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## FOR PUBLIC RELEASE

## Kingsgate announces 46% increase in Chatree Ore Reserve

Kingsgate Consolidated Limited (ASX: KCN) ("Kingsgate" or the "Company") is pleased to advise that the Chatree Gold Mine ("Chatree") Ore Reserves have increased to 1.3 million ounces of gold (JORC standard) up from 0.89 million ounces of gold which <u>represents an increase of 46%</u> from when they were last reported in 2016. Further, the Ore Reserve for silver has increased from 8.3 million ounces to 12.2 million ounces, <u>a further increase of 47%</u> since it was last reported in 2016. These updated figures indicate the potential for a mine life of at least 8 to 10 years.

These reserves have been calculated using a US\$1,700 gold price and it must be stressed that this only relates to the pits totally within the current mining leases and not the broader area of influence. Significant resources are situated outside the mining leases and we will be focusing efforts on converting some of these highly prospective areas from resources to reserves as part of our strategy going forward.

The Executive Chairman of Kingsgate, Ross Smyth-Kirk, said "the increase in the Chatree Ore Reserves demonstrates a very positive and viable future for the project, and it is Kingsgate's intent to fund a vigorous exploration program to convert further resources to reserves in other key near mine areas".

### **Explanatory Note:**

In May 2016, the Thai Government made a national mining policy change calling a halt to all gold mining in the country by 31 December 2016. Subsequently, it was announced that the Chatree Gold Mine's Metallurgical Licence (the licence required to operate the Chatree Processing Plant) would expire on 31 December 2016. Based on this information and in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 ("JORC") requirements, Chatree Ore Reserves could not be reported as at 31 December 2016, and have not been reported since that date.

Kingsgate, having successfully negotiated the reinstatement of the Metallurgical Processing Licence in January this year as part of a broader negotiated settlement with the Thai Government to restart the Chatree Gold Mine (please see ASX:KCN titled "Licences now approved for Chatree Gold Mine Re-start", dated 19 January 2022) contracted AMC Consultants Pty Ltd (AMC) to prepare an updated Ore Reserve estimate for Chatree.

Chatree comprises multiple open pits with two carbon-in-leach processing plants able to process 5.5 Mtpa. Grid power at 115 kV is accessed approximately 2 kilometres east of the plant site and a dedicated sub-station and 22 kV line service the mine.

Two water reservoirs were constructed on the original mining lease and four on the leases north of a highway that traverses the mining area to collect surface run-off water and water from the operating pits. Most of the water used in the processing plant is reclaimed from the current tailings storage facility (TSF).

## MINERAL RESOURCE

The 30 April 2022 Chatree Mineral Resource, classified and reported in accordance with the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) is stated in Table 1. Mineral Resources are inclusive of those Mineral Resources converted to Ore Reserves and are stated at a cut-off grade of 0.30 g/t Au. This estimate includes surface stockpiles.

The Mineral Resource estimate for Chatree is unchanged from that stated in the ASX:KCN release titled "Kingsgate Mineral Resources and Ore Resources 2021", dated 7 October 2021, which noted that there were no Ore Reserves stated for Chatree. An estimate of what the ore reserve would have been with approvals in place is shown in in

Table 0 below. There has been no depletion of Chatree Mineral Resources or Ore Reserves since the ASX release dated 7 October 2021.

			Gra	ade	Contain	ed Metal
Source	Category	<b>Tonnes</b> (Million)	<b>Gold</b> (g/t)	<b>Silver</b> (g/t)	Gold (Moz)	Silver (Moz)
Chatree	Measured	73.2	0.69	6.20	1.63	14.6
	Indicated	49.8	0.64	5.58	1.02	8.9
	Inferred	40.6	0.59	4.50	0.77	5.9
	Total	163.6	0.65	5.59	3.42	29.4

TABLE 1. MINERAL RESOURCES (INCLUSIVE OF ORE RESERVES) AS AT 30 APRIL 2022

Notes to the Mineral Resources Table:

(1) Rounding of figures causes some numbers to not add correctly.

(2) Chatree metallurgical recoveries: 83.3% Au and 38.7% Ag based on metallurgical test work and plant performance.

<sup>(3)</sup> Cut-off grades for Resources are: Chatree 0.30 g/t Au (assuming metal prices of USD1,200/oz Au, USD19.00/oz Ag and metallurgical recoveries as per (2) above).

# TABLE 0. CHATREE OPEN PIT ORE RESERVE AS AT 30 JUNE 2016 WITH A METALLURGICALLICENCE BEYOND 31 DECEMBER 2016

			Gr	ade	Contained Metal		
	-	Tonnes	Gold	Silver	Gold	Silver	
Source	Category	(Million)	(g/t)	(g/t)	(M oz)	(M oz)	
Chatree	Proved	26.1	0.77	6.70	0.65	6.2	
	Probable	9.3	0.80	7.04	0.24	2.1	
	Total	35.4	0.78	6.79	0.89	8.3	

Notes:

- 1. For the material in the table above to become a JORC 2012 Reserve, the Thai Department of Primary Industries and Mines would need to grant the Chatree Metallurgical Licence.
- 2. The information in the table is not currently an Ore Reserve under reporting guidelines of the JORC Code. Source: https://www.kingsgate.com.au/wp-content/uploads/2021/10/2278205.pdf, accessed on 5/05/2022.

Kingsgate reported Mineral Resources for Chatree as at 30 June 2021 because, in the opinion of Kingsgate management at that time, there were reasonable prospects for eventual economic extraction.

Kingsgate did not report Ore Reserves for Chatree as at 30 June 2021 because, in the opinion of Kingsgate management at that time, Thai Government approvals to restart mining could not be reasonably expected to be obtained.

## **ORE RESERVE**

The Chatree open pit Ore Reserve estimate as at 30 April 2022 (2022 Ore Reserve), classified and reported in accordance with the guidelines of the JORC Code, is summarised in Table 3 below. This estimate includes surface stockpiles.

			Gra	ade	Contain	ed Metal
Deposit	Ore Reserves Classification	<b>Tonnes</b> (Million)	<b>Gold</b> (g/t)	<b>Silver</b> (g/t)	Gold (Moz)	Silver (Moz)
Pit designs	Proved	31	0.85	7.6	0.85	7.5
	Probable	14	0.78	6.7	0.35	3.0
	Total	45	0.82	7.3	1.2	10.5
Stockpiles	Proved	-	-	-	-	-
	Probable	6.6	0.44	7.8	0.09	1.7
	Total	6.6	0.44	7.8	0.09	1.7
Total	Proved	31	0.85	7.6	0.85	7.5
	Probable	21	0.67	7.1	0.44	4.7
	Total Proved and Probable Ore Reserves		0.78	7.4	1.3	12.2

TABLE 3. CHATREE OPEN PIT ORE RESERVES BY CLASSIFICATION AS AT 30 APRIL 2022

Notes:

- 1. Ore Reserves are based on a cut-off grade of 0.35 g/t Au.
- 2. Metallurgical recoveries were assumed at 80.0% for gold and 38.0% for silver.
- 3. Ore Reserves were estimated using a projected gold price of US\$1,700/oz and silver price of US\$22/oz.
- 4. Totals may not equal the sum of the component parts due to rounding adjustments.

