KIN MINING NL

ASX Code: KIN

9th July 2019

Bruno-Lewis Mineral Resource Update

Updated CGP Mineral Resource to underpin upcoming Ore Reserve and PFS results

- **Updated Mineral Resource Estimate completed for the key Bruno-Lewis deposit at the Cardinia Gold Project (CGP).**
- **Bruno-Lewis Mineral Resource Estimate now 7.7 million tonnes at a grade of 1.05 g/t Au for 259,000 ounces.**
- **CGP Mineral Resource Estimate now 18.2 million tonnes at a grade of 1.44 g/t Au for 841,000 ounces.**
- **Increase in total tonnage, grade and contained ounces from March 2019 estimate.**
- **Additional data inputs have resulted in a significant improvement in the robustness and quality of the Mineral Resource Estimate.**
- **The CGP MRE provides a solid foundation for an updated CGP Ore Reserve estimate, ahead of the Pre-Feasibility Study expected to be released in late July.**

Kin Mining NL (ASX: KIN) is pleased to provide the following update of the Mineral Resource Estimates for the Cardinia Gold Project (CGP) based on an update of the Bruno-Lewis geological model (Figure 1). Bruno-Lewis is a key deposit within the CGP and is targeted to be a key provider of baseload feed for the proposed processing plant, located 1km east of Bruno-Lewis.

Kin has completed a revised geological model and Mineral Resource Estimate based on the results of five diamond drill holes completed in March 2019 which were not incorporated in the previous estimate and re-interpretation of the extent of supergene mineralisation in the central part of the Bruno-Lewis deposit.

The updated Mineral Resource Estimate for Bruno-Lewis totals 7.7 million tonnes at 1.05g/t Au for 259,000 ounces (Table 1). This increases the total Mineral Resource Estimate for the CGP to 18.2 million tonnes at 1.44 g/t Au for 841,000 ounces (Refer Table 1 for a detailed breakdown of the Bruno-Lewis and CGP Mineral Resource Estimate by deposit and classification).

Commenting on the updated Mineral Resource Estimate for Bruno-Lewis, Kin Managing Director Andrew Munckton said:

"This update to the Bruno-Lewis model and the Mineral Resource Estimate is a further important step towards updating the Ore Reserve and Pre-Feasibility Study for the CGP which we expect to be complete this month.

"Our geological team has developed an excellent understanding of the mineralisation at the CGP through drilling programs and geological modelling completed over the last 12 months which will support future exploration activities throughout our dominant landholding in the Cardinia and Mertondale areas."

Management

Andrew Munckton
Managing Director

Stephen Jones
Chief Financial Officer and Company Secretary

Glenn Grayson
Exploration Manager

Trevor Dixon
Executive Director Business Development & Land Tenure

Board of Directors

Jeremy Kirkwood
Chairman

Joe Graziano
Non-Executive Director

Brian Dawes
Non-Executive Director

Contact Details

Post

PO Box 565
Mount Hawthorn
Western Australia
6915

Office

342 Scarborough Beach Road
Osborne Park
Western Australia 6017

Phone

08 9242 2227

Email

info@kinmining.com.au

Website

www.kinmining.com.au

Shares on Issue
483,371,337

Unlisted Options

25,000,000

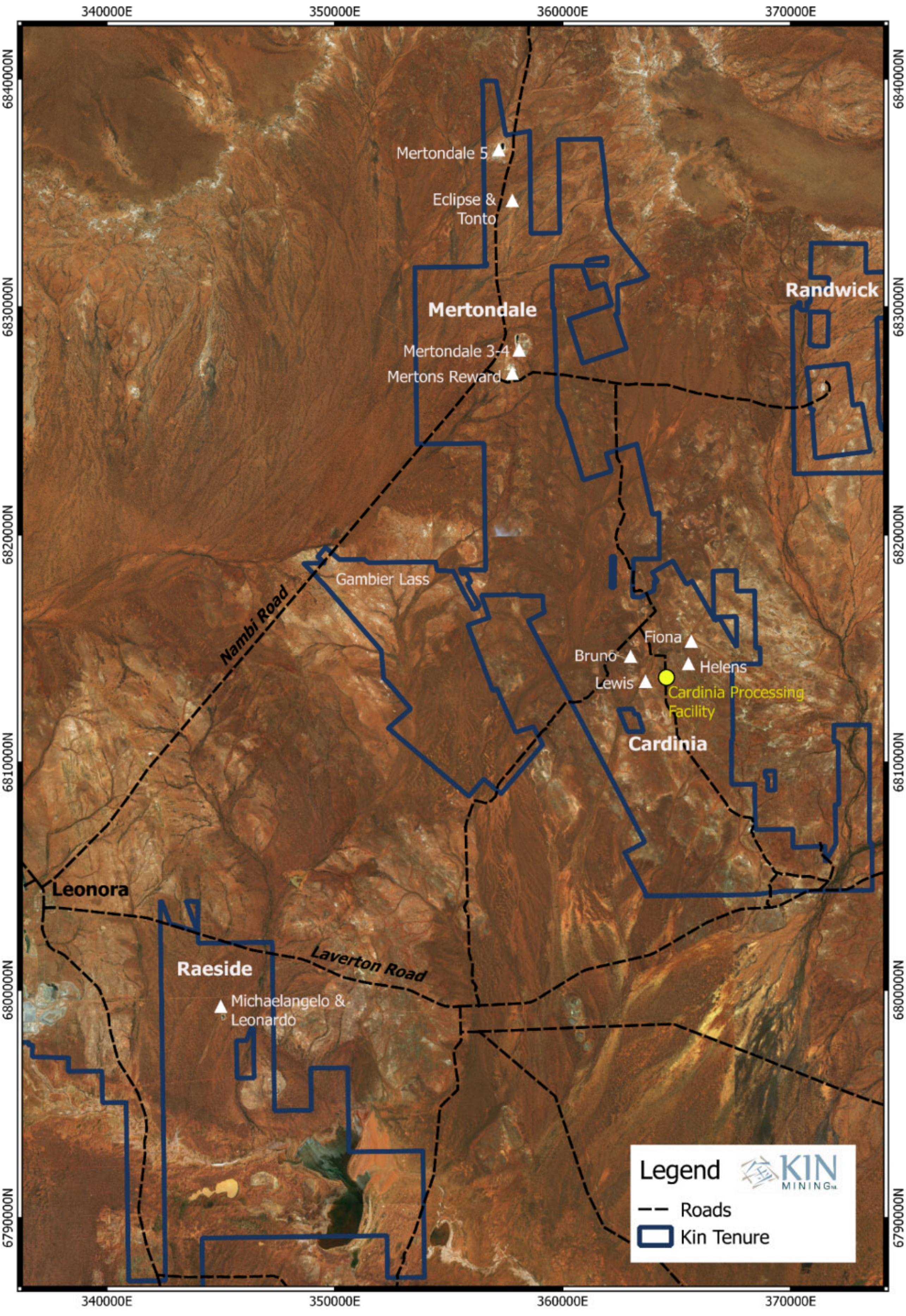

Figure 1. Project map of the Cardinia Gold Project, showing major prospects and current tenure

Cardinia Gold Project: Mineral Resources: June 2019																
Project Area	Resource Gold Price (AUD)	Lower Cut off (g/t Au)	Measured Resources			Indicated Resources			Inferred Resources			Total Resources				
			Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)		
Mertondale																
Mertons Reward	$2,000	0.5				0.80	2.30	60	0.44	1.01	15	1.25	1.86	74		
Mertondale 3-4	$2,000	0.5				1.17	1.99	75	0.45	1.36	20	1.62	1.82	95		
Tonto*	$2,000	0.5				1.79	1.31	75	0.00	1.27	0	1.79	1.31	75		
Mertondale 5*	$2,000	0.5				0.57	2.18	40	0.04	2.23	3	0.61	2.19	43		
Eclipse **	$2,200	0.5							1.23	1.39	55	1.23	1.39	55		
Quicksilver **	$2,200	0.5							0.81	1.54	40	0.81	1.54	40		
Subtotal Mertondale						4.34	1.80	250	2.97	1.38	132	7.31	1.63	383		
Cardinia																
Bruno	$2,000	0.5				0.87	1.02	28	1.90	1.28	78	2.77	1.20	106		
Lewis	$2,000	0.5	0.36	1.04	12	3.59	0.93	108	0.98	1.06	33	4.93	0.97	153		
Kyte	$2,000	0.5				0.32	1.57	16	0.05	1.30	2	0.37	1.54	18		
Helens	$2,000	0.5				0.68	2.18	47	0.24	1.83	14	0.91	2.09	61		
Fiona*	$2,000	0.5				0.22	1.80	13	0.06	1.48	3	0.28	1.73	16		
Rangoon*	$2,000	0.5				0.31	1.51	15	0.05	1.15	2	0.37	1.46	17		
Subtotal Cardinia			0.36	1.04	12	5.99	1.18	228	3.27	1.25	132	9.63	1.20	372		
Raeside																
Michaelangelo*	$2,000	0.5				0.82	2.04	53				0.82	2.04	53		
Leonardo*	$2,000	0.5				0.12	2.33	9				0.12	2.33	9		
Forgotten Four **	$2,200	0.5						0	0.21	2.12	14	0.21	2.12	14		
Krang **	$2,200	0.5						0	0.15	2.11	10	0.15	2.11	10		
Subtotal Raeside						0.94	2.08	63	0.36	2.12	24	1.30	2.09	87		
TOTAL			**0.4**	**1.04**	**12**	**11.3**	**1.49**	**541**	**6.6**	**1.36**	**289**	**18.2**	**1.44**	**841**		

Table 1. Mineral Resource Table June 2019

Mineral Resources estimated by Jamie Logan of Kin Mining NL, and reported in accordance with JORC 2012 using a 0.5g/t Au cut-off within Entech A$2,000 optimisation shells.

** Mineral Resources estimated by Carras Mining Pty Ltd in 2017, and reported in accordance with JORC 2012 using a 0.5g/t Au cut-off within Entech A$2,000 optimisation shells.*

*** Mineral Resources estimated by McDonald Speijers in 2009, audited by Carras Mining Pty Ltd in 2017 and reported in accordance with JORC 2012 using a 0.5g/t Au cut-off within Entech A$2,200 optimisation shells.*

Totals may not tally due to rounding

Bruno-Lewis

The previous Bruno-Lewis model was released in March 2019 as part of the ongoing model and Mineral Resource updates of the CGP. With the receipt of the final five diamond drill results (as announced 4th April 2019) focus of the geological team has allowed for the completion of interpretative work, including the consolidation of the geological interpretation and weathering profile, particularly in the Bruno area.

