2.8km in strike length along the Burbanks Shear and is fast becoming an extensive and significant mineralised system still with vastly untested depth potential.

BURBANKS NORTH MINERAL RESOURCE

Barra engaged BM Geological Services (BMGS) to complete a Mineral Resource Estimate (MRE) for the Burbanks North Trend (Burbanks North). The MRE, classified as Inferred (Table 1, Figure 2) is defined between 6750N and 7700N (local grid) and from surface to the 270mRL, a vertical depth of approximately 90m below surface, and prepared as a potential open-pit resource.

The July 2019 MRE contains 359,998 tonnes at 1.76 g/t Au for 20,359 ounces gold at a 1.0 g/t lower cut-off (Table 1).

Category	Profile	Tonnes	Grade (g/t Au)	Ounces
Inferred	Transported	699	1.43	32
	Oxide	167,658	1.81	9,751
	Transition	79,204	1.69	4,304
	Fresh Rock	112,437	1.73	6,268
Total MRE		**359,998**	**1.76**	**20,359**
All tonnages reported are dry metric tonnes. Minor discrepancies may occur due to rounding to appropriate figures.				

Table 1 – Burbanks North Mineral Resource Estimate as at July 2019

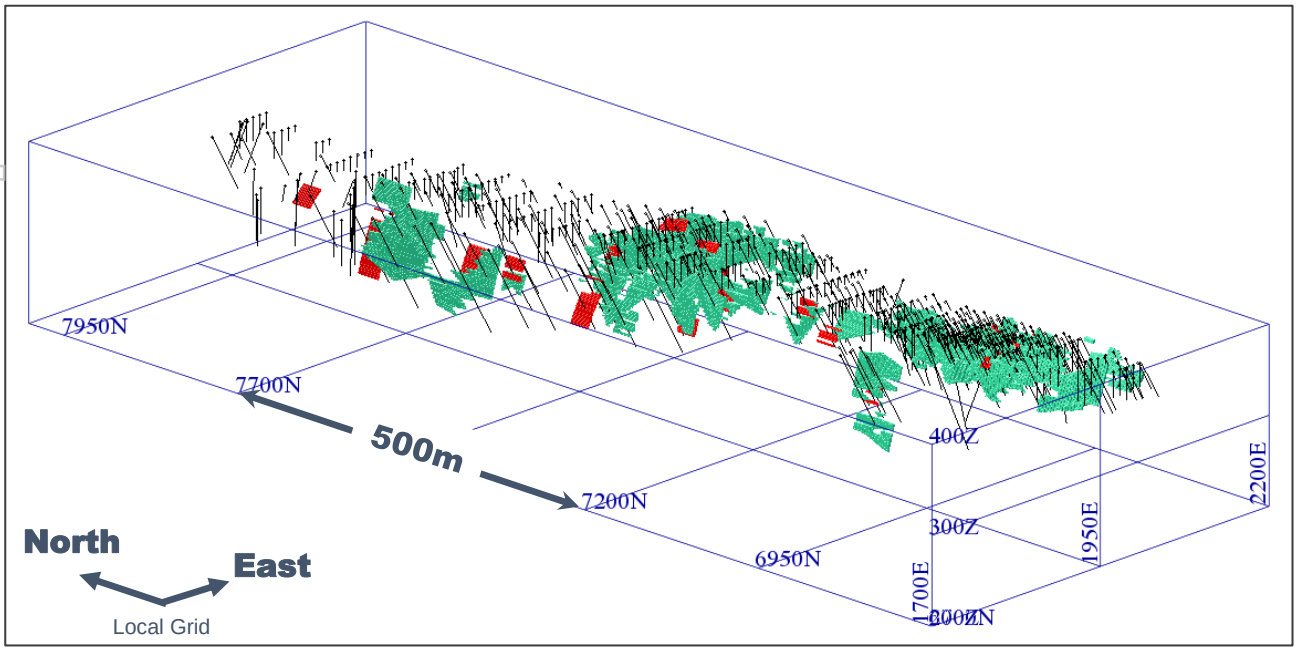

Figure 2 – Oblique view of Burbanks North Mineral Resource looking north-east displaying Inferred Resource blocks (Green) and Unclassified Resource blocks (Red)