5. Estimates are rounded to two significant figures.

The work undertaken to arrive at the 2022 Ore Reserve comprised pit optimizations, mine design, and economic evaluations.

The multiple indicator kriged recoverable resource model on which these Ore Reserves are based was developed by Kingsgate in 2015 and reviewed by AMC in 2018. Reconciliation between production results and the resource model while the mine was operating indicate good correlation and no additional ore loss and dilution was considered necessary for this Ore Reserve estimate.

The metallurgical recovery, ore processing costs, and plant throughput used for the 2022 Ore Reserve are based on actual operating results from when the mine was operating at the time of the suspension in mid-2016.

Processing and administration operating costs were escalated at 2.5% per annum from 2016 to 2022 to estimate current operating costs, while mining costs were derived from a first principles estimated developed by AMC in 2020 and escalated at 2.5% per annum. AMC has reviewed the proposed process flowsheet and metallurgical inputs and considers they are reasonable to use as the basis for an estimate of Ore Reserves.

Geotechnical slope parameters were provided from a geotechnical review of site operations in 2013 and were considered reasonable by AMC. Surface restrictions were applied to prevent mining within 20 m of the TSF.

Approximately 210 Mt of associated waste material will be mined, resulting in a waste material to Ore Reserves ratio (strip ratio) of 4.0 to 1 (tonnes:tonnes), inclusive of surface stockpiles.

This is a material change from the previous publicly reported Chatree open pit Ore Reserve estimate as at 30 June 2021, which reported a nil Ore Reserve due to loss of approvals for Kingsgate to mine at Chatree.

The material increase of the 2022 Ore Reserve relative to the previous estimate of the Chatree open pit Ore Reserve reported as at 30 June 2021 arises from reinstatement by the Thai Government of Kingsgate's approvals to mine and process Chatree ore and an increase from re-optimization and pit design due to increased metal prices partially offset by higher operating costs and royalties and marginally lower recoveries.

Changes are summarised in Table 4

Description	Total	Proved	Probable	Contained Metal	
	(Mt)	(Mt)	(Mt)	(Moz Au)	(Moz Ag)
30 June 2021 Ore Reserve	-	-	-	-	-
Reinstatement of Licences	35	26	9	0.89	8.3
Re-optimization and pit design	16	5	11	0.40	3.9
30 April 2022 Ore Reserve	52	31	21	1.3	12

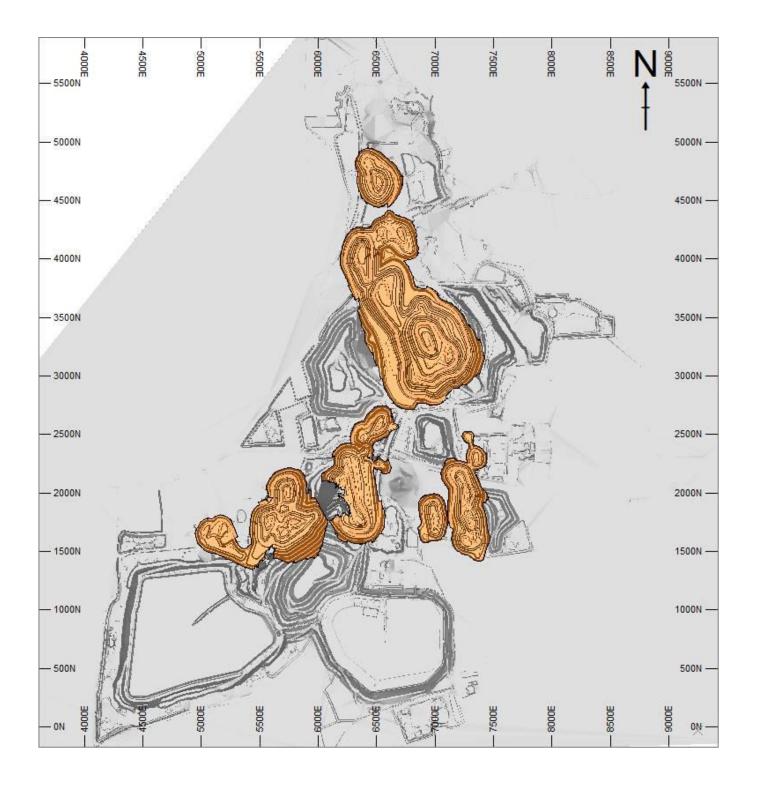
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## Key inputs to the Ore Reserve are summarised in Table 5.

