

### **ASX ANNOUNCEMENT**

10 December 2019

## Maiden 30,000 ounce gold resource at Golden Cup

Great Northern Minerals Limited (ASX:GNM, "Great Northern Minerals" or the "Company") (formerly Greenpower Energy Limited) is pleased to announce an interim JORC resource estimate for the Golden Cup Gold Mine in Northern Queensland (Figure 1). At a 0.75 g/t Au cut-off grade the initial inferred resource estimate is 256,000 tonnes at 3.6 g/t Au for approximately 30,000 ounces of contained gold. Table 1 below sets out the resource estimate at a variety of cut off grades.

#### Highlights:

- Inferred resource of 256,000 tonnes @ 3.6 g/t Au for 30,000 ounces;
- The resource is open at depth and along strike;
- Potential milling options exist within trucking distance;
- Current drill program now complete with results expected over the coming weeks.

#### **Golden Cup**

The Golden Cup mineral resource estimate was independently estimated by experienced mine geologist Andrew Beaton of AKB Mining Geology Services Pty Ltd (AKB), and the full report is attached to this release as Appendix A. Golden Cup, along with Camel Creek and Big Rush, is one of three gold mines acquired by Great Northern Minerals as announced to the ASX on 15 August 2019.

The Golden Cup mineral resource is composed of 3 lodes located beneath 3 previously mined open pit gold mines (Figure 2). Lodes 2 and 3 are part of the same mineralised structure but their relationship to Lode 1 has not been established. Exploration next year will seek to determine if these lodes represent an offset of the same structure or 2 parallel zones.

The historic gold production from the Golden Cup oxide zone was approximately 20,000 ounces and when combined with the current resource this takes the total endowment at Golden Cup to 50,000 ounces of gold which compares favourably with GNM's previous exploration target (ASX release 4 July 2019.

The resource at Golden Cup is open with very little drilling below 50 metres vertically or outside the mineralisation model as seen in the long section views through Lodes 2 & 3 (Figure 3) and Lode 1 (Figure 4).

The Golden Cup resource is refractory with preliminary metallurgy indicating that gold will report to a sulphide concentrate and there are several mills capable of processing this material within trucking distance.

The Company has just completed a small RC drilling program at Golden Cup, consisting of 8 holes to obtain further geological and QAQC data as recommended by AKB. The coming year will see a significant drill program with the aim to rapidly increase the resource at the Golden Cup Project. Results from the recent drilling program are expected to be received within the coming weeks.



**Table 1:** Golden Cup Inferred Gold Resource Table

	Lo	des 2 and	3		Lode 1		Tota	l Golden	Cup
Cut Off Au g/t	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Au Ounces
0	211,011	3.14	21,302	97,407	2.92	9,145	308,418	3.07	30,447
0.25	204,302	3.24	21,282	94,224	3.01	9,118	298,526	3.17	30,400
0.5	187,993	3.49	21,094	90,581	3.12	9,086	278,574	3.37	30,180
0.75	171,333	3.77	20,767	85,171	3.27	8,954	256,504	3.6	29,721
1	159,224	3.99	20,425	83,135	3.33	8,901	242,359	3.76	29,326
1.25	145,586	4.25	19,893	78,423	3.47	8,749	224,009	3.98	28,642
1.5	135,366	4.47	19,454	73,970	3.59	8,538	209,336	4.16	27,992
1.75	126,157	4.68	18,982	66,416	3.82	8,157	192,573	4.38	27,139
2	115,220	4.95	18,337	61,670	3.96	7,852	176,890	4.6	26,188

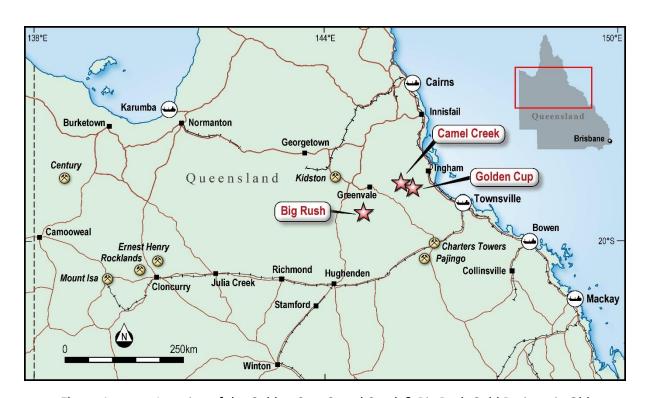


Figure 1: Location of the Golden Cup, Camel Creek & Big Rush Gold Projects in Qld