Most of the existing lodes were reviewed and refined where possible, with a significant number of new lodes added. The majority of the changes are in the Bruno area (Figure 2).

This updated work has been included in a revised geological and Mineral Resource model.

The stratigraphy is made up of a lower felsic volcanic unit which is overlain by a unit of felsic to intermediate volcaniclastics interbedded with finer grained sediments (predominantly siltstones and minor shales). This unit is in turn overlain by the mafic sequence comprising pillow basalts. To the north-west and south-east of the Lewis trial pit, the stratigraphy is offset by north-south striking faulting, exhibiting sinistral strike slip movement. The offset of the northern block to the south-west is approximately 350m. The stratigraphy is intruded by several NE-dipping felsic porphyry units as well as later east-west oriented Proterozoic dolerite dykes (Figure 3).

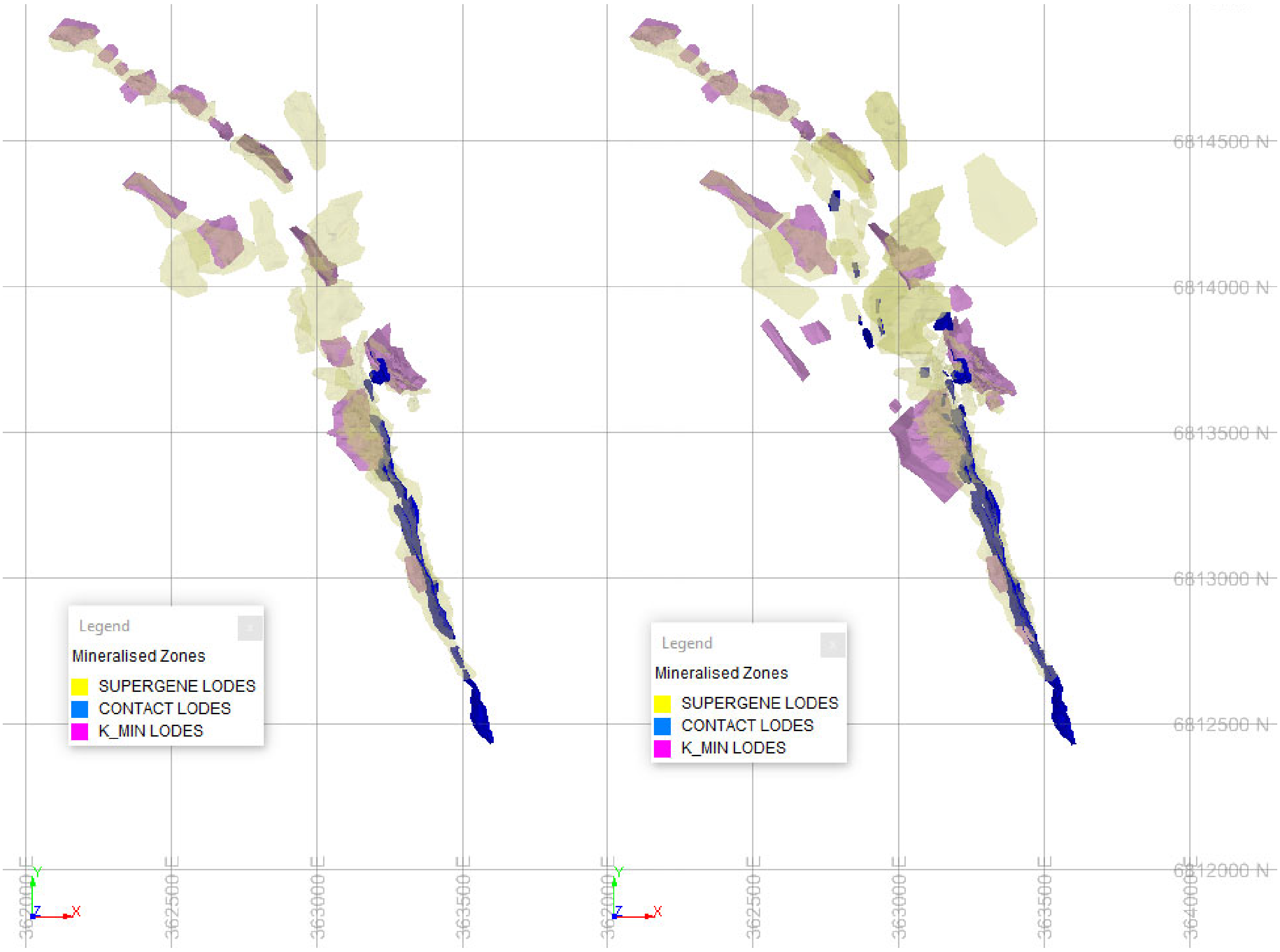

Figure 2. Bruno Lewis. Changes in Mineralised lodes from March 2019 (left) to June 2019 (right)

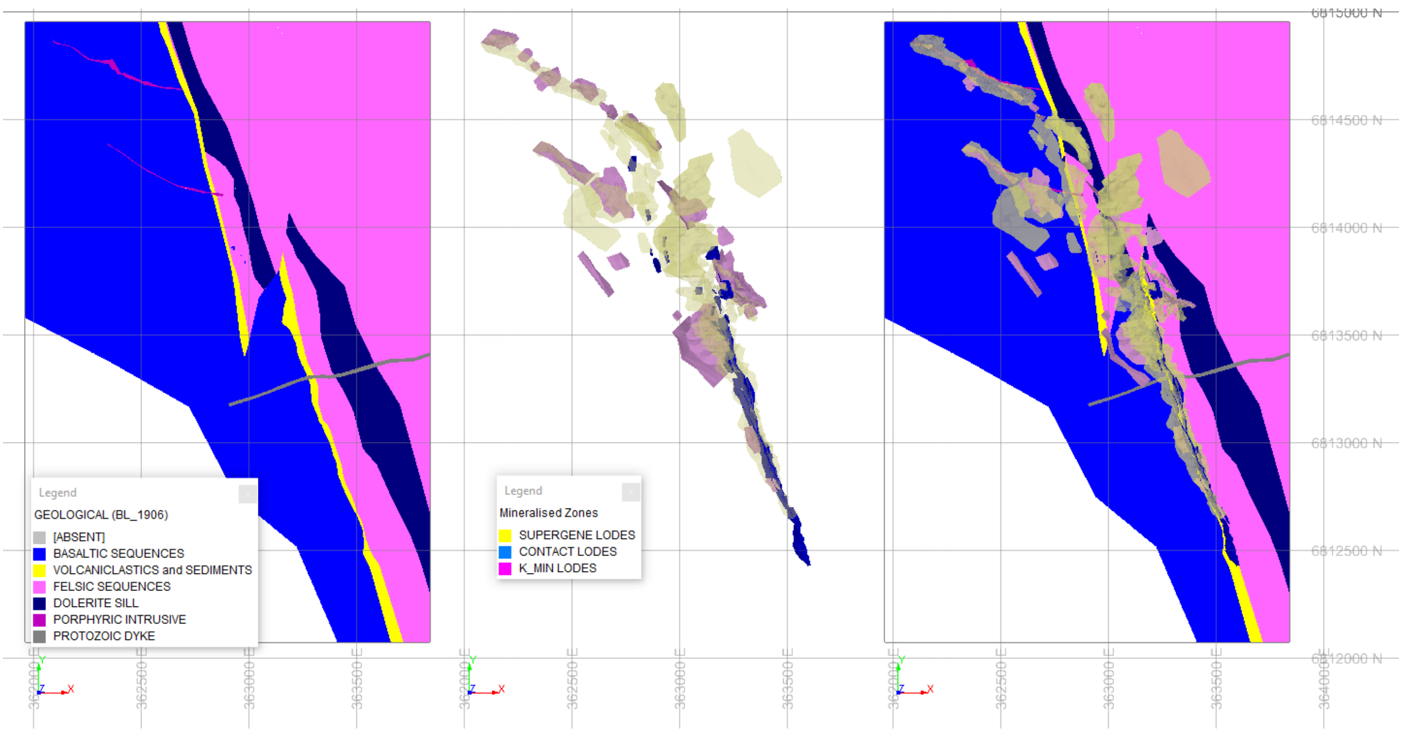

Figure 3. Bruno-Lewis: Geological Model (left), Mineralised lodes (center), relationship of Mineralised lodes to Geology (right)

Mineralisation can be divided into three broad styles:

- Contact: Moderate to steeply W-dipping, stratigraphy-parallel lodes. Located on or near the stratigraphic contacts, or within the interbedded volcaniclastic unit. Typically, pyrite-rich with limited strike extent. These lodes are high in associated metals (Ag, Cu, Zn, Sb, Te and W).
- Potassic (K-Min): Moderately NE-dipping, NW-striking lodes, occasional porphyry intrusions are sub-parallel. Characterised by potassic alteration, quartz stockwork veining and disseminated pyrite. Lower level association with Ag and minor base metals.
- Supergene: Flat lying, near surface, goethite-rich zones. Enriched in Au and Ag.

With this revised interpretation a new Mineral Resource Estimate was carried out using standard industry practices. Pit optimisation was created using the same mining and processing parameters as used in the previous model (Figure 4).

Mineral Resources are reported as blocks above 0.5g/t within the A$2,000/oz optimisation shape.