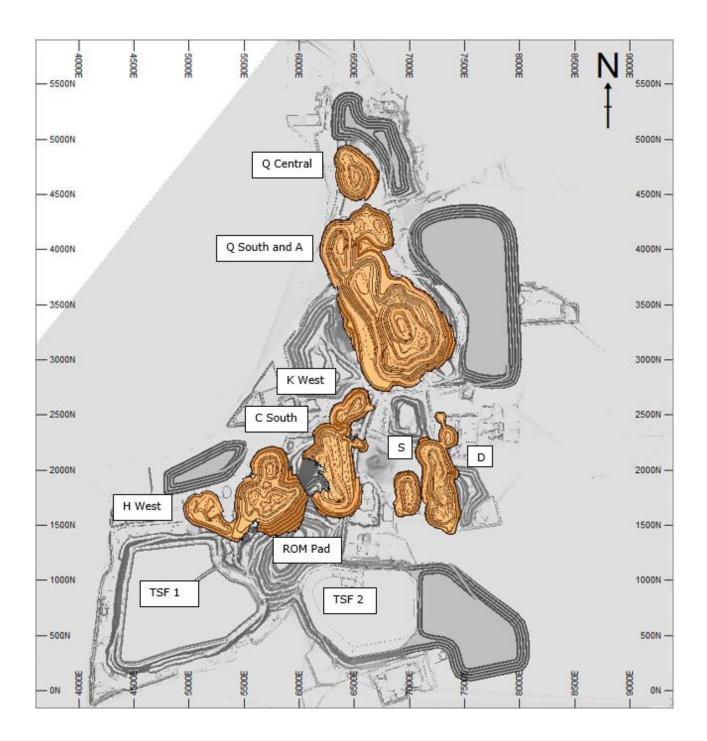
## TABLE 5. KEY INPUTS TO THE CHATREE OPEN PIT ORE RESERVE AS AT 30 APRIL 2022

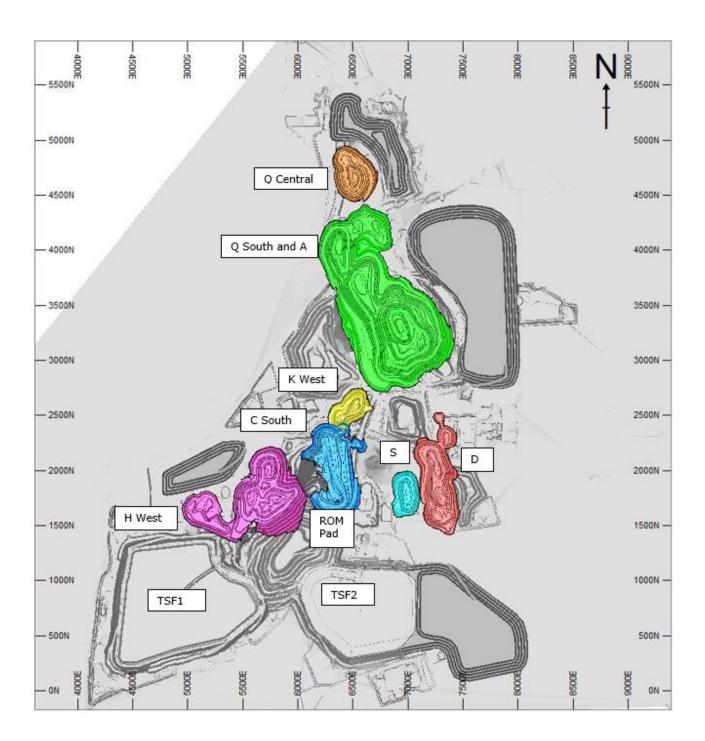
Parameter	Units	2022 LOM Plan
Gold price	US\$/oz	1,700
Silver price	US\$/oz	22
Gold refining cost	US\$/oz	5.60
Gold royalty	%	10.7%
Silver royalty	%	10%
Discount rate	%	10%
Plant throughput	Mtpa	5.5
Gold recovery	%	80
Silver recovery	%	38
Ore processing	US\$/t feed	9.28
General and administration	US\$/t feed	1.21
Grade control	US\$/t ore	0.78
Reclaim	US\$/t feed	0.20
COVID-19 management	US\$/t feed	0.30
Sustaining capital	US\$/t feed	1.10
Total operating cost	US\$/t feed	12.86
Calculated (gold-only)	g/t	0.33
Used for pit optimization	g/t	0.35

The Chatree open pit designs on which the 2022 Ore Reserve is based are shown in Figure 1 below.



#### FIGURE 1. CHATREE PIT DESIGNS





#### Chatree Gold Mine, Thailand 30 April 2022 Resource Statement

#### JORC Code 2012 Edition – Table 1

#### Section 1: Sampling Techniques and Data

Criteria	Commentary
	Resource estimates were based on diamond (DD) and face sampling reverse circulation (RC) drill holes.
	• The resource drill database totalled 704,819 metres of drilling comprising 585,350 (83%) metres of RC and 119,469 (17%) metres of diamond drilling.
	• All resource drilling and sampling was completed by industry standard techniques and was guided by the Kingsgate Group protocols including industry standard
	QAQC procedures.
	• For RC drilling, one metre samples were collected from the cyclone then riffle split to create two representative samples of 3 to 4kg, one for the laboratory for assaying and the other for retention as a reference sample. Wet samples were left to naturally dry prior to riffle splitting. Sieved chip samples were geologically
	logged.
Sampling techniques	<ul> <li>Diamond core was logged for geology and geotechnical characteristics. With the exception of barren dykes diamond core was typically sampled over 1 metre intervals and generally halved using a diamond saw. Samples were sent to the laboratory for assaying and the remaining core was kept in core trays for future reference.</li> </ul>
	All samples were transported to the Chatree Mine laboratory for assaying by company personnel.
	• At the laboratory, all samples were dried, crushed and pulverised to 85% passing 75 microns, with a 50g charge analysed for gold by fire assay and silver by aqua regia.
	<ul> <li>Standard samples, duplicate samples and blank samples were inserted into the assay batches at a frequency of at least 1 in every 25 samples. Sample batches</li> </ul>
	submitted for assay have generally 100 to 150 samples with a maximum of 250 samples per batch.
	• The QAQC results confirmed the reliability of sampling and assaying with sufficient confidence for the estimates. Close agreement between resource model
	estimates and mill reconciled production for mining to date provided additional confidence in the reliability of the resource sampling and assaying.
Drilling	• All RC drilling used face sampling bits, with diameters of generally 5.25 inch to 5.5 inches (127 to 133mm) with sub-samples collected by riffle splitting.
techniques	• Diamond holes were generally drilled with HQ or NQ sized bits (63 or 47.6mm core diameter) and included RC pre-collars that were drilled sampled and assayed consistently with other RC drilling. Competent core intervals were generally oriented by standard spear techniques.
	• Drilling contracts and geological supervision of the drillers require the operators to do their best to provide good quality, high recovery, and uncontaminated samples.
	<ul> <li>RC drilling used face-sampling bits and rigs of generally sufficient air capacity, including booster compressors where required to provide dry, high recovery samples.</li> </ul>
	• RC sample recovery was calculated by comparing total recovered sample weights with expected weights derived from bit diameters and the densities used for
Drill sample recovery	resource modelling. Overall RC sample recovery averaged around 80% with some lower sample recoveries associated with soft and less competent rock such as soil, shear zones or broken rock.
, coorer,	• Most RC samples were dry, with 73% of samples having moisture records logged completely dry and 20% as wet.
	• DD core recovery was recorded by drillers as recovered core lengths for each core run and checked by the field geologists, and average 85%.
	• Most DD holes were RC pre-collared to below the base of oxidation and the majority of core was from fresh, competent rock giving high core recoveries. Some
	lower core recoveries were associated with shear or breccia zones, although these are relatively uncommon and rarely associated with mineralisation.
	1. Overall the RC and DD drilling showed good recoveries. There is no notable relationship between gold grades and recovery, and sample recovery has not
	introduced a bias in the resource sampling.