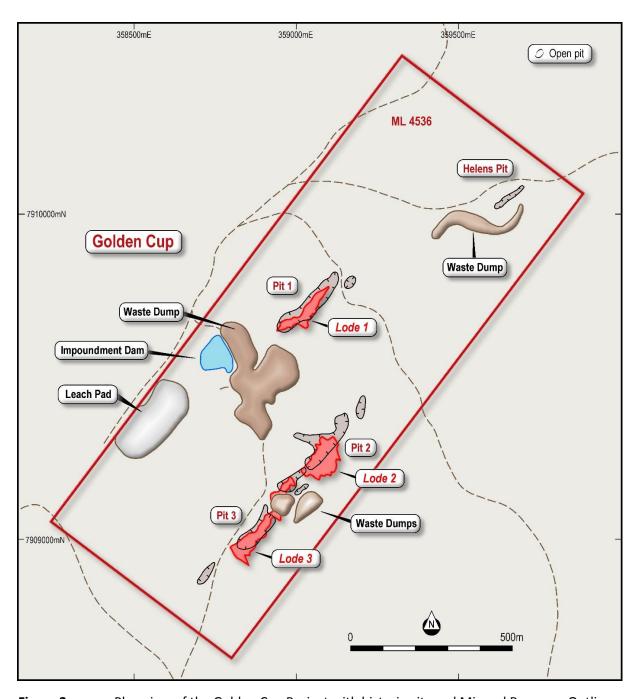


Figure 2: Plan view of the Golden Cup Project with historic pits and Mineral Resource Outlines (Red) projected to surface



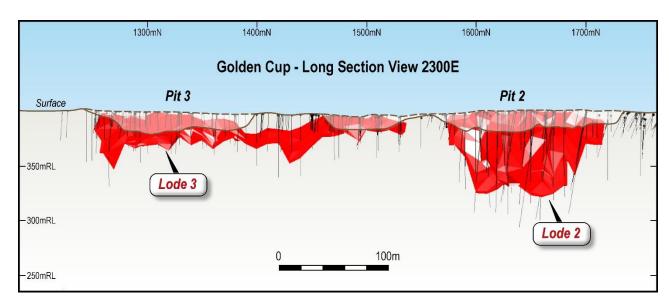
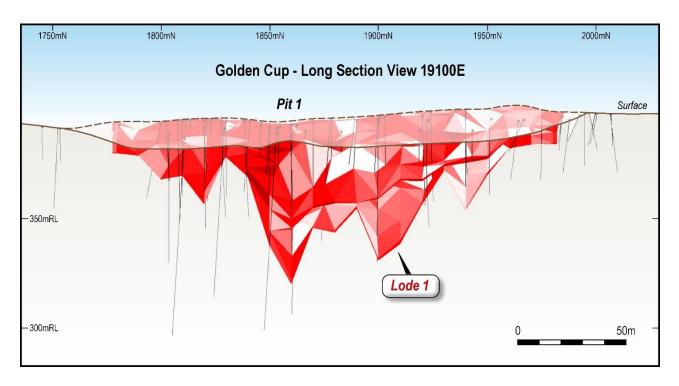


Figure 3: Long Section view in local mine grid of Golden Cup Lodes 2 and 3 showing drill intersection pierce points and historical mining surface (50m grid spacing)



**Figure 4:** Long Section view in local mine grid of Golden Cup Lode 1 showing drill intersection pierce points and historical mining surface (50m grid spacing)



Great Northern Minerals Managing Director, Cameron McLean commented on the announcement: "The Board and Management of Great Northern Minerals are delighted to announce a JORC resource estimate at Golden Cup. This represents a significant milestone for the Company and our trajectory. The focus for the immediate future is increasing this resource and the current drill program aims to do that. We are excited by the prospects of 2020 and what it holds for this company".

#### **About Great Northern Minerals Limited**

Great Northern Minerals Limited is an ASX-listed gold focussed explorer. The Company's projects include the Golden Cup, Camel Creek and Big Rush Gold Mines in Queensland.

\*\*\*ENDS\*\*\*

#### For more information please contact:

Managing Director Investor Relations

Cameron McLean Peter Taylor, NWR Communications
info@greatnorthernminerals.com.au +61 412 036 231

#### **Competent Persons Statement**

The information in this report that relates to the Mineral Resource estimate is based on information compiled by Mr Andrew Beaton. Mr Beaton is a Member of the Australasian Institute of Mining and Metallurgy and is a part time consultant to Great Northern Minerals Ltd. Mr Beaton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Beaton consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

## **APPENDIX A**

## **AKB Mining Geology Services**

### **Consulting and Contract Geologists**

#### ABN 20 776 534 873

## **MEMORANDUM**

To: Mr Andrew Jones, Exploration Manager, Great Northern Minerals Limited

**Date:** 30-Nov-2019

From: Andrew Beaton, AKB Mining Geology Services.

**Re:** Golden Cup Mineral Resource Estimate

\_\_\_\_\_

### **EXECUTIVE SUMMARY**

AKB Mining Geology Services (AKB) was commissioned by Great Northern Minerals Limited (GNM) to assist with geological modelling and to prepare a Mineral Resource estimate for the Golden Cup deposit located in Queensland, Australia. The Mineral Resource estimate was required to be reported in accordance with the JORC Code<sup>1</sup>.