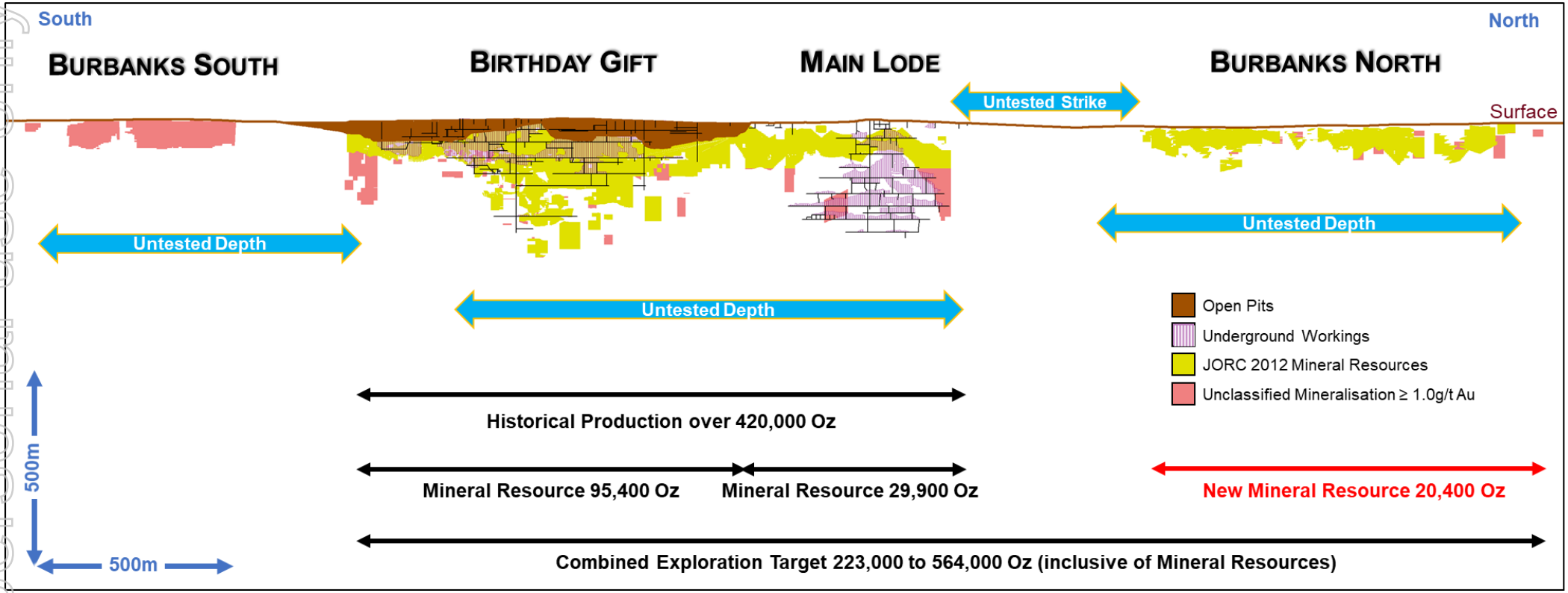

Figure 3 – Burbanks long section showing existing and new JORC Mineral Resources and Uncategorised Mineralisation (≥ 1.0 g/t Au)

Drilling Techniques and Data

The Burbanks North MRE is based on 188 Air Core (AC), 143 Reverse Circulation (RC) and 3 Diamond Core (DD) drill hole data provided to BMGS by Barra to create-dimensional (3D) mineralisation wireframes and weathering surfaces. The database used for the MRE contained a total of 649 drill holes, along with 15,655 samples. Drilling by Barra included RC and AC drilling only between 2008 and 2019, the most recent drilling being the Phase 2 AC program in April this year. All other drilling is historic and completed prior to 1991. No RAB drilling was used for this MRE.

The wireframe interpretation was then used to flag drilling data to be used in the estimation of grades into a block model constructed using the GEOVIA Surpac™ software package. The mineralisation interpretation was completed on 12.5m and 25m spaced drilling traverses and based on a 0.5 g/t Au lower cut-off to mineralisation.

Geological Interpretation and Mineralisation

The Burbanks Project is located within the southern extents of the northeast – southwest trending, reverse - dextral Burbanks Shear Zone. The stratigraphy is characterised by a sequence of steep west-dipping basalt and dolerite and trends northeast – southwest over a strike length of 6km and a width of 100m which largely parallels the Burbanks Shear Zone. Intruding this sequence are a series of fine to medium grained, garnetiferous diorite bodies.

Geological interpretation at Burbanks North identified mineralisation to be similar to that seen at Birthday Gift and Main lode where lodes are characterised by north striking, laminated and highly boudinaged, steeply dipping quartz - carbonate lodes.

During modelling wireframes were created for the geology, weathering surfaces including transported, base of complete oxidation, transitional and top of fresh rock and mineralised domains. RC, DD and AC drilling data was used to inform the wireframes. The wireframes were interpreted from data provided by Barra on cross-sections (Figure 4).

The Burbanks North interpretation consisted of 42 primary lodes and a group of ancillary lodes created from single intercepts. The interpretation was carried out by digitising wireframes onto sections and then cross checking in plan-view to ensure sensible continuity of geology and mineralisation. A lower cut-off grade of 0.5 g/t gold was used; however, a lower cut of 0.1 g/t was sometimes used to improve continuity. The cuts were used in conjunction with a minimum downhole width of 2m.

The Burbanks North Trend is ~1km long, striking 350°, with 42 parallel lodes each ranging from 2-6m wide, dipping at -60° to the west. (Figure 5).

Sampling and Sub-Sampling Techniques and Sample Analysis Methods

RC and close spaced AC samples drilled by Barra between 6850N and 7200N were collected via cyclone and 3-tier splitter then directly into a calico bag and analysed as 1m split samples. Recent Phase 2 AC holes by Barra south of 6850N and north of 7200N was sampled initially as composites, collected using an alloy scoop and submitted for analysis first with anomalous composite samples grading ≥ 0.2g/t Au then re-sampled at 1m intervals for use in the MRE. Sampling methods for historic holes are unknown.