Criteria	Commentary
	<ol> <li>The potential for preferential loss/gain of fine/coarse material was considered to be low. Test sieving and analyses of RC samples showed no notable average difference in gold grades between coarse and fine fractions.</li> <li>Comparison of gold grades from 544 closely spaced two metre composited samples from RC and diamond holes showed no notable difference in average grades providing additional confidence in the reliability of the RC sampling. Close agreement between resource model estimates and mill reconciled production for mining to date provided additional confidence in the reliability of the resource sampling and assaying.</li> </ol>
Logging	<ul> <li>The resource drilling was logged with appropriate detail to support the Mineral Resource estimates, metallurgical and mining studies.</li> <li>All resource holes are geologically logged by industry standard techniques, including qualitative logging of geology, mineralisation, alteration, structure, sample recovery, and sample quality. DD core is also geotechnically logged. The logging uses a paper based system with standardised codes and is transferred into the database after validation in MicroMine, Access, and a proprietary import tool constructed by H&amp;S Consultants.</li> <li>Logging is checked for consistency between adjacent holes providing a cross check of logging variations between geologists, and with time. Any logging revisions are recorded in field sheets and updated in the database. The majority of geologists responsible for recording geological data have been working at Chatree for more than five years providing consistency in logging.</li> <li>All drill core were photographed, stored on site in a core reference library. RC chips were stored on site in a chip library.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>All sample collection and bagging is supervised by company geologists.</li> <li>For RC drilling the full sample from each metre is collected from the cyclone and riffle split to produce two representative samples of 3 to 4kg; one sample is sent to the laboratory for assaying and the other kept as a reference sample or used as a duplicate with duplicates collected every 20<sup>th</sup> sample. Wet samples are dried prior to riffle splitting.</li> <li>After metre marking by the logging geologist core is generally halved with a diamond blade core saw. Quarter core samples represent an insignificant proportion of the dataset. After cutting the core is placed back in the core tray for checking by the geologist to ensure correct cutting and replacement.</li> <li>Rare highly broken core is sampled by collecting random pieces of broken rock to represent the interval.</li> <li>Core is sampled from a consistent side of the core. Sample numbers are written on the remaining core.</li> <li>Standard samples, duplicated samples (RC) and blank samples were inserted to the assay samples batch at least 1 in every 25 samples. Each sample batch submitted for assay has generally 100 to 150 samples with a maximum of 250 samples per batch. All samples were transported to the Chatree Mine laboratory by company personnel.</li> <li>The on-site laboratory assertified by ISO with a 17025 rating.</li> <li>At the laboratory, samples were dried at 120°C for a minimum of 8 hours then the entire sample was jaw crushed to a nominal 2-4mm. A 1-1.5kg split was taken and pulverised in a 2000cc Lab technics B2000 pulveriser. In addition to routine replicate assays of pulps, duplicate "re-split" samples of jaw-crushed material were taken at approximately every 10th sample. OREAS standards were used as internal laboratory standards.</li> <li>The field duplicate samples and the laboratory duplicate samples show an acceptable level of repeatability. Additional confirmation of the reliability of the sub-sampling was provided by comparison of gold grades</li></ul>
Quality of assay data and laboratory tests	<ul> <li>Assaying for gold and silver was carried out by the Chatree Gold Mine on-site laboratory. Gold assaying was by fire-assay (25 and 50g samples) with AAS finish. All assays of greater than 6.0g/t gold were repeated using a gravimetric finish. Silver was assayed using an aqua regia digestion with AAS finish.</li> <li>The on-site laboratory at the Chatree Mine site was certified by ISO with a 17025 rating.</li> <li>The analytical technique was considered to be a total representation of the interval sampled.</li> <li>No geophysical logging was included in resource estimates.</li> </ul>

Criteria	Commentary
	<ul> <li>Substantial focus was given to ensure sampling procedures met industry best practice ensuring acceptable levels of accuracy and precision for the resource sampling and assaying. An appropriate sampling protocol was designed and implemented specifying sample collection and sample preparation and assaying at the laboratory. Laboratory sample preparation was routinely checked using grinding tests and sieve analysis.</li> <li>All assay batches included blind reference standards, blank samples and field duplicates (RC), in addition to internal laboratory checks. These results were routinely evaluated to determine if results were within predefined tolerances. Inter-laboratory checks were done on a periodic basis and the results were analysed statistically.</li> <li>For drilling to 2014, each set of 50 samples routinely contained three control samples (47 primary samples, 1 standard, 1 duplicate, 1 blank) with QAQC samples representing 6% of assaying. In 2014, the QAQC protocol was modified as part of Kingsgate's continuous improvement strategy. For the revised protocol each set of 22 samples contained the three control samples (19 primary samples, 1 standard, 1 duplicate, 1 blank) with QAQC samples.</li> <li>Submitted standards results were analysed on a batch by batch basis and monthly. The majority of standards show average accuracy of within 5% of expected value with no consistent positive or negative bias. In cases where initial standard assays fell outside the acceptable range, the entire batch was re-assayed.</li> <li>Duplicate assays show acceptable correlation with primary samples with no apparent bias.</li> <li>The quality control measures had established that the assaying was of appropriate precision and accuracy for the estimates. Close agreement between resource model estimates and mill reconciled production for mining to date provided additional confidence in the reliability of the resource sampling and assaying.</li> </ul>
Verification of sampling and assaying	<ul> <li>Significant intersections were verified by alternate company personnel and external consultants.</li> <li>Significant intersections were re-assayed by different techniques (including Leachwell, Fire assay) to confirm their accuracy.</li> <li>Twin holes are not routinely drilled. Comparison of gold grades from 544 closely spaced two metre composited samples from RC and diamond holes showed no notable difference in average gold grades providing additional confidence in the reliability of the RC sampling.</li> <li>Comparison between nearby composited samples from resource and grade control ("GC") drilling within five metres east-west, five metres north-south and two metres vertical gave data pairs for 13% of the 314,972 resource composites. The paired resource and GC composites show comparable average gold grades providing an independent check of resource drilling.</li> <li>Resource drilling information was stored in an appropriately protected relational Microsoft Access database. RC chips and drill core were on paper using standardised geological codes and transferred into the database after validation in MicroMine, Access, and a proprietary import tool. Finalised assay results were merged directly into the database from laboratory source files.</li> <li>The Kingsgate Group had formal data validation procedures with data being validated as close to the source as possible to ensure reliability and accuracy. Inconsistencies identified in the validation procedures were re-checked and changes were made to the database once the problem was identified.</li> <li>Independent checking for internal consistency within and between tables in the resource database extract by MPR showed no significant discrepancies.</li> <li>Close agreement between resource model estimates and mill reconciled production for mining to date provided additional confidence in the validity of the resource database.</li> </ul>
	<ul> <li>Modifications to the assay dataset for resource modelling were limited to the following:         <ol> <li>Below detection assay values were assigned half the detection limit.</li> <li>Deliberately un-assayed intervals through barren dykes were assigned gold and silver grades of zero. All other un-sampled intervals were assigned null values.</li> </ol> </li> <li>A comparatively small number of samples from earlier resource drilling were analysed for gold, but not silver. These intervals were assigned silver grades from gold-silver regression formulae developed for each deposit area. The majority of these intervals were from mined-out areas, and have little impact on estimation of remnant resources.</li> </ul>
Location of data	<ul> <li>Resource modelling was undertaken in local mine grid coordinates with well documented transformations between local and UTM grids.</li> <li>The site topographic survey was regularly updated by the on-site survey team.</li> <li>All drill hole collars were surveyed using a DGPS by the site survey team.</li> </ul>