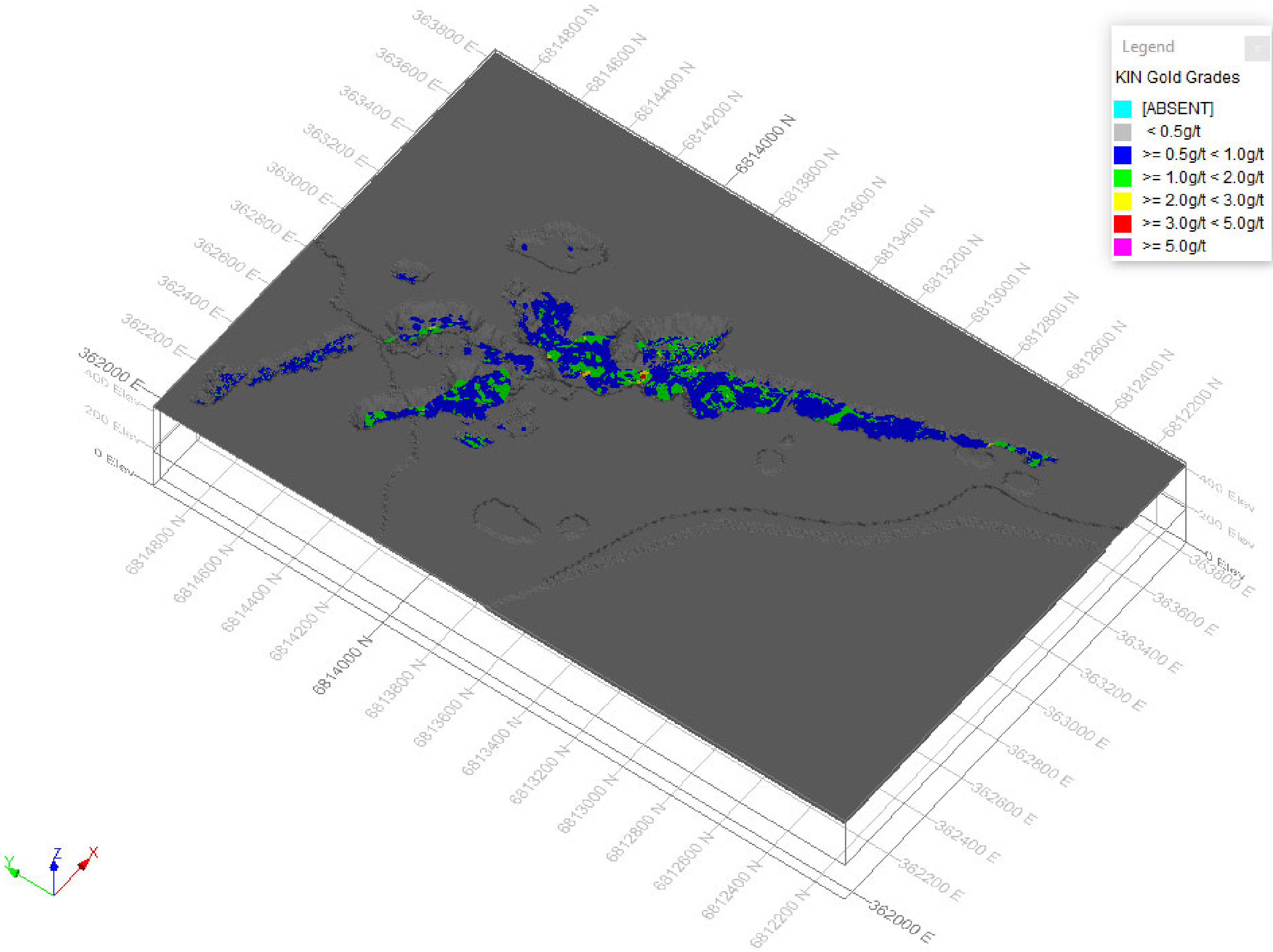

Figure 4. Bruno-Lewis: AUD$2, 000 pit optimisation (grey), showing blocks above 0.5g/t gold.

As expected, the June 2019 MRE resulted in an increase in overall tonnes, grade and ounces reported. The main change is the addition of several new lodes in the Bruno area, but also constraints to existing lodes which resulted in an increase in average grade in both Bruno and Lewis.

It should be noted that the June 2019 MRE resulted in a decrease in the proportion of the Mineral Resource classified as Indicated in the Bruno area. Previous interpretations showed large, thick supergene mineralisation. Review of this area suggests thinner, more discrete mineralised horizons are more likely. Estimation of these lodes has been changed to reflect this more conservative interpretation resulting in lower tonnages of higher grade mineralisation within the lodes.

-ENDS-

For further information, please contact:

Investor enquiries

Andrew Munckton
Managing Director, Kin Mining NL
+61 8 9242 2227

Media enquiries

Michael Vaughan
Fivemark Partners
+61 422 602 720

COMPETENT PERSONS STATEMENT

The information contained in this report relating to Resource Estimation results for Bruno Lewis, Kyte, Helens and Mertondale East relates to information compiled by Mr. Jamie Logan. Mr. Logan is a member of the Australian Institute of Geoscientists and is a full time employee of the company. Mr. Logan has sufficient experience of relevance to the styles of mineralisation and the types of deposit under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Mr. Logan consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The information in this report that relates to 2017 Mineral Resources for Mertondale 5, Tonto, Rangoon (including Fiona) and Leonardo_Michaelangelo is based on information reviewed and compiled by Dr. Spero Carras of Carras Mining Pty Ltd (CM). Dr. Carras is a Fellow of the Australasian Institute Mining and Metallurgy (AusIMM) and has over 40 years' experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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. Mark Nelson, Consultant Geologist to CM with over 30 years' experience and is a Member of the Australasian Institute Mining and Metallurgy (AusIMM) with sufficient experience in the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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. Gary Powell Consultant Geologist to CM with over 30 years' experience and is a Member of the Australasian Institute Mining and Metallurgy (AusIMM) and the AIG with sufficient experience in the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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".

CM also acted as auditors of the 2009 McDonald Speijers resource estimates for Eclipse, Quicksilver, Forgotten Four and Krang.

Dr. S. Carras, Mr. Mark Nelson and Mr. Gary Powell consent to the inclusion in the report of the matters based on their information in the context in which it appears.

The information contained in this report relating to exploration results relates to information compiled or reviewed by Glenn Grayson. Mr. Grayson is a member of the Australasian Institute of Mining and Metallurgy and is a full-time employee of the company. Mr. Grayson has sufficient experience of relevance to the styles of mineralisation and the types of deposit under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Mr. Grayson consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

FORWARD-LOOKING STATEMENTS

This release contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the feasibility and definitive feasibility studies, the Company's' business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and operational expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could',

’should’, ’scheduled’, ’will’, ’plan’, ’forecast’, ’evolve’ and similar expressions. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information. Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to the risk factors set out in the Company’s Prospectus dated October 2014.

This list is not exhausted of the factors that may affect our forward-looking information. These and other factors should be considered carefully and readers should not place undue reliance on such forward-looking information. The Company disclaims any intent or obligations to revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law. Statements regarding plans with respect to the Company’s mineral properties may contain forward-looking statements in relation to future matters that can be only made where the Company has a reasonable basis for making those statements. This announcement has been prepared in compliance with the JORC Code 2012 Edition and the current ASX Listing Rules. The Company believes that it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any mining of mineralised material, modifying factors and production targets and financial forecasts.

Appendix A: Cardina Gold Project: Table 1 - Sections 1 and 2
Appendix B: Bruno-Lewis: Section 3

Appendix A

JORC 2012 TABLE 1 REPORT

Cardinia Gold Project - Section 1 & 2

Bruno-Lewis, Helens, Kyte, Mertondale East

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 (e.g. 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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g 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*	**Diamond** Historic (pre-2014) diamond core (DD) sampling utilised half core or quarter core sample intervals; typically varying from 0.3m to 1.4m in length. 1m sample intervals were favoured and sample boundaries principally coincided with geological contacts. Recent (2014-2018) diamond core (DD) samples, either HQ3 or NQ2 in size diameter, were either cut in half longitudinally or further cut into quarters, using a powered diamond core drop saw centered over a cradle holding core in place. Core sample intervals varied from 0.2 to 1.25m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts. 2019 diamond core samples, either HQ3 or NQ2 in size diameter, were either cut in half longitudinally or a third longitudinally, using an automated Corewise core saw Core was placed in boats, holding core in place. Core sample intervals varied from 0.3 to 1.3m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts. **RC** Historic reverse circulation (RC) drill samples were collected over 1m downhole intervals beneath a cyclone and typically riffle split to obtain a sub-sample (typically 3-4kg). 1m sub-samples were typically collected in pre-numbered calico bags and 1m sample rejects were commonly stored at the drill site. 3m or 4m composited interval samples were often collected by using a scoop (dry samples) or spear (wet samples). If composite samples returned anomalous results once assayed, the single metre sub-samples of the anomalous composite intervals were retrieved and submitted for individual gold analysis. Recent reverse circulation (RC) drill samples were collected by passing through a cyclone, a sample collection box, and riffle or cone splitter. All RC sub-samples were collected over one metre downhole intervals and averaged 3-4kg. 2019 RC drilling samples were collected in 1m downhole intervals by passing through a cyclone, a collection box and then dropping through a cone splitter. All RC sub-samples were collected over one metre downhole intervals and averaged 3-4kg. **AC/RAB** Historic air core (AC) and rotary air blast (RAB) were typically collected at 1 metre intervals and placed on the ground with 3-4kg sub-samples collected using a scoop or spear. Three metre or four metre composited interval samples were often collected by using a scoop (dry samples) or spear (wet samples). If composite samples returned anomalous results once assayed, the single metre sub-samples of the anomalous composite intervals were retrieved and submitted for individual gold analysis. **Assay Methodology** Historic sample analysis typically included a number of commercial laboratories with preparation as per the following method, oven drying (90-110°C), crushing (<-2mm to <-6mm), pulverizing (<-75µm to <-105µm), and riffle split to obtain a 30, 40, or