Initial composite samples were assayed using Aqua Regia (AR) digestion and Inductively Couple Plasma Mass Spectroscopy (ICM-MS) finish. All 1m split and resamples collected by Barra and used in the MRE were assayed using Fire Assay (FA) digestion with Atomic Absorption Spectroscopy (AAS) finish.

Classification Criteria

The Mineral Resource is classified as an Inferred Mineral Resource under the JORC 2012 code on the basis of quality of drill data, search pass estimation runs, drill hole spacing, geological understanding and visual geological controls on continuity of mineralisation. The geology is well established with good geological continuity within the broad dimensions of the hosting mineralised envelopes.

The MRE classification appropriately reflects the Competent Person's view of the deposit and the current level of risk associated with the project to date and considered appropriate given the confidence that could be gained from the existing data density and results from drilling.

The resource has been classified based on the following criteria:

1. The density and confidence of drill data based on the QAQC process.
2. The geological understanding of the deposit and consistency of gold assay grades received.
3. The orientation of mineralisation is assumed based on trends from nearby pits, whilst there is potential for variation.
4. Bulk density information has been assumed based on nearby deposit data.
5. Lodes that are informed by single section intercepts with relatively few samples used to estimate grades.

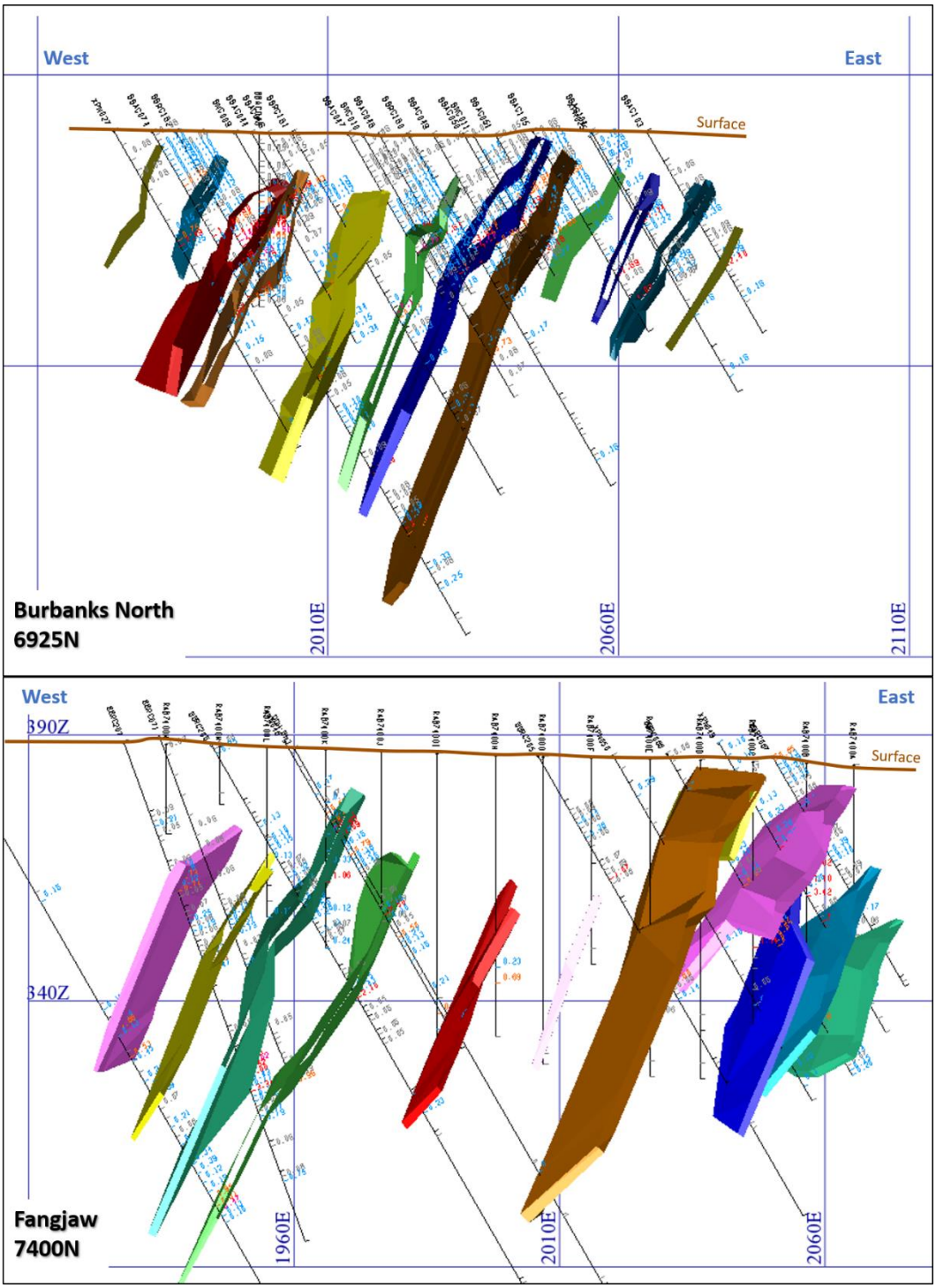

Figure 4 – Cross-section through Burbanks North and Fangjaw showing interpreted mineralisation wireframes (Note: Vertical holes are historic RAB holes and were not included in the interpretation)