Criteria	Commentary
points	<ul> <li>All diamond holes and most RC holes were down-hole surveyed at generally 25 to 30m intervals. The surveying was usually undertaken by down-hole camera during withdrawal of the drill string from the hole with the use of a stainless steel rod to minimise magnetic interference.</li> <li>Some rocks, mostly dykes, had a minor to moderate magnetic content. However, routine checking showed generally little variation between readings in any given hole and the impact of magnetic interference on down-hole surveys was considered insignificant.</li> <li>The location of the sample points and topographic surface had been established with sufficient accuracy for the estimates.</li> </ul>
Data spacing and distribution	<ul> <li>For most of the main resource areas, drill hole spacing ranged from around 20 by 25 metres to 40 by 50 metres (east, north) with holes spaced at up to approximately 100 metres in peripheral areas.</li> <li>The data spacing and distribution established geological and grade continuity adequately for the resource estimates.</li> <li>The resource estimates were based on two metre down-hole composited assay grades. This composite interval represented a multiple of the one metre sample length which represented 92% of assayed resource drilling.</li> </ul>
Orientation of data in relation to geological structure	<ol> <li>The majority of the resource drill holes were inclined at around 55 degrees and oriented approximately perpendicular to local dominant mineralisation controls interpreted from mapping and structural logging of orientated core.</li> <li>In comparatively rare areas where the resource drill holes are sub-parallel to the dominant mineralisation structures, comparison with appropriately oriented grade control sampling showed no significant difference in mean gold grades.</li> <li>The drilling orientations provided unbiased sampling of the mineralisation.</li> </ol>
Sample security	<ul> <li>RC samples were delivered directly to the assay laboratory by company staff at the completion of each drill hole. If samples were left on site overnight they were considered secure, because there was a guard at drill sites at night time when there was no drilling operation. After collection and bagging diamond core samples were delivered directly to the assay laboratory by company staff.</li> <li>Validity of assay results were established by use of field duplicates, standards and comparison of results from different sampling phases. Close agreement between resource model estimates and mill reconciled production for mining to date provided additional confidence in the validity of the resource database.</li> </ul>
Audits or reviews	<ol> <li>External and internal reviews have deemed the data and the sampling techniques to be in line with industry standards and of sufficient quality for resource estimation. The competent persons responsible for the estimates regard the sampling and assay techniques, and data validity as an appropriate basis for resource estimation.</li> <li>The resource model was routinely compared with GC estimates and any variations were investigated. GC drilling and mill reconciled production provided independent checks of the resource data and model estimates in mined areas. These two independent checks supported the general reliability of the resource models.</li> </ol>

#### SECTION 2: Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	<ol> <li>Chatree Gold Mine is located in central Thailand approximately 280km north of Bangkok and 35km south east of Phichit Province.</li> <li>Akara Resources includes the recently re-granted 16 Mining Leases and 8 Waste Dump Leases covering a total of 11.85 km<sup>2</sup>.</li> <li>Around 6.7% of resources are located outside of Chatree Lease, the other 91% are located inside of mining, TSF and dump lease. The resource in the location of the Dump and TSF represent around 6.4%.</li> </ol>
Exploration done by other parties	1. All resource drilling was undertaken by Kingsgate Group.
Geology	<ol> <li>The Chatree deposit is located between Phichit and Phetchabun Provinces, central Thailand, and is hosted by Late Permian to Early Triassic volcaniclastic and volcanogenic sedimentary rocks.</li> <li>The regional geology is dominated by a volcano-sedimentary sequence that interfingers laterally with terrigenous sediments. The depositional environment is interpreted to have consisted of a series of andesitic and rhyolitic stratovolcanoes situated in a shallow marine environment adjacent to a continental margin.</li> <li>The Chatree Gold Mine is an unusual low sulphidation epithermal gold-silver deposit located in the Loei – Phetchabun volcanic belt in central Thailand. The deposit spans 2.5 by 7.5km and consists of 8 vein zones, five of which were mined by open pit methods.</li> <li>The Chatree low sulphidation epithermal gold-silver deposit occurred as veins, stockworks and minor breccias hosted by a volcanic and volcanogenic sedimentary facies. The main gold-silver mineralisation was characterised by colloform-crustiform banded quartz ± carbonate ± chlorite ± adularia-sulphide-electrum veins. Gold mainly occurs as electrum, both as free grains associated with quartz, carbonate mineralis and chlorite, and as inclusions in sulphides, mostly pyrite (Salam et al., 2013).</li> <li>Oxidisation and broad stratigraphic types control the gross distribution of gold and silver mineralisation with specific geological units providing preferred mineralisation hosts. These are most notable at the A Prospect where the sedimentary unit hosted the majority of mineralisation. At a local scale, mineralisation was controlled by structures that cross cut lithological trends. A combination of broad scale geological wire frames and knowledge of local mineralisation controls was utilised when estimating resources. Barren post mineralisation dykes with widths varying from less than one to around eight metres cross cut mineralisation.</li> </ol>
Drill hole information	1. No individual drill hole results are included in this announcement.
Data aggregation methods	1. The RC and diamond resource holes were generally sampled over one metre down-hole intervals, with assay grades composited to two metre intervals for resource estimation.
Relationship between mineralisation widths and intercept lengths	<ol> <li>The majority of the resource drill holes were generally inclined at around 55°, and oriented approximately perpendicular to local dominant mineralisation controls interpreted from mapping and structural logging of orientated core. Down hole lengths generally approximate true thicknesses.</li> </ol>
Diagrams	1. Relevant diagrams are included in the body of this announcement.

Criteria	Commentary
Balanced reporting	1. No individual drill hole results are included in this announcement.
Other substantive exploration data	<ol> <li>Airborne geophysical surveys were conducted at Chatree in 2004 also ground geophysical surveys continued until mine closure in 2016.</li> <li>Surface mapping and sampling had been undertaken over the life of the property.</li> <li>Bulk density, metallurgical results are detailed in Section 3 below.</li> </ol>
Future work	1. The Mineral Resource Development Strategy for 2022/2023 is to prioritise conversion of Mineral Resources to Ore Reserves in order to increase the Chatree reserve inventory.