Criteria	• JORC Code explanation	Commentary
	nodules) may warrant disclosure of detailed information.	50gram catchweight for gold analysis. Fire Assay fusion, with AAS finish was the common method of analysis however, on occasion, initial assaying may have been carried out via Aqua Regia digest and AAS/ICP finish. Anomalous samples were subsequently re-assayed by Fire Assay fusion and AAS/ICP finish. Recent sample analysis typically included oven drying (105-110°C), crushing (<-6mm & <-2mm), pulverising (P90% <-75µm) and sample splitting to a representative 50gram catchweight sample for gold only analysis using Fire Assay fusion with AAS finish. Multi element analysis was also conducted on approximately 10% of samples, predominantly through ore zones. This was conducted via a 4-acid digest with ICP-MS/OES determination for a 48-element suite. All recent drilling, sample collection and sample handling procedures were conducted and/or supervised by KIN geology personnel to high level industry standards. QA/QC procedures were implemented during each drilling program to industry standards.
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).*	Drilling carried out since 1986 and up to the most recent drill programs completed by KIN Mining was obtained from a combination of reverse circulation (RC), diamond core (DD), air core (AC), and rotary air blast (RAB) drilling. Data prior to 1986 is limited due to lack of exploration. **Diamond** Historic DD was carried out using industry standard 'Q' wireline techniques, with the core retrieved from the inner tubes and placed in core trays. Core sizes include NQ/NQ3 (Ø 45-48mm) and HQ/HQ3 (Ø 61-64mm). At the end of each core run, the driller placed core blocks in the tray, marked with hole number and depth. Core recovery was usually measured for each core run and recorded onto the geologist's drill logs. 2017 – 2018 DD was carried out by contractor Orbit Drilling Pty Ltd ("Orbit Drilling") with a Mitsubishi truck-mounted Hydco 1200H 8x4 drill rig, using industry standard 'Q' wireline techniques. 2019 DD was carried out y Topdrill Pty Ltd. With a Sandvick DE840 mounted on a Mercedes Benz 4144 Actros 8x8 Carrier. The rig is fitted with Sandvik DA555 hands free diamond drilling rod handler and Austex hands free hydraulic breakout. Drill core is retrieved from the inner tubes and placed in plastic core trays and each core run depth recorded onto core marker blocks and placed at the end of each run in the tray. Core sizes include NQ2 (Ø 47mm) and HQ3 (Ø 64mm). Recent DD core recovery and orientation was obtained for each core run where possible, using electronic core orientation tools (e.g. Reflex EZ-ACT) and the 'bottom of core' marked accordingly. 2017 -18 drilling was measured at regular downhole intervals, typically at 10-15m from surface and then every 30m to bottom of hole, using electronic multi-shot downhole survey tools (i.e. Reflex EZ-TRAC or Camteq Proshot). Independent programs of downhole deviation surveying were also carried out to validate previous surveys. These programs utilised either electronic continuous logging survey tool (AusLog A698 deviation tool) or gyroscopic survey equipment. 2019 DD was surveyed at regular downhole intervals (every 30m with an additional end-of-hole survey) using electronic gyroscopic survey equipment. **RC** Historic RC drilling used conventional reverse circulation drilling techniques, utilising a cross-over sub, or face-sampling hammers with bit shrouds. Drill bit sizes typically ranged between 110-140mm. 2017-18 RC drilling was carried out by Orbit Drilling's truck-mounted Hydco 350RC 8x8 Actross drill rigs with 350psi/1250cfm air compressor, with auxiliary and booster air compressors (when required). Drilling utilised mostly downhole face-sampling hammer bits (Ø 140mm), with occasional use of blade bits for highly oxidized and soft formations. The majority of drilling retrieved dry samples, with the occasional use of the auxiliary and booster air compressors beneath the water table, to maintain dry sample return as much as possible. RC drillhole deviations were surveyed downhole, typically carried out inside a non-magnetic stainless steel (s/s) rod located above the hammer, using electronic multi-shot downhole tool (e.g. Reflex EZ-

Criteria	JORC Code explanation	Commentary
		TRAC). In some instances, drillholes were surveyed later in open hole. Independent programs of downhole deviation surveying were also carried out to validate previous surveys. These programs utilised either electronic continuous logging survey tool (AusLog A698 deviation tool) or gyroscopic survey equipment. 2019 RC drilling was carried out by Swick Mining Services truck-mounted Swick version Schramm 685 RC Drill Rig (Rod Handler & Rotary Cone Splitter) with support air truck and dust suppression equipment. Drilling utilised downhole face-sampling hammer bits (Ø 140mm). The majority of drilling retrieved dry samples, with the occasional use of the auxiliary and booster air compressors beneath the water table, to maintain dry sample return as much as possible. 2019 RC was surveyed at regular downhole intervals (every 30m with an additional end-of-hole survey) using electronic gyroscopic survey equipment. **AC/RAB** Historic AC drilling was conducted by Navigator utilising suitable rigs with appropriate compressors (e.g. 250psi/600cfm). AC holes were drilled using 'blade' or 'wing' bits, until the bit was unable to penetrate ('blade refusal'), often near the fresh rock interface. Hammer bits were used only when it was deemed necessary to penetrate further into the fresh rock profile or through notable "hard boundaries" in the regolith profile. No downhole surveying is noted to have been undertaken on AC drillholes. Historic RAB drilling was carried out using small air compressors (e.g. 250psi/600cfm) and drill rods fitted with a percussion hammer or blade bit, with the sample return collected at the drillhole collar using a stuffing box and cyclone collection techniques. Drillhole sizes generally range between 75-110mm. No downhole surveying is noted to have been undertaken on RAB drillholes.
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.*	**Diamond** Historic core recovery was recorded in drill logs for most of the diamond drilling programs since 1985. A review of historical reports indicates that core recovery was generally good (>80%) with lesser recoveries recorded in zones of broken ground and/or areas of mineralisation. Overall recoveries are considered acceptable for resource estimation. Recent core recovery data was recorded for each run by measuring total length of core retrieved against the downhole interval actually drilled and stored in the database. KIN representatives continuously monitor core recovery and core presentation quality as drilling is conducted and issues or discrepancies are rectified promptly to maintain industry best standards. Core recoveries averaged >95%, even when difficult ground conditions were being encountered. When poor ground conditions were anticipated, a triple tube drilling configuration was utilised to maximize core recovery **RC/AC/RAB** Historic sample recovery information for RC, AC, and RAB drilling is limited. Recent RC drilling samples are preserved as best as possible during the drilling process. At the end of each 1 metre downhole interval, the driller stops advancing, retracts from the bottom of hole, and waits for the sample to clear from the bottom of the hole through to the sample collector box fitted beneath the cyclone. The sample is then released from the sample collector box and passed through either a 3-tiered riffle splitter or cone splitter fitted beneath the sample box. Drilling prior to 2018 utilised riffle split collection whereas sample collection via a cone splitter was conducted for drilling undertaken since March 2018; cyclone cleaning processes remained the same. Sample reject is collected in plastic bags, and a 3-4kg sub-sample is collected in pre-marked calico bags for analysis. Once the samples have been collected, the cyclone, sample collector box and riffle splitter are flushed with compressed air, and the splitter cleaned by the off-sider using a compressed air hose at both the end of each 6 metre drill rod and then extensively cleaned at the completion of each hole. This process is maintained throughout the entire drilling program to maximise drill sample recovery and to maintain a high level of representivity of the material being drilled.

Criteria	JORC Code explanation	Commentary
		RC drill sample recoveries are not recorded in the database however a review by Carras Mining Pty Ltd (CM) in 2017, of RC drill samples stored in the field, and ongoing observations of RC drill rigs in operation by KIN representatives, suggests that RC sample recoveries were mostly consistent and typically very good (>90%). Collected samples are deemed reliable and representative of drilled material and no material discrepancy, that would impede a mineral resource estimate, exists between collected RC primary and sub-samples.
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.*	Logging data coded in the database, prior to 2014, illustrates at least four different lithological code systems, a legacy of numerous past operators (Hunter, MPI, Metana, CIM, MEGM, Pacmin, SOG, and Navigator). Correlation between codes is difficult to establish however, based on historical reports, drill hole logging procedures appear consistent with normal industry practices of the time. KIN has attempted to validate historical logging data and to standardize the logging code system by incorporating the SOG and Navigator logging codes into one. This is an ongoing process and is not yet completed. **Diamond** Diamond core logging is typically logged in more detail compared to RC, AC, and RAB drilling. Historical diamond core logging procedures are not well documented however core logging was recorded into drill logs for most of the diamond drilling programs since 1985. A review of historical reports indicates that logging noted core recovery, fractures per metre and RQD, lithology, alteration, texture, mineralisation, weathering, and other features. Core was then marked up for cutting and sampling. Navigator's procedure for logging of diamond core included firstly marking of the bottom of the core (for successful core orientations), then recording of core recovery, fractures per metre and RQD, lithology, alteration, texture, mineralisation, weathering, and other features. Core was then marked up for cutting and sampling. Navigator DD logging is predominantly to geological contacts. Navigator logging information was entered directly into hand held digital data loggers and transferred directly to the database, after validation, to minimize data entry errors. Drill core photographs, for drilling prior to 2014, are available only for diamond drillholes completed by Navigator. KIN DD logging is carried out on site once geology personnel retrieve core trays from the drill rig site. Core is collected from the rig daily. The entire length of every hole is logged. Recorded data includes lithology, alteration, structure, texture, mineralisation, sulphide content, weathering and other features. Drillhole collar coordinates, azimuth, dip, depth and sampling intervals are also recorded. KIN DD logging is to geological contacts. Qualitative logging includes classification and description of lithology, weathering, oxidation, colour, texture and grain size. Quantitative logging includes percentages of identified minerals, veining, and structural measurements (using a kenometer tool). In addition, logging of diamond drilling includes geotechnical data, RQD and core recoveries. Drill core is photographed at the Cardinia site, prior to any cutting and/or sampling, and then stored in this location. Photographs are available for every diamond drillhole completed by KIN and a selection of various RC chip trays. SG data is also collected. All information collected is entered directly into laptop computers or tablets, validated in the field, and then transferred to the database. The level of logging detail is considered appropriate for exploration and to support appropriate mineral resource estimation, mining studies, and metallurgical studies. Diamond drillholes completed for geotechnical purposes were independently logged for structural data by geotechnical consultants. **RC/AC/RAB**