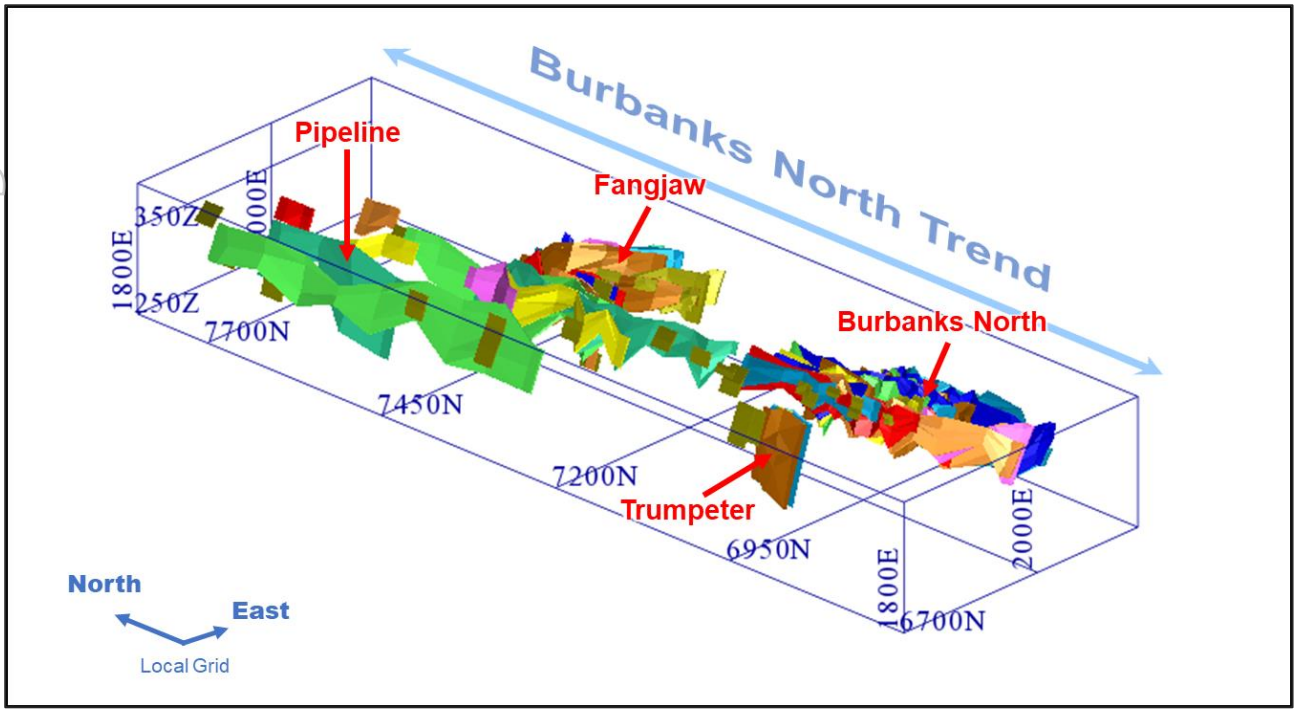

Figure 5 – Oblique view looking north-east of the Burbanks North wireframe model

Estimation and Modelling Methodology

Estimations were performed using Inverse Distance with a power of 2 (ID2). Hard boundaries were used for all estimations. In order to prevent over-estimation and smearing of high-grade samples, a top-cut was applied. Histograms, log probability plots and mean variance plots were considered to select the most appropriate top-cut; a top-cut of 20.0g/t Au was used for all domains.

Block model validation was also completed using swath plots on 12.5 increments along strike and 5m increments for across strike and elevations to display grades for the ID2 estimate against the composite grades. The block model visually and statistically reflected the input data.

The search criteria utilised for the estimate were based on the overall orientation of the individual domain geometry and the variogram model generated. The orientation of the lodes fit into two groups, those around the Fangjaw area and all others. Due to the thin nature of the lodes and the small number of samples some lodes required 3 passes to estimate all blocks. The search passes were adjusted in subsequent passes by either increasing search criteria or relaxing restrictions on the number of samples required for estimation.

Weathering codes assigned in the model were based on the interpreted surfaces and a topography file provided by Barra.

Density and Moisture Determination

No measured bulk density (BD) data was provided for Burbanks North. The densities applied were based on nearby deposits that contain similar rock types including BD's used at Birthday Gift. It was recommended that a selection of diamond holes be drilled at Burbanks North in the future to provide samples for accurate density measurements for the deposit. The densities used are displayed in Table 3 below.

Profile	Density
Oxide	1.8
Transitional	2.4
Fresh	2.8

Table 3 – Bulk Densities applied to weathering profiles

Tonnages are reported on a dry basis with sampling and analysis having been conducted to avoid water content density issues.

Cut-off Parameters

The MRE has been reported using a lower cut-off grade of 1.0 g/t Au to align with previously reported estimates. This lower cut-off grade is also in line with the assumption of extraction of material using open pit mining methods.

Mining, Metallurgical Factors and Other Modifying Factors

The Burbanks North Mineral Resource is primarily a shallow oxide resource amenable to open pit mining. Previous optimisation studies on modelled mineralisation has previously demonstrated potential for economic extraction. Open pit parameters of a minimum of 2m downhole mineralisation width, and a lower cut grade of 0.5 g/t Au was used for interpretation. The MRE only reports mineralisation to a maximum vertical depth of 120m.