The Mineral Resource estimate for Golden Cup is shown in Table 1. The Mineral Resource estimate is reported above a cut-off grade of 0.75g/t Au and is reported below the historical open pit excavations.

Table 1: Golden Cup Mineral Resource estimate, >0.75 q/t Au

Lode	JORC Classification	Tonnage (Kt)	Au (g/t)	Ounces (Koz)
1	Inferred	87	3.3	9
2	Inferred	117	4.0	15
3	Inferred	54	3.3	6
Total	Inferred	256	3.6	30

<sup>\*</sup> Due to the effects of rounding, the total may not represent the sum of all components

TEL: (07) 4728 3518 MOB: 0488 584 350

<sup>&</sup>lt;sup>1</sup> Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

## DRILLING, SAMPLING AND SUB-SAMPLING TECHNIQUES

Reverse Circulation (RC) and Open Hole Percussion (Percussion) samples have predominantly informed the Mineral Resource estimate with a minor amount of diamond drilling. Drilling data has been collected during numerous drilling campaigns, commencing in 1988. Sampling that was carried out during historical mining via trenching, open hole drilling with blast hole rigs, RAB drilling and ditchwitching has not been used in the Mineral Resource estimate.

The following series of drillholes have been used;

GC1 – GC216 Lynch Mining (1988 – 1993)

CCRC1 - CCRC17 Wiluna Gold Mines Ltd (1994)

GCRC001 - GCRC073 Curtain Brothers Qld Pty Ltd (2010 - 2014)

GCD01 – GCD02 Curtain Brothers Qld Pty Ltd (2012)

The Curtain Brothers drilling from 2010 onwards is considered to be "modern drilling" whilst the earlier drilling is considered "historic". The modern drilling accounts for 46% of the intersections used in the Mineral Resource estimate.

All programs have been well documented via annual reports and other historical records that describe data collection techniques which vary from company to company but are considered to reflect industry standards at the time.

RC and Percussion drilling was used extensively due to the shallow nature of the deposit. RC drilling was generally completed using either an RC face sampling hammer (ranging between 4" and 5  $^{1}/_{2}$ " diameter) or a conventional percussion hammer and a cross-over sub. Diamond drilling was completed using HQ3 diameter core.

Sampling of drilling core ranged from 0.2m to 1.4m averaging 0.9m, with half core submitted for assay. Sampling of modern RC drilling was for the most part at 1m intervals with a bulk sample being collected from a cyclone and immediately riffle split, or on some occasions a bulk sample being collected from a cyclone, stored in a plastic bag before being riffle split or spear sampled at the completion of the hole. Sampling of RC and Percussion drilling in the GC series of holes (1988 - 1993) was at 1m intervals and for the CCRC series of holes was at a combination of 4m composites and 1m intervals. Additional details of sampling procedures for the historical drilling are not known.

Modern drill collars have been surveyed using a differential global positioning system (DGPS). Some historical collars were also surveyed in 2009 with a DGPS unit. As Golden Cup was discovered whilst mining was underway at the nearby Camel Creek mine, records indicate that all historical collars were surveyed by the mine surveyors of the time. Many of the historical collars are still intact and the locations have been checked with a handheld GPS and found to be within the accuracy limit of the device.

Modern drilling downhole surveys were completed using either a Camteq ProShot digital single shot camera or a Reflex multi shot digital camera. The majority of historical drilling (86%) is less than 40m in depth and no downhole surveys were taken for these holes.

## **ANALYTICAL METHODS AND QUALITY ASSURANCE**

Samples from the earliest drilling programs were sent to Pilbara Laboratories in Townsville. Pilbara Laboratories were taken over by Analabs in late 1989 and samples were then sent to Analabs Townsville. Samples from the modern drilling programs were sent to SGS Townsville (formerly Analabs). Umpire samples were at different times sent to ALS Townsville.

Analysis was by Fire Assay (mainly 30g in historical programs and 50g in modern programs) with determination by atomic absorption spectrophotometry (AAS). Arsenic and Antimony were historically analysed by XRF and more recently by ICP.

The lack of QC across the various drilling programs means that sampling precision, analytical accuracy and carry over contamination were not able to be assessed. Data collection methods are quite well known, however, and reputable laboratories were used which gives some confidence in the data.

Historical mining records also support the accuracy of the sampling and analytical accuracy with several phases of reconciliation undertaken whilst mining was underway. The correlation between the various historical and modern programs and the relatively close spaced nature of the drilling also provides additional support.

The lower confidence as a result of the lack of QC data was a major consideration when classifying the Mineral Resource estimate.

It is strongly recommended that all future drilling programs include certified standards, blanks and duplicates in order to build up a volume of QAQC data. This will improve the veracity of the historical data and increase confidence in subsequent Mineral Resource estimates.