#### SECTION 3: Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	<ol> <li>Resource drilling information was stored in an appropriately protected relational Microsoft Access database. RC chips and drill core were logged on paper using standardised codes and transferred into the database after validation in MicroMine, Access, and a proprietary import tool. Finalised assay results were merged directly into the database from laboratory source files.</li> <li>The Kingsgate Group has formal data validation procedures with data being validated as close to the source as possible to ensure reliability and accuracy. Inconsistencies identified in the validation procedures were checked by the project geologists and corrected once the problem was identified.</li> <li>The database is centrally managed by a Database Manager who is responsible for data entry, validation, development, quality control and specialist queries. The database was configured for optimal validation through constraints, library tables, triggers and stored procedures. Data that fails these rules was</li> </ol>
	<ul><li>quarantined until it was corrected.</li><li>Independent checking for internal consistency within and between tables in the resource database extract by MPR showed no significant discrepancies.</li></ul>
	5. After close to 20 years of evaluation and resource estimation and 15 years of mining the geological setting and mineralisation controls were well understood and confidence in the geological interpretation was high. The interpreted geological frame work was based on resource drilling data, and grade control and pit mapping. Alternative interpretations are considered unnecessary due to the detailed understanding of mineralisation controls.
Geological	6. Oxidisation and broad stratigraphic types control the gross distribution of gold and silver mineralisation with specific geological units providing preferred mineralisation hosts. These were most notable at the A Prospect where the sedimentary unit hosted the majority of mineralisation. At a local scale, mineralisation was controlled by structures that cross cut lithological trends. A combination of broad scale geological wire frames and knowledge of local mineralisation controls was utilised when estimating resources.
interpretation	7. Barren post mineralisation dykes with widths varying from less than one to around eight metres cross cut mineralisation, with these intervals commonly not assayed in resource drilling.
	8. The MIK modelling included mineralised domains interpreted with reference to broad scale geological wire frames and geological understanding of local mineralisation controls developed from geological interpretations based on resource drill data, grade control data and pit mapping. Un-sampled dykes intervals were assigned zero grades in the modelling dataset.

Criteria	Commentary
Dimensions	<ol> <li>Resource estimates extend from the southern edge of the mining lease to the northern Q Prospect for 4.2 kilometres. Overall width of the resource was typically 40 to 80 metres depending on dip, but extended up to 160 metres in the A Prospect. Estimated resources extend from the surface to a maximum of 370 metres below the pre-mining surface.</li> </ol>
Estimation and modelling techniques	<ol> <li>Resources were estimated by Multiple Indicator Kriging of gold and silver grades with block support adjustment to reflect open pit mining selectivity based of gold cut off grades.</li> <li>The MIK modelling included mineralised domains interpreted with reference to broad scale geological wire frames and geological understanding of loc mineralisation controls developed from geological interpretations based on resource drill data, grade control data and pit mapping. Un-sampled dykes intervow were assigned zero grades, and included in the MIK modelling. This approach was supported by the close reconciliation with production. Comparative data continuity of each domain was characterised by indicator varigorarms modelled at 14 indicator thresholds.</li> <li>All bin grades used for MIK modelling were determined from class mean grades with the exception of upper bin grades which were determined on a case to case basis from review of the tenor and distribution of high grade composites.</li> <li>MicroNine software was used for data compliation, domain wire-framing, and coding of composite values, and GS3M was used for resource estimation.</li> <li>The block model has 10 by 25 by 6m panels (east, north, elevation) relative to the generally 20 by 25 to 40 by 50m spaced resource drilling.</li> <li>The modelling included a four pass octant based search strategy as outlined below with search ellipsoids aligned with local mineralisation controls.</li> <li>Search Teatin Minimum Minimum Maximum Vasimum Vasimum Vasimum Vasimum Strategrade and strate search as a search context were supported by the dost reconciliation with production.</li> <li>The modelling included gold and silver grades with no by-products. Silver grades were generally comparatively low and poorly correlated with gold grade Sulphide content was globally low and is silver grades set to 125 mapper sectores.</li> <li>The stimates included gold and silver grades with no by-products. Silver grades were generally comparativ</li></ol>

Criteria	Commentary
	15. The overall close agreement included relatively short periods of less consistent reconciliation reflecting the highly variable nature of the mineralisation. For mining to April 2012, ore definition was based on partial extraction Leachwell assaying (not calibrated for recovery) contributing some of the marginally lower tonnages, and higher mined grades relative to the resource estimates based on fire assays.
Moisture	1. Tonnages were estimated on a dry basis with bulk densities assigned by oxidation type on the basis of immersion measurements of representative core samples including oven drying at 110°C.
Cut-off parameters	<ol> <li>The cut-off grade of 0.30 g/t gold used for reporting resources reflected the average gold price for the last five years of mine operation until the end of 2016 of USD 1460/oz and anticipated costs and average metallurgical recoveries.</li> </ol>
Mining factors or assumptions	<ol> <li>Mining at Chatree was by open cut methods utilising 200t and 100t class excavators with ore definition based on close spaced RC grade control drilling.</li> <li>The resource estimates include block support adjustment to reflect ore selection based on gold cut-off grades with mining selectivity and RC grade control sampling consistent with best practise at Chatree.</li> </ol>
Metallurgical factors or assumptions	<ol> <li>Plant recovery varied depending on mineralisation type and throughput rate, with an historic average gold recovery of over 85%. Test work aimed at improving knowledge of recovery variability by rock types was ongoing.</li> <li>Detailed metallurgical testing has been completed for the major deposits and is supported by plant performance. These results have been applied to the mineralisation domains when estimating Ore Reserves and determining the cut-off grade for resource reporting.</li> </ol>
Environmental factors or assumptions	1. Estimated resources lie within a Mining Lease and consideration of waste dumps and infrastructure was made when determining cut off grades. The Chatree operation completed various environmental impact statements in compliance with regulations for approval of Mining Leases.
Bulk density	<ol> <li>Consistent with previous estimates, the resource model included bulk densities of 2.16, 2.40 and 2.62 t/bcm (bank cubic metre) for oxide, transition and fresh material respectively.</li> <li>These density values are based on immersion measurements of representative, oven-dried diamond core and are supported by reconciliation with production to date.</li> </ol>
Classification	<ol> <li>Resource confidence levels were assigned on the basis of search pass and a triangulation defining the limits of closer spaced sampling. Panels within the classification triangulation informed by search passes 1 and 2 were classified as Measured and Indicated respectively. All search pass 3 and 4 panels and all panels in broadly drilled areas outside the classification triangulation were assigned to the Inferred category. These criteria classify estimates for mineralisation tested by nominally 20 by 25m and 40 by 50m spaced drilling as Measured and Indicated respectively with estimates for more broadly sampled mineralisation classified as Inferred.</li> <li>The resource classifications account for all relevant factors including relative confidence in the estimates, reliability of the input data, confidence in continuity of geology and metal vales, quality, quantity and distribution of the data. The classifications are supported by the close agreement between model estimates and production.</li> <li>The resource classifications appropriately reflect the Competent Persons views of the deposit.</li> </ol>