No metallurgical work has been completed at Burbanks North however previous toll treatment of ore from the Burbanks Mining Centre through third party processing plants indicated no issues with metallurgical recoveries. Metallurgical test work at Burbanks North will be completed as future drilling programs deliver suitable material for testing.

BURBANKS GLOBAL MINERAL RESOURCES

The maiden MRE for Burbanks North is another milestone for Barra. It adds an additional 16% of Mineral Resources to our Global Mineral Resource which now stands at 145,700 Oz (Table 4). This represents just over a quarter of the upper limit of the Company's previously announced Exploration Target.

Deposit	Cut-Off g/t Au	Indicated			Inferred			Total		
		kt	Grade g/t Au	Ounces	kt	Grade g/t Au	Ounces	kt	Grade g/t Au	Ounces
Christmas Open Pit	1.0	5	6.2	1,100	4	7.8	1,050	9.7	6.9	2,150
Birthday Gift Underground Mine	2.5	180	6.0	34,750	325	5.6	58,500	505	5.7	93,250
Main Lode Deposit	1.0	106	2.8	9,700	254	2.5	20,200	360	2.6	29,900
Burbanks North	1.0				360	1.8	20,400	360	1.8	20,400
Total	**1.0/2.5**	**291**	**4.9**	**45,550**	**943**	**3.3**	**100,150**	**1235**	**3.7**	**145,700**

All tonnages reported are dry metric tonnes. Minor discrepancies may occur due to rounding to appropriate figures. For full details of the Birthday Gift and Christmas Pit Mineral Resources, refer to ASX:KDR's 2016 Annual Report. For full details of the Main Lode Resource, refer to ASX:BAR Release dated 30/10/18.

Table 4 – Burbanks Global Mineral Resources

BURBANKS MINING STUDY

In light of the increased resource base at Burbanks and recent increases in gold prices above A$2,000 per ounce, the Company has commissioned Snowden Mining Consultants to conduct a desktop mining study to consider a near-term restart in mining operations. The study will consider the following elements:

- the potential for open pit mining at Burbanks North,
- the potential to access the shallow Mineral Resource discovered at Main Lode during 2018, potentially via an underground development launched from the adjacent Christmas open pit,
- Remnant Mineral Resources at Birthday Gift in the Hadfield and Dahmu lodes at level 4 and above that was accessed and developed by Kidman Resources, but never mined,
- Toll treatment at one of several nearby mills; and
- Dewatering solutions and ongoing reserve definition drilling, to enable future development at deeper levels.

The results of the study are expected during the current quarter. Whilst further detailed studies and reserve definition drilling would then be required, Burbanks has the advantage of being a granted mining lease with some approvals already in place, potentially paving the way to a rapid restart in mining operations.

ONGOING EXPLORATION

The addition of the maiden Burbanks North MRE to the Burbanks resource base continues to lay a solid foundation for further growth. When considered in the context of the overall Burbanks mineral system as illustrated in Figure 3, there remain several glaring gaps that represent outstanding drill targets and scope to add significantly more resources.

In particular, the 500m of untested strike along the Burbanks Shear between the northern limit of the Main Lode Deposit and the southern limit of Burbanks North Deposit has emerged as a high priority area for follow up testing.

Furthermore, the entire Burbanks high-grade gold system has only been tested to shallow depths, below which it remains open.

SEAN GREGORY

Managing Director & CEO

ABOUT BURBANKS

The Burbanks Project is located 9km southeast of Coolgardie, Western Australia. The Project includes the Burbanks Mining Centre and over 5km of the highly prospective Burbanks Shear Zone, historically the most significant gold producing structure within the Coolgardie Goldfield.

The Burbanks Mining Centre comprises the Birthday Gift and Main Lode Gold Mines. The recorded historic underground production at Burbanks (1885-1961) totalled **444,600t at 22.7 g/t Au for 324,479oz** predominantly from above 140m below the surface. Intermittent open pit and underground mining campaigns between the early 1980's to present day has seen total production from the Burbanks Mining Centre now exceed **420,000oz**.

In March 2018, Barra updated its Gold Strategy based on a newly defined Exploration Target (Refer to ASX:BAR Announcement 21/3/18). The Exploration Target for Burbanks is now identified as **223,000 to 564,000 ounces of gold** (Table 1). The potential quantity and grade of the Exploration Target is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource beyond Birthday Gift and Main Lode. It is uncertain if further exploration will result in an estimation of a Mineral Resource.

	Low Range			High Range		
	dmt	**Au g/t**	**Au Oz**	**dmt**	**Au g/t**	**Au Oz**
Main Lode to Burbanks North Exploration Target	185,000	8.0	47,600	2,170,000	5.0	348,800
Birthday Gift Exploration Target	625,000	4.0	80,000	650,000	6.0	120,000
Birthday Gift Mineral Resource	514,700	5.8	95,400	514,700	5.8	95,400
Total			**223,000**			**564,000**

Table 5: Burbanks JORC 2012 Exploration Targets and Mineral Resource

The Exploration Target is inclusive of the JORC 2012 compliant Mineral Resource Estimate announced here of 145,700 ounces of gold at Burbanks (Table 4).