### DEPOSIT GEOLOGY AND GEOLOGICAL MODELLING

The gold mineralisation at Golden Cup is located within the generally tightly folded sediments of the early Devonian age Kangaroo Hills Formation which is characterised by a varying assemblage comprising sandstone, mudstone and lesser tuff.

The area is traversed by a major north west/south east structural corridor paralleling the Sybil Graben, with many of the numerous basaltic, andesitic and rhyolitic dykes of the region sharing a similar trend.

The region has undergone three significant periods of deformation with gold mineralisation introduced during at least four different phases, resulting in a complex mineralogical history.

At a local scale the gold is strongly associated with quartz veins. The cross section below (Figure 1) has gold grades plotted on the right of the drill trace and quartz percentage graphed in red on the left. It shows a definite correlation between gold grade and quartz content. It

also worth noting the similarity between the grades in hole GC18 from the historical drilling and GCRC015 from the more recent 2010 drilling.

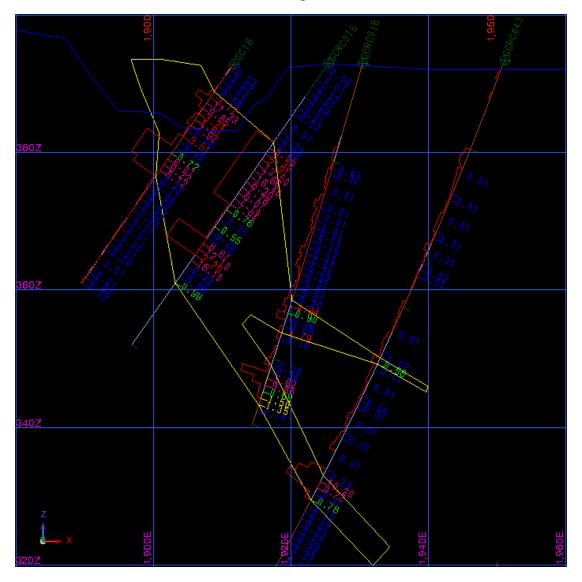


Figure 1: Cross Section through Golden Cup Lode 1 at 1860N with Au values in ppm on the right and quartz percentages graphed on the left. The yellow outline is the modelled mineralisation.

Strings were created on 10m sections throughout the deposit to enable creation of 3D domain shapes. A combination of geology (mainly quartz content), drill assays and general confidence in continuity were used as the basis for the domain boundary.

Historical mining has removed the auriferous oxide ore that was amenable to extraction by cyanide leaching. The primary mineralisation that remains is refractory with gold associated with arsenopyrite and antimony. Metallurgical test work to date has demonstrated that concentrates can be produced with Au recoveries between 77 and 87%. Further work is recommended to optimise that.

## **ESTIMATION METHODOLOGY**

Statistical analysis was completed using Surpac software. Sample data were composited to 1m lengths, which is consistent with the dominant sample length for the project. Top cuts were applied to the main domains of lodes 1, 2 and 3 after reviewing the histograms and adopting a cut at the 97.5 percentile. Cuts ranged between 16.85 and 21.05g/t. The four minor domains did not possess significant outliers, so no cuts were made to them.

Valid variograms were not able to be generated for the main domains.

A block model was constructed using Surpac software. A block size of 5m E x 5m N x 5m RL was chosen along with sub-blocking to  $1.25m \times 1.25m \times 1.25m$ . This reflects a practical single mining unit in a shallow open pit selective mining environment.

Grades were interpolated into the blocks from the 1m composites using the inverse distance squared estimation method with a 2 to 1 flattening anisotropy. Search parameters honoured the geometry of the modelled mineralised domains with search distances restricted to between 10 and 40 metres to reflect the close spaced drilling. The domain boundaries for the mineralised lodes were honoured by the estimate as a hard boundary; that is no composite data from outside of each individual domain was used to inform the grade of blocks within that domain.

The estimation process was validated by comparing global block grades with the average composite grades, visual checks comparing block grades with raw assay data and volume checks of the ore domain wireframes versus the block model volume.

An in-situ dry bulk density of 2.5 t/m<sup>3</sup> was applied to the ore zones and 2.4 t/m<sup>3</sup> to waste blocks in the model. In the absence of measured density data, this was based on the average density of sandstone, shale and quartz.

The collection of density data needs to be a focus for future drilling programs.

## **CLASSIFICATION**

The Mineral Resource estimate has been classified as Inferred in accordance with guidelines contained in the JORC Code. The classification applied reflects the author's view of uncertainties surrounding the historical drilling data and the general lack of QAQC in the drilling.

#### MODIFYING FACTORS

The selected cut-off grade assumes an open pit mining method. This is considered reasonable given the shallow nature of the mineralisation and the historical open pit mining that has occurred at the site previously.

Preliminary metallurgy test work conducted in 2010 and 2014 demonstrated that a concentrate can be produced with a gold recovery of between 77 and 87 percent. Further

metallurgical test work is recommended when new material becomes available from future drilling programs.