Criteria	Commentary
Audits or reviews	<ol> <li>The resource model was last prepared in 2015 by Issara geologists and independently audited by Jonathon Abbott of MPR Geological Consultants Pty Ltd. Mineral Resources have not expanded since this time. This Table 1 forms part of extensive internal documentation which was provided to independent consultants during their audits.</li> <li>Over at least 10 years, Chatree Gold Mine has had numerous visits by external consultants who have reviewed sampling techniques, geological interpretation estimation parameters and results. These audits have concluded that procedures and data used to estimate the Mineral Resource are appropriate for the style of mineralisation.</li> <li>For ore production to 2015 of 54 Mt the model estimates have closely matched ore production, with production realising 1% and 4% more ounces for gold and silver respectively than model estimates providing additional confidence in the general reliability of model estimates.</li> </ol>
Discussion of relative accuracy/ confidence	<ol> <li>The relative accuracy of the Mineral Resource estimate was reflected in the reporting of Measured, Indicated and Inferred estimates with Measured and Indicated Resources of sufficient local confidence to form the basis of mine designs and production scheduling. The close agreement between resource model estimates and mill reconciled production for mining to date provided additional confidence in the reliability of estimates.</li> </ol>

#### SECTION 4: Estimation and Reporting of Ore Reserves

#### JORC CODE ORE RESERVES ASSESSMENT AND REPORTING CRITERIA (TABLE 1 – SECTION 4) FOR CHATREE GOLD MINE ORE RESERVES AS AT 30 APRIL 2022

Criteria	Commentary
Mineral Resources Estimate for conversion to Ore Reserves	<ul> <li>Ore Reserves estimates are based on the Chatree June 2015 multiple indicator kriged (MIK) resource model. Mineral Resource estimates have been restated as at 30 June 2021, and are reported in accordance with the guidelines of the JORC Code. Resource estimation was carried out by Kingsgate Resources Limited (Kingsgate) and were independently reviewed by MPR Geological Consultants Pty Ltd in 2016 and AMC Consultants Pty Ltd (AMC) in 2018.</li> <li>The model was constructed with block size of X=20 m, Y=25 m, Z=12 m.</li> <li>Mineral Resources are reported inclusive of Ore Reserves.</li> </ul>
Site visits	• The Competent Person has not visited the site due to the current global COVID-19 pandemic. However, an AMC Principal Mining Engineer and an AMC Principal Geologist visited the site in 2018 for project familiarization, pit and pit wall inspections, discussions with project personnel and to inspect the local conditions.
Study Status	<ul> <li>Chatree was an operating mine from 2002 until the suspension in 2016, and mine planning parameters have largely been derived from actual operating results at the time of suspension. AMC undertook a review of the Chatree life-of-mine (LOM) plan in 2018 and developed an updated LOM plan and economic evaluation in 2020 and again for the estimation of this Ore Reserve. The Competent Person considers the LOM plan to be technically achievable and Modifying Factors to be at a pre-feasibility study level of assessment.</li> </ul>
Cut-off Grade	• The cut-off value used in the estimation of these Ore Reserves is the non-mining, break-even value taking into account mining recovery and dilution, metallurgical recovery, site operating costs including processing and administration, and off-site costs for doré transport, refining, royalties, and revenue

Criteria	Commentary
	from sales of doré.
	• A grade of 0.35 g/t Au has been used for the estimation of this Ore Reserve.
Mining Factors	<ul> <li>Chatree was an established open pit mining operation using conventional open pit mining methods and a locally based mining contractor. Conventional open pit mining and contract mining is also assumed for the restart of operations. The Competent Person considers the mining methods to be appropriate for the deposit.</li> <li>Pit optimization was undertaken using Whittle Four-X pit optimization, with consideration of all operating costs, commodity prices, mine recovery and dilution factors, metallurgical recoveries, process throughputs, and mining rate limits. Limits were placed on pit optimization to prevent mining within 20 m of the tailing storage facilities. A revenue factor 1.12 optimal pit shell was used as the basis of the final pit designs. Stage mining was used to smooth material movements for scheduling.</li> <li>Detailed pit designs were completed for all pits, designed following pit slope recommendations of O'Bryan 2013 and dual lane haul ramps, except for the final benches, which have been designed with one way access to reduce stripping requirements.</li> <li>Bench height selection is appropriate for the deposit and expected mining equipment, with both ore and waste to be blasted on 9 m benches then mined in 3 m flitches by 100-t and 180-t class excavators. Grade control will be done by reverse circulation drilling on 18 m benches ahead of drilling and blasting. Ancillary equipment utilized includes bulldozers, graders, and water carts.</li> <li>No additional ore loss or waste rock dilution was included in mine planning, as the model is an MIK model, and reconciliation between resource models and production results up to 2016 indicated that mining dilution and recovery factors are appropriate.</li> <li>Open pit cutbacks were designed with a minimum bench pushback width of 30 m.</li> <li>Inferred Mineral Resources are treated as waste and excluded from the pit optimizations and schedules.</li> <li>All of the major infrastructure to support the current mining op</li></ul>
Metallurgical Factors/Recovery Model	<ul> <li>The Chatree ore processing plant was commissioned in 2001 with a capacity of 1.0 Mtpa and utilized semi-autogenous grinding (SAG) milling and conventional carbon-in-leach (CIL) cyanide leaching technology. A series of expansions from 2001 to 2011 added additional leach tanks, pebble crushers and a gravity circuit and expanded the comminution circuit, which increased throughput to a design capacity of 5.0 Mtpa and peak annual throughput of 6.2 Mtpa, although average annual throughput rates of 5.5 Mt were used for the estimation of this Ore Reserve.</li> <li>The plant operated successfully from 2002 to the suspension in 2016 and achieved better than design throughput and metallurgical recoveries similar to that indicated by metallurgical testwork. AMC undertook a review of the processing plant in 2018 as part of a wider review, and concluded that the metallurgical processes used as Chatree were appropriate for the style of mineralization.</li> <li>CIL processing of gold and silver ores is well tested technology and along with the related carbon-in-pulp technology, used in the majority of operating gold mines globally.</li> <li>No allowance for deleterious elements was made in estimating the Ore Reserve. There are minor amounts of carbonaceous ore within the deposit and test work was performed to determine the impact on recovery. The results of this test work were incorporated into the overall recovery model. Operating reports from 2015 and 2016 indicate that the carbonaceous materials that were encountered did affect processing performance, but site operations were able to continue utilizing appropriate plant settings.</li> <li>The recovery models for gold and silver used in previous estimation of the Ore Reserve were variable recovery models based on head grade with algorithms derived from test work performed over the full range of head grades from different geographic areas as well as historical operational data.</li> </ul>