The Burbanks Exploration Target was arrived at after evaluation of historic and current exploration drilling and mining datasets including geological and resource modelling, aeromagnetic, new mapping, auger geochemistry, conceptual exploration models and recent mine production data. The information gathered was used to estimate average grades, typical dimensions, average bulk densities, and possible frequency of lode occurrences to estimate the likely ranges of the magnitude of possible extensions to known lodes and repetitions within the same geological domain, limited to a nominal depth of up to 500m.

Key target areas were identified, ranked and prioritised. This then fed into the development of a long-term strategy to explore these key target areas with a clear focus on the discovery, delineation and delivery of resources to underpin the establishment of a medium- to long-term mining operation.

Barra has a plan of ongoing drilling campaigns using air core, reverse circulation and diamond drilling methods to test these targets followed by Mineral Resource estimation where appropriate over the next four years as market conditions allow.

DISCLAIMER

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken based on interpretations or conclusions contained in this report will therefore carry an element of risk.

This report contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this report. No obligation is assumed to update forward-looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

COMPETENT PERSONS' STATEMENT

The information in this report which relates to Exploration Results, geological interpretation and Exploration Targets at Burbanks is based on information compiled by Mr Gary Harvey a full-time employee of Barra Resources Limited who is a Member of the Australian Institute of Geoscientists.

The information in this report which relates to Mineral Resources at Main Lode and Burbanks North is based on information compiled by Mr Andrew Bewsher full-time employee of BM Geological Services Pty Ltd who is a Member of the Australian Institute of Geoscientists.

For full details of the Burbanks Mineral Resources other than Main Lode, refer to ASX:KDR's 2016 Annual Report available to view on asx.com.au.

Messer's Harvey and Bewsher has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Messer's Harvey and Bewsher consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The company is not aware of any new information or data that materially affects the information presented and that the material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

JORC CODE, 2012 EDITION – TABLE 1 – BURBANKS NORTH TREND

SECTION 1 SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections.)

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.*	• Sampling was conducted using a Reverse Circulation (RC) and an Air Core (AC) drilling rig. • Drill chips are placed directly on the ground. • For RC drilling and Phase 1 AC drilling, samples were collected every 1m interval using a cyclone and 3-tier riffle splitter to obtain a ~2-3kg representative sub-sample for each 1m interval. The cyclone and splitter were cleaned regularly to minimize contamination. • For Phase 2 AC drilling 4m composite samples were collected (a 1, 2, or 3m interval is collected for end-of hole as required) initially using an alloy scoop with mineralised samples (≥0.2g/t Au) re-sampled at every 1m interval using an alloy scoop. • Field duplicates and standards were collected at a rate of 1:20m for RC and Phase 1 AC drilling, and 1:50m for Phase 2 AC drilling. • Samples were pulverised to produce a 40g charge for fire assay or aqua regia analysis. • Sampling and QAQC procedures are carried out using Barra protocols as per industry best practice.
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).*	• Reverse circulation (RC) drilling was carried out using a face sampling hammer with a 143mm (5 5/8") drill bit. • AC drilling was carried out using a blade bit with an 82.2mm (3.25") diameter bit. • Where a face sampling hammer was used, the drill diameter was 108mm (4.25").
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.*	• Sample recoveries are visually estimated qualitatively on a metre basis and recorded in the database. • Drilling contractors adjust their drilling approach to specific conditions to maximise sample recovery. • Moisture content is recorded for each sample and captured on the drill log. • No sample recovery issues have impacted on potential sample bias.
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*	• All drill holes are logged in full. • All holes were logged at 1m intervals for the entire hole from drill chips collected and stored in chip trays. Data was recorded for regolith, lithology, veining,

Criteria	JORC Code explanation	Commentary
	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.*	fabric (structure), grain size, colour, sulphide presence, alteration and oxidation state. • Logging is both qualitative and quantitative in nature depending on the field being 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.*	• Wet samples, if encountered, are sampled separately as individual metre samples and flagged in the database. No wet samples were encountered. • All RC and Phase 1 AC samples were passed through cyclone and a 3-tier splitter, and a ~2-3kg split sample is collected for each 1m interval. • 1m split samples were collected for analysis from selected zones based on field logging. All other zones were sampled by collecting a 4m composite sample. • 4m composite samples were collected using an aluminium scoop. • Field duplicates and standards were collected at a rate of 1:20m for RC and Phase 1 AC drilling, and 1:50m for Phase 2 AC drilling. • Certified reference standards were inserted at a rate of 1:20m for RC and Phase 1 AC drilling, and 1:50m for Phase 2 AC drilling. • Sample preparation was conducted at Bureau Veritas' Kalassay Laboratory in Perth using a fully automated sample preparation system. Preparation commences with sorting and drying. Oversized samples are crushed to <3mm and split down to 3kg using a rotary or riffle splitter. Samples are then pulverized and homogenized in LM5 Ring Mills and ground to ensure >90% passes 75µm. • 200g of pulverized sample is taken by spatula and used for a 40g charge for Fire Assay or Aqua Regia for gold analysis. A high-capacity vacuum cleaning system is used to clean sample preparation equipment between each sample. • All 1m samples used in the MRE were analysed by Fire Assay. • The sample size is considered appropriate for this type and style of mineralisation.
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*	• Fire Assay is an industry standard analysis technique for determining the total gold content of a sample. The 40g charge is mixed with a lead-based flux. The charge/flux mixture is 'fired' at 1100oC for 50mins fusing the sample.