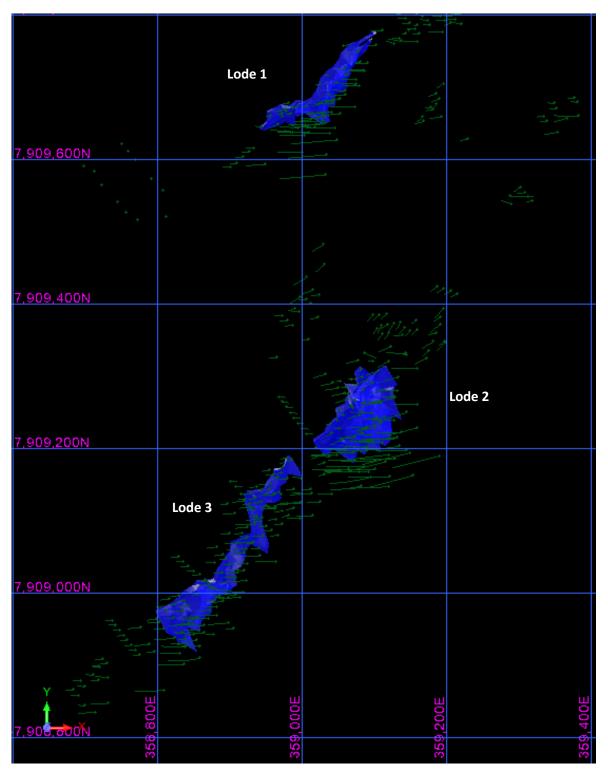


Figure 2: Plan view in GDA94 Zone 55 of the Golden Cup lodes and drill traces

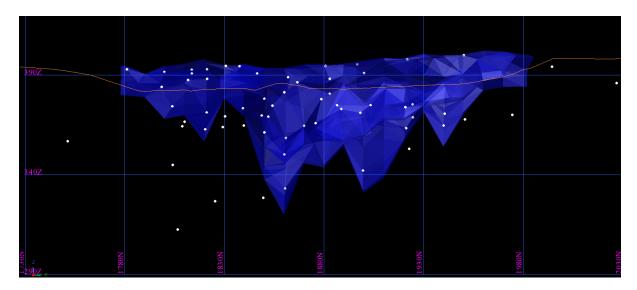


Figure 3: Long Section view in local mine grid of Golden Cup Lode 1 showing drill intersection pierce points and historical mining surface (50m grid spacing)

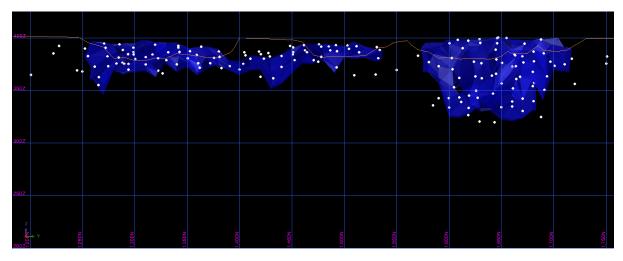


Figure 4: Long Section view in local mine grid of Golden Cup Lodes 2 and 3 showing drill intersection pierce points and historical mining surface (50m grid spacing)

## **COMPETENT PERSONS STATEMENT**

The information in this report that relates to the Mineral Resource estimate is based on information compiled by Mr Andrew Beaton. Mr Beaton is a Member of the Australasian Institute of Mining and Metallurgy and is a part time consultant to Great Northern Minerals Ltd. Mr Beaton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Beaton consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

# **JORC Code, 2012 Edition – Table 1**

## **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report.  In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	<ul> <li>The deposit has been primarily sampled via Reverse Circulation (RC) and Open Hole Percussion (Percussion) drilling. A total of 159 individual RC (80) and Percussion (79) holes have intersected the mineralized zones along with two diamond holes.</li> <li>For the drill programs completed between 2010 and 2015 (73 RC holes and 2 diamond holes) RC chips were collected in 1m intervals in plastic bags and stored adjacent to the drill rig. Sample intervals were selected based on logging and portable XRF arsenic values. A representative 3kg sub-sample of the bulk sample was collected later by either riffle splitting or spear sampling and submitted for pulverising to produce a 50g charge for fire assay.</li> <li>Diamond drilling was completed from surface (no RC pre-collars) using HQ triple tube diameter coring. Drill core was sampled to geological boundaries, sample widths averaging 0.9m, with half core samples being submitted for pulverizing to produce a 50g charge for fire assay.</li> <li>The historical RC and Percussion holes were drilled between 1989 and 1994 by Lynch Mining (GC1 – GC216) and Wiluna Gold Mines (CCRC1 – CCRC17). Samples were collected in 1m intervals for all the GC series of holes and initially a combination of 4m composites and 1m samples for the CCRC series of holes and submitted for pulverising to produce a 30g or 50g charge for fire assay. Additional details of sampling procedures for historical RC drilling are not presently known.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>Most holes drilled at Golden Cup have been RC and Percussion with a small amount of diamond drilling. Recent RC programs have utilized face sampling hammers varying in diameter from 100mm to 125mm.</li> <li>Diamond drilling has been by HQ triple tube.</li> <li>Based on the collars that can still be located the historical RC and Percussion programs have utilized hammers ranging from 4 inches to 5 ½ inches.</li> </ul>