Criteria	Commentary
	AMC placed greater weight on historical performance and slightly reduced metallurgical recoveries based on metallurgical performance over the last two
	years of operation from average gold recovery of 83.3% to 80% and for silver from 38.7% to 38%.
	Bulk samples are not appropriate due to the 14-year operating history of Chatree.
	Successful management of environmental aspects is recognized to be a critical contributor to the success of Chatree. Environmental management will be
	required for a range of important issues on project restart, including:
	<ul> <li>Environmental monitoring.</li> </ul>
	• Statutory reporting.
	<ul> <li>Safe tailings disposal.</li> </ul>
	• Safe treatment and discharge of excess mine water.
	<ul> <li>Communication of environmental performance to stakeholders.</li> </ul>
	<ul> <li>Revegetation and progressive rehabilitation</li> </ul>
	<ul> <li>Development of waste rock management strategies, including acid mine drainage.</li> </ul>
Environmental	<ul> <li>Run-off water management.</li> </ul>
Linnonnentai	<ul> <li>Waste and chemical management.</li> </ul>
	<ul> <li>A submitted and approved mine closure plan.</li> </ul>
	Chatree gold mine will operate under an approved Environmental and Health Impact Assessment (EHIA) which will be regularly audited by Thai
	government officials.
	• The EHIA covers the storage of tailings from the processing plant and waste rock. The mine has installed double plastic linings in the tailings storage facility
	for 62 Mt of tailings.
	• Waste will be characterized into potentially acid forming and non-acid forming materials, as was the case up to 2016, and placed into dumps in
	accordance with the EHIA.
	The site conditions are that no water is to be discharged from the mining lease.
	• Kingsgate has confirmed that there are not likely to be any environmental impediments to the extraction of the Ore Reserve.
	Chatree will be supplied with electricity from the Thai national grid and access to Bangkok is by sealed highways.
	• All land within the mining lease is owned by Akara Mining Limited. Land surrounding the project is generally freehold title, and as such negotiations will be
Infrastructure	conducted with individual land holders to obtain access to land as required.
innastructure	• Labour will be sourced from local communities surrounding the operation. Over 90% of the staff employed on site in 2016 were Thai Nationals, many
	locals. Akara Mining does not provide any on-site accommodation, with all staff living within the local communities.
Costs	Chatree infrastructure is largely in place and US\$17M in capital costs for mill refurbishment and restart of operations were provided by Kingsgate and are
	relatively modest.
	• Ore processing and general and administration costs were derived from actual operating costs at the time of suspension, escalated by 2.5% per annum to
	account for cost escalation from 2016 to 2022.
	• Mining operating costs were derived from a first principles estimate undertaken by AMC in 2020 and escalated at 2.5% per annum from 2020 to 2022.

Criteria	Commentary
	No allowance was made for deleterious elements.
	<ul> <li>Costs are generally based on United States dollars and an exchange rate of 32.5 Thai baht per United States dollar was made as required for royalty calculations.</li> </ul>
	Transport and refining charges were provided by Kingsgate based on their experience with previous contracts at Chatree.
	• Thai Government royalties are based on a sliding scale and represented US\$182/oz Au or 10.7% of gold sales. Silver royalty was 10% of silver sales.
	• In general, no factors were applied in the application of the metal prices stated in the above section. A reduction in revenue is applied in the form of doré transport, refinery, and smelting charges, based on current US\$/oz costs.
Revenue Factors	• The revenue was based on commodity prices of US\$1,700/oz for gold and US\$22/oz for silver which are supported current spot prices. The RF 1.12 pit shell used as the basis for pit design represents metal prices of US\$1,904/oz Au and US\$24.64/oz Ag.
	Production from Chatree has been assumed to be sold into the spot market at spot market prices, with no hedging.
Market Assessment	• The combined gold and silver doré will be transported from site, refined off site and on-sold. There are no impediments to the sale of the refined products.
	• Chatree was an operating mine, with the majority of capital associated in realizing the estimated Ore Reserves already expended and the relevant infrastructure in place. The economics of the reported Ore Reserves are based on operating costs and assumptions which have been applied in the selection of process plant feed as discussed in the section addressing the cut-off grade methodology applied.
Economic	<ul> <li>Inputs to economic evaluation are revenue derived from products, operating costs, capital cost allowances and royalties payable to the Thai Government. To estimate discounted cash flow, a discount rate of 10% was applied as provided by Kingsgate.</li> <li>NPV was significantly positive</li> </ul>
	• Kingsgate traditionally had close working relationships with the communities surrounding Chatree, with a number of funds set up to provide services and support. The Competent Person understands from Kingsgate that the local community is supportive of the restart of operations.
Social	<ul> <li>Kingsgate confirms that there are not likely to be any social impediments to extracting the Chatree Ore Reserves included in this statement.</li> </ul>
Other Risks	<ul> <li>There are no significant naturally occurring risks to Chatree. Past major flooding events in Thailand did not impact the operation.</li> <li>Material Legal and Marketing Agreements - output from Chatree is sold at spot market prices.</li> <li>Government agreements and approvals have recently been updated, with the four outstanding mining leases required to operate Chatree granted and all necessary steps for the renewal of the Metallurgical Processing Licence are complete and approved with new leases confirmed for 10 years from the end of 2021.</li> <li>Theses Ore Reserves include pits that require Government approvals to relocate public roads and other approvals before those reserves can be fully exploited.</li> <li>The recent global COVID-19 pandemic will need to be managed appropriately to enable production and cost targets to be achieved</li> </ul>

Criteria	Commentary
Classification	<ul> <li>All in pit Ore Reserves that are reported as Proved were derived from Measured Mineral Resources And all in pit Ore Reserves that are reported as Probable were derived from Indicated Mineral Resources.</li> <li>No Inferred Mineral Resources are included in these Ore Reserves. The high degree of confidence in the modifying factors gives the Competent Person confidence that the classification of the Ore Reserve is appropriate.</li> </ul>
Audits or Reviews	• AMC reviewed the Ore Reserve estimate in 2018 and conducted independent checks and estimates and considered that the Ore Reserve was reasonable.
Accuracy/Confidence	<ul> <li>In estimating the Ore Reserve, confidence levels as reflected in the Mineral Resource estimates was accepted in the respective Ore Reserve classification categories.</li> <li>The Ore Reserves estimates relate to global estimates in the conversion of the Mineral Resource to Ore Reserve, due largely to the spacing of the drill data on which estimates are based, relative to the intended local selectivity of the mining operations.</li> <li>Long term historical reconciliation of the Chatree resource model to mill production shows a high level of confidence in the reported contained metal. The reconciliation carried out is global in nature as ore from different pits and stockpiles is blended in the mill feed.</li> </ul>

#### **Competent Persons Statement**

The information in this report that relates to the Chatree Mineral Resources is based on information compiled by Ron James, who is a consultant geologist to the Kingsgate Group. Ron James is a member of The Australasian Institute of Mining and Metallurgy, and qualifies as a Competent Person. Mr James has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves." Mr James has consented to the public reporting of these statements and the inclusion of the material in the form and context in which it appears.

The information in this report that relates to the Chatree Ore Reserve estimates is based on information compiled by Glen Williamson who is a member of the Australasian Institute of Mining and Metallurgy. Mr Williamson is a full time employee of AMC Consultants Pty Ltd and has sufficient relevant experience in the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Williamson has consented to the public reporting of these statements and the inclusion of the material in the form and context in which it appears. Mr Williamson has no potential for conflict of interest in relation to this report to Kingsgate Consolidated Limited.