Criteria	JORC Code explanation	Commentary
	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.*	The gold is extracted from the fused sample using Nitric (HNO3) and Hydrochloric (HCl) acids. The acid solution is then subjected to Atomic Absorption Spectrometry (AAS) to determine gold content. The detection level for the Fire Assay/AAS technique is 0.01ppm. • Aqua Regia analysis is an industry standard analysis technique for determining the gold content of a sample. A nominal 40g charge of pulverised sample is digested with Aqua Regia (a mix of Nitric (HNO3) and Hydrochloric (HCl) acids) in a water bath. An aliquot of the digest solution is then taken, and gold is determined by ICP-MS. Due to the high sensitivity of the ICP-MS, lower detection limits are possible without further pre-concentration (solvent extraction) of the gold. The detection level is 1ppb Au (0.001ppm). • Laboratory QA/QC controls during the analysis process include duplicates for reproducibility, blank samples for contamination and standards for bias.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All drilling and significant intersections are verified and signed off by the Exploration Manager for Barra Resources who is also a Competent Person. • No pre-determined twin holes were drilled during this program. • Geological logging was originally captured on paper, scanned and sent to the company's consultant database administrator (RoreData) for entry directly into the database via a validation process. Sampling, collar, and laboratory assay data is captured electronically and also sent to RoreData. All original data is stored and backed-up by Barra. The official database is stored by RoreData, a copy of which is uploaded to Barra's server for geologists use. Uploaded data is reviewed and verified by the geologist responsible for the data collection. • No adjustments or calibrations were made to any assay data reported.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole*	• All Barra drill hole collar locations were surveyed by a qualified surveyor using

Criteria	JORC Code explanation	Commentary
	surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	sophisticated DGPS with a nominal accuracy of +/- 0.05m for north, east and RL (elevation) • The drilling rig was sighted using a compass. Drill hole angle was set using an inclinometer placed on the drill mast prior to collaring the hole. • No down-hole surveying was completed for this drilling.
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 holes were located on 12.5 to 25m spaced traverses at 5 to 20m centres between and along strike from previous drill holes. • No sample compositing has been applied to mineralised 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 was perpendicular to the strike of the main mineralised structure targeted for this program. All reported intervals are however reported as downhole intervals and not true-width. • No drilling orientation and/or sampling bias have been recognized in the data at this time.
Sample security	• *The measures taken to ensure sample security.*	• Samples for analysis were tagged and recorded instantly and delivered to the laboratory at the end of each day.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been conducted on sampling techniques and data at this stage.

SECTION 2 REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Burbanks North Trend is located within Barra's 100% owned granted mining lease M15/161. • There is no native title claim over the lease. • The tenement is in good standing.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Mining lease M15/161 comprises the

Criteria	JORC Code explanation	Commentary
		Birthday Gift Mining Centre. Historical production (1885-1999) from the Birthday Gift Mine (incl. Lady Robinson, Christmas, Far East and Tom's Lode pits) and the Main Lode Mine produced over 420,000 ounces to a depth of about 140m below surface. • No mining has occurred at Burbanks North • 1978-1991; Jones Mining NL and Metallgesellschaft/Lubbock conducted shallow RAB, RC and DD drilling along the Burbanks North Trend which identified the Burbanks North deposit and over 1km of shallow anomalous gold. • 1999-2013; Barra conducted followed up previous drilling with infill RC and AC to define the Burbanks North Resource.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Burbanks Project, specifically M15/161, covers about 5km of strike of the Burbanks Shear Zone within a package of basalts and intercalated gabbro/dolerite and sediments. • Gold occurs in ptygmatically folded and boudinaged laminated quartz veins with pyrite, pyrrhotite, +/- scheelite and an alteration assemblage of plagioclase, calcite, chlorite and biotite. It may also occur in quartz-pyritic biotitic shears and is often associated with garnetiferous diorite sills.
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.*	• Drill hole information for the drilling discussed in this report is listed in Table 1 in the context of this report. • All material data has been periodically released to the ASX.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.*	• Reported intersections have been length weighted to provide the intersection width. • A lower cut-off of 0.5g/t Au was used to identify significant intersections, with maximum of 2m internal waste (<0.50g/t Au) included in the calculation of intersection widths. • Significant intersections have been reported where the weighted average for the intersection is ≥ 1.0g/t Au. • No assays have been top-cut for the purpose of reporting drill hole intersections. • All significant intersections have been reported. • No metal equivalent values have been used for the reporting of these exploration results.
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').*	• True widths, where reported, have been estimated manually on a hole by hole basis for intersections within known mineralised zones and based on the current knowledge of the mineralised structure. • Both downhole width and estimated true width have been clearly specified in this report when used. • The main mineralised shear trends grid north and dips about ~60-70 degrees grid west. (Grid north = 41.3 True North)
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.*	• Appropriate plans and sections have been included in the body of this report.
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.*	• Both high and low grades have been reported accurately, clearly identified with drill hole attributes and 'from' and 'to' depths.
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*	• Bottom of hole multi-element data assisted in interpreted bedrock geology used to inform the interpretation of the orientation of lodes at Fangjaw.