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Core recovery was &gt;95% with the only instance of loss occurring during the collaring of one hole when clays and unconsolidated material washed away. No core loss was experienced through the ore zones.</li> <li>No cavities were encountered in RC drilling and no underground workings exist in the area. All care was taken by the drilling contractor in the modern drilling to maximise RC sample recovery.</li> <li>Some of the historical RC and Percussion holes had sample weights recorded for each meter. From the records sighted weights ranged from 17kg to 25kg indicating good recovery.</li> <li>No testing has been conducted to identify whether a relationship exists between sample recovery and grade.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All RC and Percussion samples from both modern and historical drill programs were geologically logged for lithology, alteration, mineral occurrence, quartz veining and weathering by geologists. A small sub sample was collected for each meter in plastic chip trays for future reference.</li> <li>All diamond core was geologically logged for lithology, alteration, mineral occurrence, quartz veining and weathering by geologists. All diamond core was photographed. Diamond core was also geotechnically logged and RQD values recorded.</li> <li>The logging of both core and chips in all programs is qualitative in nature</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	were adopted. Samples for the majority of the historical drilling was in 1-meter intervals and in the case of the CCRC program 4m

Criteria	JORC Code explanation	Commentary
		Weights recorded in the historical program indicate that sample sizes were appropriate to provide representative sub-samples for analysis.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	copy assay results for a large proportion of the historical drilling is still on hand. The analytical work for the modern drilling programs was completed by SGS Laboratories in Townsville, also a NATA accredited facility.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Multiple phases of drilling by different companies have resulted in similar results. The modern drilling program featured holes within 10m of historical intersections that helped confirm the veracity of the historical data.</li> <li>Historical mining at Golden Cup between 1989 and 1992 demonstrated the structural continuity of the lodes and produced ore grades expected from the historical drilling. Hard copy records of pit reconciliations reveal that expected tonnes and grades were generally encountered.</li> <li>Multiple holes on adjacent sections help confirm continuity of mineralization.</li> <li>The project data is held in both digital and hard copy formats.</li> <li>There have been no adjustments to the assay data as received from the laboratories with the exception of high-grade cuts being applied to</li> </ul>

Criteria	JORC Code explanation	Commentary
		composites for the estimation.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Historical hole collars were surveyed by the mine surveyors from the nearby Camel Creek mine that was also operated by Lynch Mining. In 2009 when Curtain Brothers purchased the project any of the historical holes that could still be located (ie. didn't lie within the excavated pits) were surveyed by the Mt Moss mine surveyors using differential GPS with an error margin of 50 – 100mm.</li> <li>All of the modern drill hole collars were surveyed using the same differential GPS unit.</li> <li>There is no detail for downhole surveys in the historical drilling. Holes are quite shallow, so it is possible that no downhole surveys were used.</li> <li>The modern drilling has been down hole surveyed with either a Camteq ProShot digital single shot camera or a Reflex multi shot digital camera.</li> <li>Drill collar co-ordinates are recorded in GDA94 (MGA Zone 55) and then transformed to the Golden Cup mine grid.</li> <li>Aerometrex 2008 aerial imagery was used to create a DTM surface for the Golden Cup area. The pit surface was adjusted down from the surface water level by using the historical grade control trenching and blast hole drilling data.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The spacing of drill hole collars and sample intervals down hole are appropriate for the nature of the mineralisation. The lodes have been drilled out on average spacings of 10m x 20m and this spacing provides evidence of geological continuity for the purposes of resource estimation.</li> <li>Some minor compositing of samples was applied in the CCRC series of drill holes in the areas suspected not to be mineralized. These composites were of 4 x 1m samples.</li> <li>Sample compositing to 1m down hole lengths has been used for the resource estimation.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>The majority of drill holes in both the historical and modern drilling programs have been oriented perpendicular to the target structures.</li> <li>The relationship between the drilling orientation and the orientation of the mineralised structures is not considered to have introduced a sampling bias.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	<ul> <li>Drill samples were dispatched to Pilbara, Analabs and SGS laboratories in Townsville, all NATA accredited laboratories, by the project geologist. Hardcopy chain of custody forms from the modern drilling program have been sighted. Details of sample transportation from the historical programs are not available.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of sampling techniques and data have been carried out.