Criteria	JORC Code explanation	Commentary
		Historical RC, AC, and RAB logging was entered on a metre by metre basis. Logging consisted of lithology, alteration, texture, mineralisation, weathering, and other features Navigator RC and AC logging was entered on a metre by metre basis. Logging consisted of lithology, alteration, texture, mineralisation, weathering, and other features. Navigator logging information was entered directly into hand held digital data loggers and transferred directly to the database, after validation, to minimize data entry errors. For the majority of historical drilling (pre-2004) the entire length of each drillhole have been logged from surface to 'end of hole'. KIN RC logging of was carried out in the field and logging has predominantly been undertaken on a metre by metre basis. KIN logging is inclusive of the entire length of each RC drillhole from surface to 'end of hole'. Recorded data includes lithology, alteration, structure, texture, mineralisation, sulphide content, weathering and other features. Drillhole collar coordinates, azimuth, dip, depth and sampling intervals are also recorded. Qualitative logging includes classification and description of lithology, weathering, oxidation, colour, texture and grain size. Quantitative logging includes identification and percentages of mineralogy, sulphides, mineralisation, and veining. Photographs are available for a selection of recent KIN RC drillholes. All information collected is entered directly into laptop computers or tablets, validated in the field, and then transferred to the database. The level of logging detail is considered appropriate for exploration and to support appropriate mineral resource estimation, mining studies, and metallurgical studies.
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.*	Historical reports for drill programs prior to 2004, are and have not always been complete in the description of sub-sampling techniques, sample preparation, and quality control protocols. Errors may be present in the following commentary as a direct result of this however this is deemed relatively immaterial to the final mineral estimation. **Diamond** Historic diamond drill core (NQ/NQ3 or HQ/HQ3) samples collected for analysis were longitudinally cut in half, and occasionally in quarters for the larger (HQ/HQ3) diameter holes, using a powered diamond core drop saw centered over a cradle holding the core in place. Half core or quarter core sample intervals typically varied from 0.3m to 1.4m in length. 1m sample intervals were favoured and are the most common method of sampling, however sample boundaries do principally coincide with geological contacts. The remaining core was retained in core trays. Where historical reports do not describe the sampling protocol for sampling of drill core, it is assumed that drill core was sampled as described above. 2017-18 diamond drill core samples collected for analysis were longitudinally cut in half, with some samples cut into quarters, using a powered diamond core drop saw blade centered over a cradle holding the core in place. Core sample intervals varied from 0.2 to 1.25m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts. The remaining core was retained in their respective core trays and stored in KIN's yard for future reference. All KIN diamond drill core is securely stored at the KIN Leonora Yard. 2019 diamond drill core samples collected for analysis were longitudinally cut in half, with some samples cut into thirds, using an automated Corewise powered diamond core saw with the blade centered over a boat holding the core in place. Core sample intervals varied from 0.2 to 1.25m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts. The remaining core was retained in their respective core trays and stored in KIN's yard for future reference. All KIN diamond drill core is securely stored at the Cardinia coreyard. All sub-sampling techniques and sample preparation procedures conducted and/or supervised by KIN geology personnel are to

Criteria	• JORC Code explanation	Commentary
		standard industry practice. Sub-sampling and sample preparation techniques used are considered to maximise representivity of drilled material. QA/QC procedures implemented during each drilling program are to industry standard practice. Samples sizes are considered appropriate for this style of gold mineralisation and as an industry accepted method for evaluation of gold deposits in the Eastern Goldfields of Western Australia. **RC/AC/RAB** Historic sampling was predominantly conducted by collecting 1m samples from beneath a cyclone and either retaining these primary samples or passing through a riffle splitter to obtain a 3-4kg sub-sample for analysis. First pass sampling often involved collecting composite samples by using a scoop (dry samples) or spear/tube (wet samples) to obtain 3m or 4m composited intervals, with the single metre split samples being retained at the drill site as spoil or in sample bags. If composite sample assays returned anomalous results, the single metre samples for this composite were retrieved and submitted for analysis. RC/AC/RAB sampling procedures are believed to be consistent with the normal industry practices at the time. Samples obtained from conventional RC drilling techniques with cross-over subs often suffered from down hole contamination, especially beneath the water table. Samples obtained from RC drilling techniques using the face sampling hammer suffered less from down hole contamination and were more likely to be kept dry beneath the water table, particularly if auxiliary and booster air compressors were used. These samples are considered to be representative. The vast majority of Reverse Circulation (RC) drill samples were collected at 1m downhole intervals from beneath a cyclone and then riffle split to obtain a sub-sample (typically 3-4kg). After splitting, 1m sub-samples were typically collected in pre-numbered calico bags, and the 1m sample rejects were commonly stored at the drill site in marked plastic bags, for future reference. First pass sampling often involved collecting composite samples by using a scoop (dry samples) or spear/tube (wet samples) to obtain 3m or 4m composited intervals, with the single metre split sub-samples being retained at the drill site. If the composite sample assays returned anomalous results, single metre sub-samples for the anomalous composite intervals were retrieved and submitted for analysis. Navigator obtained sub-samples from wet samples using the spear or tube method. There are no sample rejects available from RC drilling prior to 2014 as most drill sites have been rehabilitated and the sample bags either removed or destroyed. Navigator included standards, fields duplicate splits (since 2009), and blanks within each drill sample batch, at a ratio of 1 for every 20 samples, with the number of standards being inserted at a ratio of 1 for every 50 samples. Recent RC sub-samples were collected over 1 metre downhole intervals and retained in pre-marked calico bags, after passing through a cyclone and either a riffle splitter, prior to March 2018, or cone splitter, after March 2018. The majority of RC sub-samples consistently averaged 3-4kg. Sample reject from the riffle splitter were retained and stored in plastic bags, and located near each drillhole site. When drilling beneath the water table, the majority of sample returns were kept dry by the use of the auxiliary and booster air compressors. Very few wet samples were collected through the splitter, and the small number of wet or damp samples is not considered material for resource estimation work. KIN RC drill programs utilise field duplicates, at regular intervals at a ratio of 1:25, and assay results indicate that there is reasonable analytical repeatability; considering the presence of nuggety gold. All sub-sampling techniques and sample preparation procedures conducted and/or supervised by KIN geology personnel are to standard industry practice. Sub-sampling and sample preparation techniques used are considered to maximise representivity of drilled material. QA/QC procedures implemented during each drilling program are to industry standard practice. Samples sizes are considered appropriate for this style of gold mineralisation and as an industry accepted method for evaluation of gold deposits in the Eastern Goldfields of Western Australia.

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 (i.e lack of bias) and precision have been established.*	Numerous assay laboratories and various sample preparation and assay techniques have been used since 1981. Historical reporting and descriptions of laboratory sample preparation, assaying procedures, and quality control protocols for the samples from the various drilling programs are variable in their descriptions and completeness. Assay data obtained prior to 2001 is incomplete and the nature of results could not be accurately quantified due to the combinations of various laboratories and analytical methodologies utilised. Since 1993, the majority of samples submitted to the various laboratories were typically prepared for analysis firstly by oven drying, crushing and pulverizing to a nominal 85% passing 75µm. In the initial exploration stages, Aqua Regia digest with AAS/ICP finish, was generally used as a first pass detection method, with follow up analysis by Fire Assay fusion and AAS/ICP finish. This was a common practice at the time. Mineralised intervals were subsequently Fire Assayed (using 30, 40 or 50 gram catchweights) with AAS/ICP finish. Approximately 15-20% of the sampled AC holes may have been subject to Aqua Regia digest methods only, however AC samples were predominantly within the oxide profile, where aqua regia results would not be significantly different to results from fire assay methods. Limited information is available regarding check assays for drilling programs prior to 2004. During 2004-2014, Navigator utilised six different commercial laboratories during their drilling programs, however Kalgoorlie Assay Laboratories conducted the majority of assaying for diamond, RC, and AC samples using Fire Assay fusion on 40 gram catchweights with AAS/ICP finish. Since 2009 Navigator regularly included field duplicates and Certified Reference Material (CRM), standards and blanks, with their sample batch submissions to laboratories at average ratio of 1 in 20 samples. Sample assay repeatability and blank and CRM standard assay results were typically within acceptable limits. KIN sample analysis from 2014 to 2018 was conducted by SGS Australia Pty Ltd.'s ("SGS") Kalgoorlie and Perth laboratories. Sample preparation included oven drying (105°C), crushing (<6mm), pulverising (P90% passing 75µm) and riffle split to obtain a 50 gram catchweight. Analysis for gold only was carried out by Fire Assay fusion technique with AAS finish (SGS Lab Code FAA505). • KIN regularly insert blanks and CRM standards in each sample batch at a ratio of 1:50. This allows for at least one blank and one CRM standard to be included in each of the laboratory's fire assay batch of 50 samples. Field duplicates are typically collected at a ratio of 1:50 samples and test sample assay repeatability. Blanks and CRM standards assay result performance is predominantly within acceptable limits for this style of gold mineralisation. • KIN requests laboratory pulp grind and crush checks at a ratio of 1:50 or less since May 2018 in order to better qualify sample preparation and evaluate laboratory performance. Samples have generally illustrated appropriate crush and grind size percentages since the addition of this component to the sample analysis procedure. • SGS include laboratory blanks and CRM standards as part of their internal QA/QC for sample preparation and analysis, as well as regular assay repeats. Sample pulp assay repeatability, and internal blank and CRM standards assay results are typically within acceptable limits. From late 2018 samples have been analysed by Intertek Genalysis, with sample preparation either at their Kalgoorlie prep laboratory or the Perth Laboratory located in Maddington. Sample preparation included oven drying (105°C), crushing (<6mm), pulverising (P90% passing 75µm) and split to obtain a 50 gram catchweight. Analysis for gold only was carried out by Fire Assay fusion technique with AAS finish. • KIN regularly insert blanks and CRM standards in each sample batch at a ratio of 1:25. Kin accepts that this ratio of QAQC is industry standard. Field duplicates are typically collected at a ratio of 1:25 samples and test sample assay repeatability. Blanks and CRM standards assay result performance is predominantly within acceptable limits for this style of gold