Criteria	JORC Code explanation	Commentary
	characteristics; potential deleterious or contaminating substances.	
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 work has been discussed in the context of this report

SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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.*	• A complete database was supplied by Barra Resources in the form of an access database. • The database was checked for duplicate values, from and to depth errors and EOH collar depths. • A 3D review of collars and hole surveys was completed in Surpac to ensure that there were no errors in placement or dip and azimuths of drill holes.
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.*	• No site visits have taken place by the competent person. The geological team for Barra Resources have described adequately the geological processes used for the collection of assay data
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.*	• Wireframes have been created for the geology, weathering surfaces including base of complete oxidation and top of fresh rock and mineralised domains. • RC, DD and AC drilling data has been used to inform the wireframes. • The wireframes were interpreted from data provided by Barra on cross-sections. • Mineralisation domains were created using a lower cut-off of 0.5 g/t gold.
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 Burbanks North Trend is ~1km long, striking 350°, with 42 parallel lodes each ranging from 2-6m wide, dipping at -60° to the west, the bulk of mineralisation is within 100m of surface.
Estimation and modelling	• *The nature and appropriateness of the estimation technique(s) applied*	• Estimations were performed using Inverse Distance with a power of 2 (ID2). Hard

Criteria	JORC Code explanation	Commentary
techniques	*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 (eg 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.*	boundaries were used for all estimations. In order to prevent over-estimation and smearing of high-grade samples, top-capping was applied to some domains. • Selection of top cap values were based on statistical analysis of the data set. • A top-cut of 20 g/t was selected for the data set and was applied to all domains. • During the estimation, ellipsoidal searches orientated along the approximate strike and dip of the mineralisation were used. The X axis was orientated along strike, the Y axis across strike in the plane of mineralisation, and the Z axis perpendicular to the plane of mineralisation. • The block model extents have been extended to allow for a minimum of 50m in all directions past the extent of known mineralisation. • The block model was built with 12.5m North 5m East and 5m elevation parent block cells. • Hole spacing is varied through the deposit but is at least 50m * 20m and increases in density to 12.5m * 10m. These areas have the higher confidence classifications. Drill hole spacing and sample availability were the main drivers for classification of resource. Indicated mineralisation was based on the blocks that were estimated on the first pass of estimation with using a minimum of 9 samples within 30m of the block. • Sampling occurs at 1m intervals for the majority of holes. 1m compositing was used to ensure adequate sample support for the estimate. • No estimation has been completed for other minerals or deleterious elements. • The model has been checked by comparing composite data with block model grades in swath plots (north/East/elevation) on each estimated domain. The block model visually and statistically reflects the input data.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are reported on a dry basis with sampling and analysis having been conducted to avoid water content density issues. Currently there is no data on the natural moisture content and no density determinations.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The mineral resource has been quoted using a lower cut-off grade of 1.0 g/t gold to align with previously reported estimates. • This lower cut grade is in line with the assumption of extraction of material using Open pit mining methodology.
Mining factors or	• *Assumptions made regarding*	• The mineral resource has been reported

Criteria	JORC Code explanation	Commentary
assumptions	*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.*	based on utilising open pit mining methodologies. • Open pit parameters of min 2m downhole mineralisation width, and a lower cut grade of 0.5 g/t has been used for interpretation. • The deepest mineralisation is reported at 120m vertical depth.
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.*	• Previous toll treatment for the adjacent open pit and underground mines through third party processing plants indicated no issues with metallurgical recoveries. • No metallurgical work has been completed at Burbanks North but will be completed as future drilling programs deliver suitable material for testing.
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.*	• It is considered that there are no significant environmental factors, which would prevent the eventual extraction of gold from the Main Lode project. Environmental surveys and assessments will form a part of future pre-feasibility.
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*	• Based on instructions from Barra Resources densities were applied based on typical densities of the rock types and weathering profiles found at Burbanks North. • The densities were applied oxide-1.8, transitional-2.4 and fresh-2.8. • Test work needs to be carried out at Burbanks North to prove up these

Criteria	JORC Code explanation	Commentary
	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.*	assumptions.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie 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 Resources are classified as an Inferred Mineral Resource under the JORC 2012 code. These classifications are considered appropriate given the confidence that can be gained from the existing data density and results from drilling. • Classifications have been based on quality of drill data, search pass estimation runs, drill hole spacing and visual geological controls on continuity of mineralisation. • The current classification is considered appropriate as the geology is well established with good geological continuity within the broad dimensions of the hosting mineralised envelopes. • The Mineral Resource classification and results appropriately reflect the Competent Person's view of the deposits and the current level of risk associated with the project to date
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audits have been previously completed on Mineral Resource Estimates.
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.*	• As an 'Inferred Mineral Resource', there is low confidence in the current data quality and analytical results. Further good quality geological and assay data is required to demonstrate grade continuity. • Density test work must also be carried out to increase confidence in the reported resource as all densities have been assumed.