# **Section 2 Reporting of Exploration Results**

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Golden Cup deposit lies wholly within Mining Lease ML 4536 which is held by Golden Ant Mining Pty Ltd. Great Northern Minerals (GNM) completed the acquisition of Golden Ant Mining Pty Ltd from Q-Generate Pty Ltd in August 2019.</li> <li>ML 4536 was granted on the 22<sup>nd</sup> of February 1990 and has an expiry date of 31<sup>st</sup> of December 2029.</li> <li>There are no known impediments to Great Northern Minerals Ltd obtaining a license to operate on ML 4536.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The Golden Cup mine area has been the subject of substantial previous exploration, resource definition drilling and mining operations.</li> <li>Lynch Mining first recognized gold mineralization in the Golden Cup area in 1987 whilst they were mining the nearby Camel Creek deposit. Lynch Mining drilled the GC series of holes (GC01 – GC216) between 1988 and 1993.</li> <li>Lynch Mining excavated several small pits at Golden Cup between 1989 and 1992. Oxide ore was mined and treated via a heap leach operation.</li> <li>Wiluna Gold Mines Ltd entered into a Joint Venture with Lynch Mining and drilled the CCRC series of holes (CCRC1 – CCRC17) in 1994.</li> <li>Ownership returned to Lynch mining in 1995 and Curtain Brothers entered into a Joint Venture that eventually saw them gain complete ownership in 2009. Curtain Brothers drilled a total of 73 RC holes (GCRC01 – GCRC73) and two diamond holes (GCD01 and GCD02) between 2009 and 2014.</li> <li>Great Northern Minerals Ltd (previously Greenpower Energy Ltd</li> </ul>

Criteria	JORC Code explanation	Commentary
		purchased the project in August 2019.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The gold mineralisation at Golden Cup is located within the generally tightly folded sediments of the early Devonian age Kangaroo Hills Formation which is characterised by a varying assemblage comprising sandstone, mudstone and lesser tuff.</li> </ul>
		The area is traversed by a major north west/south east structural corridor paralleling the Sybil Graben, with many of the numerous basaltic, andesitic and rhyolitic dykes of the region sharing a similar trend.  The region has undergone three significant periods of deformation with gold mineralisation introduced during at least four different phases, resulting in a complex mineralogical history.  Gold is strongly associated with quartz veining. Historical mining has removed the auriferous oxide ore that was amenable to extraction by cyanide leaching. The primary mineralisation that remains is refractory with gold associated with arsenopyrite and antimony. Metallurgical test work to date has demonstrated that concentrates can be produced with Au recoveries of between 77 and 87%.
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	Drill holes that are material to this mineral resource estimation are summarized below (Appendix 1 Golden Cup Drill Hole Data)
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used</li> </ul>	<ul> <li>The drill intercepts reported in Appendix 1 are on a length weighted basis. No high-grade cuts have been applied to the tabled intersections.</li> <li>Lengths of low-grade material have been incorporated where the adjacent higher grades are sufficient such that the weighted average</li> </ul>

Criteria	JORC Code explanation	Commentary
	for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	remains above the lower cut-off grade.
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No metal equivalents are used or presented.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>Drilling is generally perpendicular to the structure by angled at 55° to 65° into structures dipping between 30° and 60°. Some of the reported intersections are very close to true width. The apparent width is accounted for with the three-dimensional wireframe models of the mineralised structures.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	Maps and sections are presented in the announcement.
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>No new drilling has been completed by GNM.</li> <li>The existing drilling has defined three mineralised lodes at approximately 10m x 20m spacing. All lodes are open at depth and further drilling is planned to extend the known resources.</li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>Preliminary metallurgical test work has been completed on samples from Golden Cup in 2010 by HRL Testing, 2012 by NQ Met Lab and in 2014 by consultant R.W. Nice. All work indicates that gold will need to be recovered by flotation to a concentrate and that recoveries can be expected to be between 77 and 87%.</li> <li>No density data was available from the existing data set, so a density has been applied based on the rock types.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further work will include;</li> <li>Drill testing for extensions to the known mineralization, mostly down dip.</li> <li>Additional metallurgical test work to determine the most appropriate process route for gold recovery.</li> <li>Complete an initial Scoping Study on the economics of developing a gold producing operation at Golden Cup.</li> </ul>