Criteria	JORC Code explanation	Commentary
		mineralisation. • KIN requests laboratory pulp grind and crush checks at a ratio of 1:50 or less since May 2018 in order to better qualify sample preparation and evaluate laboratory performance. Samples have generally illustrated appropriate crush and grind size percentages since the addition of this component to the sample analysis procedure. • Genalysis include laboratory blanks and CRM standards as part of their internal QA/QC for sample preparation and analysis, as well as regular assay repeats. Sample pulp assay repeatability, and internal blank and CRM standards assay results are typically within acceptable limits. The nature and quality of the assaying and laboratory procedures used are considered to be satisfactory and appropriate for use in mineral resource estimations. Fire Assay fusion is considered to be a total extraction technique. The majority of assay data used for the mineral resource estimations were obtained by the Fire Assay technique with AAS or ICP finish. AAS and ICP methods of detection are both considered to be suitable and appropriate methods of detection for this style of mineralisation Aqua Regia is considered a partial extraction technique, where gold encapsulated in refractory sulphides or some silicate minerals may not be fully dissolved, resulting in partial reporting of gold content. No other analysis techniques have been used to determine gold assays. Ongoing QAQC monitoring program identified one particular CRM returning spurious results. Further analysis demonstrated that the standard was compromised and was subsequently removed and destroyed. A replacement CRM of similar grade was substituted into the QAQC program. KIN continues to both develop and reinforce best practice QAQC methods for all drilling operations and the treatment and analysis of samples. Regular laboratory site visits and audits have been introduced since April 2018 and will be conducted on a quarterly basis. This measure will ensure that all aspects of KIN QAQC practices are adhered to and align with industry best practice.
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.*	Verification of sampling, assay techniques, and results prior to 2004 is limited due to the legacy of the involvement of various companies, personnel, drilling equipment, sampling protocols and analytical techniques at different laboratories. During 2009, a selection of significant intersections had been verified by Navigator's company geologists and an independent consultant McDonald Speijers ("MS"). MS were able to validate 92% of the assay records in 50 randomly selected check holes, and only 6 assay discrepancies were detected (< 0.2%), only 2 of those were considered significant. MS concluded that the very small proportion of discrepancies indicated that the assay database was probably reliable at that time. In 2009, Runge Ltd ("Runge") completed a mineral resource estimate report for the Cardinia Project area, including the Helens, Rangoon, Kyte and Bruno Lewis deposits. Runge's database verification included basic visual validation in Surpac and field verification of drillhole positions in February 2009. Runge did not report any significant issues with the database. Since 2014, significant drill intersections have been verified by KIN company geologists during the course of the drilling programs. During 2017, Carras Mining Pty Ltd ("CM") carried out an independent data verification. 38,098 assay records for KIN 2014-2017 drilling programs were verified by comparing laboratory assay reports against the database. 6 errors were found, which are not considered material and which represented only 0.03% of all database records verified for KIN 2014-2017 drilling programs No adjustments, averaging or calibrations are made to any of the assay data recorded in the database. QA/QC protocol is considered industry standard with standard reference material submitted on a routine basis. Recent (2014-2018) RC and diamond drilling by KIN included twinning of some historical holes within the Helens and Rangoon

Criteria	• JORC Code explanation	Commentary
		resource areas. There is no significant material difference between historical drilling information and KIN drilling information. Areas without twinned holes illustrate a drill density that is considered sufficient to enable comparison with surrounding historic information. No material difference of a negative nature exists between historical drilling information and KIN drilling information. KIN diamond holes drilled for metallurgical and geotechnical test work illustrate assay results with adequate correlation to both nearby historical and recent drilling results. No adjustment or calibration has been made to assay data.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	Several local grids were established and used by previous project owners. During the 1990s, SOG transformed the surface survey data firstly to AMG and subsequently to MGA (GDA94 zone51). Navigator recognised errors in the collar co-ordinates resulting from transformations and as a result, a significant number of holes were resurveyed and a new MGA grid transformation generated. Historical collars have been validated against the original local grid co-ordinates and independently transformed to MGA co-ordinates and checked against the database. Navigator's MGA co-ordinates were checked against the surveyor's reports. Drilling was carried out using these various local grids. Since 2004, All Navigators drill hole collars were surveyed on completion of drilling in the Australian MGA94, Zone51 grid using RTK-DGPS equipment by licensed surveyors, with more than 80% of the pickups carried out by independent contractors. Almost all the diamond and at least 70% of Navigator RC holes were downhole surveyed. Pre-Navigator, single shot survey cameras were used, with typical survey intervals of 30-40 metres. Recent KIN drill hole collars are located and recorded in the field by a contract surveyor using RTK-DGPS (with a horizontal and vertical accuracy of ±50mm). Location data was collected in the GDA94 Zone51 grid coordinate system. Downhole surveying was predominantly carried out by the drilling contractor which, prior to late 2018, was Orbit Drilling Pty Ltd. This was conducted using a downhole electronic single shot magnetic tool. (Reflex EZ-shot), which is industry standard practice. This is considered sufficiently accurate except where significant magnetic interference is encountered. The magnetic field is recorded on every survey and flagged when likely to interfere with the reading. These surveys are downgraded in the database. In addition, if the downhole survey tool is located within 15 metres of the surface, there is risk of influence from the drill rig affecting the azimuth readings. This was observed for the survey readings, which include total magnetic intensity (TMI) measurements, where TMI is spurious for readings taken at downhole depths less than 20 metres. These spurious readings are included in the database, but are not used. Downhole surveying in 2019 has been conducted by the drilling contractors (Topdrill Pty Ltd and Swick Mining Services Pty Ltd) utilizing downhole electronic gyroscopic survey tools. These are considered very accurate and not susceptible to magnetic interference. No further surveying required to check drill hole deviation. A small selection of drillhole collars, which do not have DGPS collar surveys, were picked up with a handheld GPS and individually appraised in regards to their location prior to modelling; the position of these collars is deemed appropriate for the resource estimation work. Considering the history of grid transformations and surviving documentation, there might be some residual risk of error in the MGA co-ordinates for old drillholes, however this is not considered to be material for the resource estimation. Azimuth data was historically recorded relative to magnetic north. Much of the historical drilling data was recorded relative to magnetic north. Variation in magnetic declination for the Cardinia Project area is calculated at +0.823° East (1985) to +1.301° East (2017), with a maximum variation of +1.575° in 2005. The difference between true north and magnetic north, and the annual variation in magnetic declination since 1985 is not significant, therefore magnetic north measurements have been used, where true north data is unavailable, for all survey data used in resource estimation processes.

Criteria	JORC Code explanation	Commentary
		The accuracy of drill hole collars and downhole data are located with sufficient accuracy for use in resource estimation work.
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 patterns vary considerably throughout the Cardinia Gold Project area and are deposit specific, depending on the nature and style of mineralisation being tested. Drill hole spacing within the resource areas is sufficient to establish an acceptable degree of geological and grade continuity and is appropriate for both the mineral resource estimation and the resource classifications applied. Sample compositing of 1m was conducted for the resource estimations. The vast majority (95%) of primary assay intervals are 1 metres interval for RC drill samples with diamond drilling illustrating a greater degree of sample interval length variation. AC and RAB assay data was not included in the resource estimation and was only utilised for geological interpretation.
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.*	The Cardinia greenstone sequence displays a NNW to NW trend. Drilling and sampling programs were carried out to obtain unbiased locations of drill sample data, generally orthogonal to the strike of mineralisation. At Helens mineralisation is structurally controlled in sub-vertical shear zones, with supergene components of varying lateral extensiveness present in the oxide profile. The vast majority of historical drilling, pre-Navigator (pre-2004), and KIN drilling is orientated at -60°/245° (WSW) and -60°/065° (ENE). At Bruno-Lewis and Kyte, mineralisation is either stratigraphy parallel (trending NNW, steep to moderately W-dipping) or cross-cutting and dipping shallowly to the NE (striking NW). The vast majority of the drilling is therefore predominantly orientated at -60°/225-250° or -60°/090°. Grade Control drillholes were drilled vertically. Since late 2018, Kin's drilling has been largely oriented to 070° to target contact lodes and 225-250° to target the NE-dipping potassic lodes. At Mertondale mineralisation is associated with the north trending Mertondale Shear Zone (MSZ), located within the Mertondale greenstone sequence, which is orientated in a NNE to Northerly direction. The stratigraphy and mineralisation generally dips sub-vertically to steeply dipping to the east or west. The majority of drilling and sampling programs were carried out to intersect mineralisation orthogonal to strike and as close to orthogonal to dip as practical. The majority of holes were inclined at -60° and drilled orthogonal to the interpreted strike of the target mineralisation (i.e. towards 245° to 270°). In some areas, historical vertical drillholes were completed, as initial reconnaissance drilling, or specifically targeting interpreted flat- to shallow-dipping mineralisation. The chance of sample bias introduced by sample orientation is considered minimal. No orientation sampling bias has been identified in data thus far.
Sample security	*The measures taken to ensure sample security.*	No sample security details are available for pre-Navigator (pre-2004) drill or field samples. Navigator drill samples (2004-2014) were collected in pre-numbered calico bags at the drill rig site. Samples were then collected by company personnel from the field and transported to the secure Navigator yard in Leonora. Samples were then batch processed (drillhole and sample numbers logged into the database) and then packed into 'bulkabag sacks'. The bulkabags were tied off and stored securely in the Navigator yard until being transported to the selected laboratory. There was no perceived opportunity for the samples to be compromised from collection of samples at the drill site to delivery to the laboratory. 2017 -18 KIN RC drill samples were collected in pre-numbered calico bags at the drill rig site. The samples were then batch

Criteria	JORC Code explanation	Commentary
		processed (drillhole and sample numbers encoded onto a hardcopy sample register) in the field, and then transported and stacked into 'bulkabag sacks' at the secure KIN yard location in Leonora. Bulkabags were tied off and stored securely in the yard until being transported to the laboratory. 2019 RC drill samples were collected in pre-numbered calico bags at the drill rig site. The samples were then batch processed (drillhole and sample numbers encoded onto a hardcopy sample register) in the field, and then transported and stacked into 'bulkabag sacks' at the Cardinia office. 2017-18 KIN DD samples were obtained by KIN personnel in pre-numbered calico bags at the KIN yard location in Leonora. Samples were then stacked into 'bulkabag sacks' at the yard location and stored securely until being transported to the laboratory. 2019 DD samples were obtained by KIN personnel in pre-numbered calico bags at the core yard located at the Cardinia office. Samples were then stacked into 'bulkabag sacks' at the yard location and stored securely until being transported to the laboratory. Transport contractors are utilised to transport samples to the laboratory. No perceived opportunity for samples to be compromised from collection of samples at the drill site, to delivery to the laboratory, where they were stored in their secure compound, and made ready for processing is deemed likely to have occurred. On receipt of the samples, the laboratory independently checked the sample submission form to verify samples received and readied the samples for sample preparation. SGS and Genalysis sample security protocols are of industry standard and deemed acceptable for resource estimation work.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Historic drilling and sampling methods and QA/QC are regarded as not being as thoroughly documented compared to current standards. In house reviews of various available historical company reports of drilling and sampling techniques indicates that these were most likely conducted to industry best practice and standards of the day. Independent geological consultants Runge Ltd completed a review of the Cardinia Project database, drilling and sampling protocols, and so forth in 2009. The Runge report highlighted issues with bulk density and QA/QC analysis within the supplied database. Identified issues were subsequently addressed by Navigator and KIN. Carras Mining Pty Ltd (CM), an independent geological consultant, reviewed and carried out an audit on the field operations and database in 2017. Drilling and sampling methodologies observed during the site visits were to industry standard. No issues were identified for the supplied databases which could be considered material to a mineral resource estimation. During the review, Carras Mining logged the oxidation profiles (base of complete oxidation and top of fresh rock) for each of the deposit areas, based on visual inspection of selected RC drill chips from KIN's recent drilling programs, and a combination of historical and KIN drillhole logging. Final adjustments were made with input from KIN geologists. The oxidation profiles were used to assign bulk densities and metallurgical recoveries to the 2017 resource models. Past bulk density test work has been inconsistent with incorrect methods employed, to derive specific gravity or in-situ bulk density, rather than dry bulk density. Navigator (2009) and recent KIN (2017) bulk density test work was carried out using the water immersion method on oven dried, coated samples to derive dry bulk densities for different rock types and oxidation profiles. This information has been incorporated into the database for resource estimation work. CM conducted site visits during 2017 to the laboratory to validate the methodology. Drilling, sampling methodologies, and assay techniques used in these drilling programs are considered to be appropriate and to mineral exploration industry standards of the day. Laboratory site visits and audits were introduced in April 2018 and are conducted on a quarterly basis. This measure ensures that all aspects of KIN QAQC practices are adhered to and align with industry best practice.

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 license to operate in the area.*	The Cardinia Project, 35-40km NE of Leonora is managed, explored and maintained by KIN, and constitute a portion of KIN's Leonora Gold Project (LGP), which is located within the Shire of Leonora in the Mt Margaret Mineral Field of the North Eastern Goldfields. The Helens and Rangoon area includes granted mining tenements M37/316 and M37/317, The tenements are held in the name of Navigator Mining Pty Ltd, a wholly owned subsidiary of KIN. The Bruno-Lewis and Kyte areas includes granted mining tenements M37/86, M37/227, M37/277, M37/300, M37/428 and M37/646. The tenements are held in the name of Navigator Mining Pty Ltd, a wholly owned subsidiary of KIN. The following royalty payment may be applicable to the areas within the Cardinia Project's Bruno and Lewis areas that comprise the deposits being reported on: 1. Gloucester Coal Ltd (formerly CIM Resources Ltd and Centenary International Mining Ltd) in respect of M37/86 - 1% of the quarterly gross value of sales for gold ounces produced, in excess of 10,000 ounces. The Mertondale Project area includes granted mining tenements M37/1284 (Mertons Reward), M37/81 and M37/82 (Mertondale 3-4), M37/231 and M37/232 (Quicksilver), and M37/233 (Mertondale 5 and Tonto). The tenements are held in the name of Navigator Mining Pty Ltd, a wholly owned subsidiary of KIN. The following royalty and compensation payments may be applicable to the areas within the Mertondale Project that comprise the deposits being reported on: 1. Aurora Gold (WA) Pty Ltd (subsidiary company of Harmony Gold Mining Company Ltd in respect of M37/82, M37/231, M37/232 and M37/233 - $0.25 production royalty per dry tonne of ore mined and processed. 2. Aurora Gold (WA) Pty Ltd in respect of M37/81 - $1.00 production royalty per dry tonne of ore mined and processed. 3. Technomin Australia Pty Ltd in respect of M37/82, M37/231, M37/232 and M37/233 - $0.75 production royalty per dry tonne of ore mined and milled, and 4. Higherealm Pty Ltd (Mertondale Pastoral Leaseholder) in respect of M37/81, M37/82, M37/231, M37/232 and M37/233 - $10,000 per annum (indexed to CPI) applicable to the year(s) when extraction activities are being carried out. There are no known native title interests, historical sites, wilderness areas, national park or environmental impediments over the outlined current resource areas, and there are no current impediments to obtaining a licence to operate in the area.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	At Cardinia, from 1980-1985, Townson Holdings Pty Ltd ("Townson") mined a small open pit over selected historical workings at the Rangoon prospect. Localised instances of drilling relating to this mining event are not recorded and are considered insubstantial and immaterial for resource modelling. Companies involved in the collection of the majority of the gold exploration data since 1985 and prior to 2014 include: Thames Mining NL ("Thames") 1985; Mt Eden Gold Mines (Aust) NL (also Tarmoola Aust Pty Ltd "MEGM") 1986-2003; Centenary International Mining Ltd ("CIM") 1986-1988, 1991-1992; Metana Minerals NL ("Metana") 1986-1989; Sons of Gwalia Ltd ("SOG") 1989, 1992-2004; Pacmin Mining Corporation ("Pacmin") 1998-2001, and Navigator Resources Ltd ("Navigator") 2004-2014. In 2009 Navigator commissioned Runge Limited ("Runge") to complete a Mineral Resource estimate for the Bruno, Lewis, Kyte, Helens and Rangoon deposits. Runge reported a JORC 2004 compliant Mineral Resource estimate, at a cut-off grade of 0.7g/t Au, totaling 1.45Mt @ 1.3 g/t au (61,700 oz Au) for Helens and Rangoon, and totaling 4.34Mt @ 1.2 g/t au (169,700

Criteria	JORC Code explanation	Commentary
		oz Au) for Bruno, Lewis and Kyte. A trial pit (Bruno) was mined by Navigator in 2010, and a 'test parcel' of ore was extracted and transported firstly to Sons of Gwalia's processing plant in Leonora, and finally to Navigator's processing plant located at Bronzewing, where approximately 100,000 tonnes were processed at an average head grade of 2.33 g/t au (7,493 oz Au). At Mertondale, gold was originally discovered in 1899 by Mr. Fred Merton. The Mertons Reward (MR) underground gold mine (M37/1284) was the direct result of his discovery. The main mining phase at MR was carried out from 1899 to 1911. Historic underground production records to 1942 totalled 88,890t @ 21.0g/t Au (60,520oz) which represents the only recorded mining conducted at Mertons Reward. Between 1981-1984 Telluride Mining NL, Nickel Ore NL, International Nickel (Aust) Ltd and Petroleum Securities Mining Co Pty Ltd conducted exploration programs in the Mertondale area. Hunter Resources Ltd began actively exploring the region 1984-1989, Hunter submitted a Notice of Intent (NOI) to mine in 1986 and established a JV with Harbour Lights to treat ore from the Mertondale 2 (M37/1284) and Mertondale 3 pits (M37/82). Between 1986 and 1993 the adjoining Mertondale 4 pit (M37/82 and 81) was mined. Harbour Lights acquired the project in 1989 from Hunter. Ashton Gold eventually gained control of Harbour Lights. Large scale mining in the region was completed in 1993 with the mining of the Mertondale 2 and Mertondale 3-4 pits (M37/81 and M37/82). In 1993 Ashton's interest was transferred to Aurora Gold who established a JV with MPI followed by Sons of Gwalia who entered into a JV with Aurora. Sons of Gwalia (SOG) eventually obtained control of the project in 1997 but conducted limited exploration drilling. In 2004 Navigator Mining Pty Ltd (Navigator) acquired the entire existing tenement holding from the SOG administrator. Navigator conducted the majority of recent exploration drilling in the Mertondale area. KIN acquired the project from Navigator's administrator in late 2014. Historic production from the Mertondale Mining Centre totals 274,724 oz of gold.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Cardinia Project area is located in the central part of the Norseman-Wiluna Greenstone Belt, which extends for some 600km on a NNW trend across the Archean Yilgarn Craton of Western Australia. The regional geology comprises a suite of NNE-North trending greenstones positioned within the Mertondale Shear Zone (MSZ) a splay limb of the Kilkenny Lineament. The MSZ denotes the contact between Archaean felsic volcaniclastics and sediment sequences in the west and Archaean mafic volcanics in the east. Proterozoic dolerite dykes and Archaean felsic porphyries have intruded the sheared mafic/felsic volcanoclastic/sedimentary sequence. Locally within the Cardinia Project area, the stratigraphy consists of intermediate, mafic and felsic volcanic and intrusive lithologies and locally derived epiclastic sediments, which strike NNW, dipping steep-to-moderately to the west. Structural foliation of the areas stratigraphy predominantly dips steeply to the east but localised inflections are common and structural orientation can vary between moderately (50-75°) easterly to moderately westerly dipping. Mineralisation at Helens is controlled by a cross-cutting fault, hosted predominantly in mafic rock units, adjacent to the felsic volcanic/sediment contacts. The ore zones are associated with increased shearing, intense alteration and disseminated sulphides. Minor supergene enrichment occurs locally within mineralised shears throughout the regolith profile. Mineralisation at Bruno-Lewis is largely controlled by the stratigraphic contact between basalt and felsic volcanics. Gold is associated with significant sulphide mineralisation in the sediments and volcaniclastics between the 2 volcanic units. Gold Is also hosted within shallowly NE-dipping lodes, associated with increased potassic-sericite alteration and quartz stockwork veining. These lodes also host the mineralisation at Kyte. Substantial supergene mineralisation sits above both styles of mineralisation. At Mertondale, the four recognised deposits and all the known mineralisation is located within the north trending Mertondale Shear Zone (MSZ). Two distinct north trending mineralised zones are recognized within the MSZ. The western zone includes Quicksilver, Tonto, Eclipse and Mertondale 5, while the eastern zone includes the Merton's Reward, Mertondale

Criteria	JORC Code explanation	Commentary
		2 and Mertondale 3-4 deposits. Eastern Mineralised Zone: In the Mertons Reward - Mertondale 2 area, two distinct types of high grade lodes were historically recognized; Steeply-dipping Shear Lodes with abundant quartz-carbonate veining and disseminated pyrite, and Intershear lodes, flat moderately-dipping quartz veins up to 40cm thick with pyrite-rich carbonate-altered haloes up to 10m. These are usually truncated to the east and west by the steep dipping shear lodes. At Mertondale 3-4 gold mineralisation is associated with the intrusive porphyry contact. Western Mineralised Zone: The western mineralised zone typically comprises dark mafic mylonites, sedimentary units including carbonaceous shales, mafic intrusives and mafic-intermediate and felsic volcanics. Felsic porphyry intrusives occur irregularly within the shear zone. The black sulphide-rich mafic mylonite typically contains anomalous gold values up to 0.5 g/t Au in the resource areas.
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.*	Material drilling information used for the resource estimation has previously been publicly reported in numerous announcements to the ASX by Navigator (2004-2014) and KIN since 2014. The results for the last five holes drilled (ASX Announcement 03/04/2019) have not been included in this resource estimate, but were used for the geology interpretation.
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*	When exploration results have been reported for the resource areas, the intercepts are reported as weighted average grades over intercept lengths defined by geology or lower cut-off grades, without high grade cuts applied. Where aggregate intercepts incorporated short lengths of high-grade results, these results were included in the reports. Since 2014, KIN have reported RC drilling intersections with low cut off grades of >= 0.5 g/t Au and a maximum of 2m of internal dilution at a grade of <0.5g/t Au. There is no reporting of metal equivalent values.

Criteria	JORC Code explanation	Commentary
	short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and 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').*	The orientation, true width, and geometry of mineralised zones have been primarily determined by interpretation of historical drilling and continued investigation and verification of KIN drilling. Drill intercepts are reported as downhole widths not true widths. Accompanying dialogue to reported intersections normally describes the attitude of mineralisation.
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 maps and sections are included in the main 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.*	Public reporting of exploration results by KIN and past tenement holders and explorers for the resource areas are considered balanced. Representative widths typically included a combination of both low and high grade assay results. All meaningful and material information relating to this mineral resource estimate is or has been previously reported.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results;*	Since 2018, a campaign of determining Bulk Densities has been undertaken. The water displacement method is used on drill samples selected by the logging geologist. These measurements are entered into the logging software interface and loaded to the Datashed database.

Criteria	• JORC Code explanation	Commentary
	bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock 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.*	The potential to increase the existing resources as reported is viewed as probable. Further work does however not guarantee an upgrade in resources will be achieved. KIN intend to continue exploration and drilling activities at in the resource areas, with the intention to increase the project's resources and convert Inferred portions to the Indicated category.

Appendix B

JORC 2012 TABLE 1 REPORT

Bruno-Lewis Section 3

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.*	• Data is collected in the field on propriety software, which contains inbuilt validation steps. (example overlapping intervals, data duplication). • Data is then uploaded into Maxwells Datashed application by the Database Administrator (DBA). This application includes quality protocols which must be met in order for uploading to occur (examples: data duplication, validation of geological field) • Returned assay results are loaded electronically in CSV format into Datashed, by either the DBA, or Senior Geologists. This includes a review of QC results. • Finally, the data is reviewed upon upload to Datamine Studio RM before final use. (Examples: DHsurveys present, overlapping intervals, 'From' and 'To's concurrent). • Historic data does not contain sufficient metadata for thorough validation protocols, however compares well with recent QAQC controlled data.
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.*	• KIN's geological team have an onsite presence which includes supervision and management of drill programs within each of the Resource areas. • Mr. Jamie Logan conducted a formal site visit during July of 2018 and again in February of 2019, where all steps within the sample collection process were reviewed. Drilling, sample handling, logging and sampling, QAQC and dispatch procedures were validated. • No data quality issues were noted.
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*	• Confidence in the interpretation is directly reflected in the classification. During 2018 and 2019 a large component of the drilling campaign included diamond core drilling. This information (especially structural data, and core photographs) have played an important role in increasing the confidence in the controls of gold mineralisation at Bruno Lewis. • Lithological, structural, alteration and grade information were used to determine this interpretation. • Alternate interpretations (including the previous interpretation) have been considered, however the current interpretation is considered robust, and conforms to the current thinking, and observed controls. • The interpretation is directly based on geological observations, particular the presence of lithologies, structural features and fabrics. Domains represent mineralised zones associated with lithologies and/or structural features. All

Criteria	JORC Code explanation	Commentary
	guiding and controlling Mineral Resource estimation. • *The factors affecting continuity both of grade and geology.*	boundaries are hard. • Continuity is structurally and/or stratigraphically controlled. The supergenes zones are characteristically highly variable.
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 Bruno Lewis Mineral Resource estimate (MRE) covers most of the Bruno Lewis system. It strikes for approximately 2,500m, to a depth of 100m, with an average width of 140m. The Mineral Resource estimate extends from surface to a maximum depth of 240m below surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-*	• Only Diamond and RC drilling included. • Lodes assigned and wireframes created in Datamine RM. Weathering surfaces and Lithological Model constructed in Leapfrog Geo. These wireframes re-imported to Datamine RM, and validated. All other work takes place in Datamine RM. • Drillholes composited to 1m, which is based on the majority of samples being 1m or below. Comparison of Diamond and RC lengths conducted to support this decision. All lengths retained • Individual lodes assessed for capping, using multiple methods including reviewing population gaps and Coefficient of Variation (CV). Capping effect is not believed to be material. Caps range between 3g/t to 10g/t. • No sub-domaining undertaken, however numerous lodes intersect Supergenes zones. These relationships reviewed and often shared volume assigned to one or another domain. • Variography undertaken on lodes with sufficient samples. • Kriging neighborhood analysis (KNA) reviewed in order to determine optimal block sizes and estimation parameters. • Parent cells of 5m x 5m x 5m estimated using Ordinary Kriging. • Search distances and directions generally aligned with maximum variogram ranges and rotations. • The estimate was compared to the previous estimates, to understand changes. • No assumptions were made regarding recovery of by-products • No potential by products noted in drill logs.

Criteria	JORC Code explanation	Commentary
	products.	
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	• No estimates of deleterious elements or other non-grade variables were done. • No deleterious elements noted in drill logs.
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	• Drill spacing varies greatly in the Bruno-Lewis area, from 8m x 6m in the Grade controlled areas, to 30m x 30m in the lesser informed areas. A nominal drill spacing of 15m x15m was deemed most appropriate when assessing the entire project. This led to parent cells of 5mE x 5mN x 5mRL used. These then allowed to subcell to 0.2mE x 1mN x 1mRL for effective filling of domain wireframes. • Search distances and directions generally aligned with maximum variogram ranges and rotations.
	• *Any assumptions behind modelling of selective mining units.*	• No assumptions were made on selective mining units.
	• *Any assumptions about correlation between variables.*	• No assumptions were made on the correlation between variables.
	• *Description of how the geological interpretation was used to control the resource estimates.*	• Lodes are modeled to represent material mineralised by fluid flow through planar structural and/or stratigraphic features. Estimates constrained by lode wireframes

	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Model validation is a combined review including:
		  • Visual review of blocks values vs composite values, by section and plan.
		  • Visual review of Kriging efficiencies and Slope of regression outputs.
		  • Review of global means by domain vs declustered cut composite means.
		  • Swath plots showing block means vs composite means in space.
		  • Review of Change of Support plots against idealised scenario.
		• No reliable reconciliation data available.

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages estimated on a dry basis only.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Cut-off grade (0.5g/t) determined by KIN's engineering consultants for 2017 DFS based on operating costs. This was reviewed for this Mineral resource estimate and deemed reasonable.
Mining factors or	• *Assumptions made*	• No mining method assumptions were made for the estimation of this model.

Criteria	JORC Code explanation	Commentary
assumptions	*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.*	• Assumption were made for the pit optimisation used to constrain the Mineral Resource for reporting.

			Unit	2019 Resources
Revenue Assumptions	Gold Price		$/t ore	$2,000
	Revenue		$/g	$64.30
Mining Cost Assumptions	Mining Dilution		%	10.0%
	Mining Recovery		%	90.0%
	Mining Cost		$/bcm	Calculated
Processing Recovery and Cost Assumptions	Recovery	Oxide	%	92.5%
		Trans		92.0%
		Fresh		90.0%
	Processing Cost	Oxide	$/t ore	$14.00
		Trans		$16.50
		Fresh		$20.00
	G & A Cost		$/t ore	$2.06
Geotechnical Assumptions		Oxide	deg	50
		Transitional	deg	60
		Fresh	deg	65
General Assumptions	Throughput		t/yr	1,400,000
	Annual Discounting		%	0%

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where*	• No Metallurgical assumptions were made for the estimation of this model. • A range of recoveries were used for the optimisation to constrain the MRE, depending on material type. (See table above)

Criteria	JORC Code explanation	Commentary
	this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No environmental assumptions have been made for the estimation of this model.
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.*	• During 2018 measuring specific gravity was integrated into normal sampling procedures. Water displacement method was used on samples selected by the logging geologist. These measurements are input to the logging software interface and loaded to the Datashed database. These are simplified for the deposit, but largely consistent with previous works. • The mean of these measurements is then assigned to a weathering profile (Oxide, Transition, Fresh rock).

Criteria	JORC Code explanation	Commentary
		<table><tr><td></td><td>Sample count</td><td>2019 model</td></tr><tr><td>Oxide</td><td>57</td><td>2</td></tr><tr><td>Transitional</td><td>114</td><td>2.34</td></tr><tr><td>Fresh</td><td>463</td><td>2.77</td></tr></table>
	• *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.*	• Previous work considered void spaces and were sealed prior to the wet measurement. For the more recent work, all measurements have been on fresh rock, where vugs and voids are absent.
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Density has been assigned to differing material: Oxide, Transitional and Fresh.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	• Classification is based on a combination of drill spacing, geological confidence and estimation quality. The classification is applied to the model on a lode by lode basis.
		  ◦ Measured: 10m x 10m drillspacing with > 50% Kriging Efficiency and > 75% Slope of regression
		  ◦ Indicated: 20m x 20m drill spacing with > 50% Kriging Efficiency and > 75% Slope of regression.
		  ◦ Inferred: up to 40m x 40m drill spacing with Positive kriging efficiency and > 50% Slope of regression.
		• Classification discussed with interpreting Geologists to ensure classification represents geological confidence as well as statistical confidence.

	• *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.*	• All relevant factors effecting classification have been considered.
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource estimate appropriately reflects the view of the Competent Person.

Criteria	JORC Code explanation	Commentary
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	No audits and reviews have completed on this 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 Mineral Resource Estimate is validated both visually and statistically, and the accuracy is reflected in the reporting as per the guidelines of the 2012 JORC code Global estimate for the Bruno Lewis area Production Data is not available