## **Section 3 Estimation and Reporting of Mineral Resources**

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>The drill hole database including geology and assay information was built in Microsoft Access from available Excel files that came from the vendor. Basic cross validation checks were carried out when importing the data through Surpac.</li> <li>Drill hole locations and significant intercepts in the database were checked against historical plans and cross sections to verify the relative location.</li> <li>GPS co-ordinates were recorded in the field for 30 collars and compared against the database. All holes were positioned within the accuracy limits of the device (+/-3m)</li> <li>A small number of randomly selected original assay sheets from the historical drilling were compared to the database for verification of the assays.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Andrew Beaton visited the site on September 17<sup>th</sup>, 2019. Drill collars and historical pits were inspected along with drill core from the two diamond holes. RC chips from Golden Cup were also inspected by Andrew Beaton at the Mt Moss mine site on October 17<sup>th</sup>, 2019.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The confidence in the overall geological interpretation is moderate given the reliance on the historical drilling. This is offset somewhat by the successful historical mining and the more recent drilling that supports the historical data.</li> <li>Where continuity was considered sufficient the lodes were wireframed on sections 10 meters apart and perpendicular to the strike with a minimum width of 1m.</li> <li>The mineralized zones are characterized by quartz veining. The three modelled lodes are continuous, and the interpretation includes sub grade drill intercepts where necessary to maintain a continuous structure.</li> <li>The continuity of the lode structures modelled are demonstrated by drilling and the historically mined pits.</li> </ul>
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.	<ul> <li>The Golden Cup lodes are quite shallow having been mined originally from surface outcrops in places. The area of historic excavation covers approximately 750 meters of strike with the pits not exceeding 25m in depth. Widths vary from 1m on the periphery to 15m in the broader zones.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>Mineralization has been defined on three main lodes to varying depths and strike lenghs. In long section the overall dimensions for the remaining portion of the lodes are;</li> <li>Lode 1 200m long by up to 50m deep</li> <li>Lode 2 150m long by up to 70m deep</li> <li>Lode 3 275m long by up to 30m deep</li> </ul>
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>A block model was constructed using Surpac software. A block size of 5m E x 5m N x 5m RL was chosen along with sub-blocking to 1.25m x 1.25m x 1.25m. This reflects a practical single mining unit in a shallow open pit selective mining environment.</li> <li>Grades were interpolated into blocks using 1m composites by length weighted inverse distance squared methodology. A 2 to 1 flattening anisotropy was used based on the wireframe geometry.</li> <li>The presence of significant levels of Ag, As and Sb are noted, but the lack of assay data (less than 25% of the Au assays) precludes an estimation from being carried out. Future drilling programs will boost the data set and enable estimation of these elements.</li> <li>Given the close drill spacing the search parameters were restricted to a 10m radius for the first pass, 25m for the second pass and 40m for the third pass. All blocks were populated after the third pass.</li> <li>The domain boundaries for the mineralised lodes were honoured by the estimate as a hard boundary; that is no composite data from outside of each individual domain was used to inform the grade of blocks within that domain.</li> <li>After a review of the assay dataset statistics several outliers were evident. A high grade cut for Au was set at the 97.5 percentile for each of the three main domains. This resulted in a high grade cut of 17g/t for lode 1, 21.05g/t for lode 2 and 16.5g/t for lode 3.</li> <li>The estimation process was validated by comparing global block grades with the average composite grades, visual checks comparing block grades with raw assay data and volume checks of the ore domain wireframes versus the block model volume.</li> </ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	All tonnages are estimated on a dry basis and moisture content is not considered in the resource estimate.
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>When constructing the mineralized wireframes, a nominal cut-off of 0.3g/t was adopted. The resource estimate has been reported at a</li> </ul>

Criteria	JORC Code explanation	Commentary
		cut-off of 0.75g/t which is considered reasonable given the shallow nature of the mineralisation and the historical open pit mining that has successfully been undertaken on the site previously.
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul> <li>Mining at Golden Cup will be by open pit methods. The resources have been estimated using a minimum thickness of 1.25m in the subblocking which is in line with selective mining methods in a shallow open cut.</li> <li>Grade control in the historic pits included trenching, blast hole sampling and ditch witching. Quartz veining also provided good visual control.</li> </ul>
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>Preliminary metallurgical test work has been completed on samples from Golden Cup in 2010 by HRL Testing, 2012 by NQ Met Lab and in 2014 by consultant R.W. Nice. All work indicates that gold will need to be recovered by flotation to a concentrate and that recoveries can be expected to be between 77 and 87%.</li> <li>Further metallurgy test work is recommended.</li> </ul>
Environmen- tal factors or assumptions	<ul> <li>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.</li> </ul>	Environmental considerations have not been factored into this mineral resource estimate. The assumption has been made that the waste material can be disposed of in a mine waste dump, as has historically happed on site.
Bulk density	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The bulk density for the mineral resource estimate is assumed. An in-situ dry bulk density of 2.5 t/m³ was applied to the ore zones and 2.4 t/m³ to waste blocks in the model. In the absence of measured density data, this was based on the average density of sandstone, shale and quartz.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The mineral resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of the JORC 2012 Table 1.</li> <li>After giving due consideration to the amount of historical drilling used in the estimate, the absence of any significant QAQC from the various drilling programs and the lack of measured density data, the mineral resource has been categorized as inferred. Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity and grade continuity.</li> <li>The mineral resource estimate appropriately reflects the Competent Person's views of the deposit.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>The current model has not been audited by an independent third party.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The resource estimate is deemed to be an accurate reflection of both the geological interpretation and tenure of mineralization within the deposit.</li> <li>The mineral resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.</li> <li>The historic production data was not compared against a block model when mining was carried out between 1989 and 1992. Reports do compare mined tonnes and grade to polygonal estimates and show reasonable correlation.</li> </ul>

# Appendix 1 Golden Cup Resource Drill Hole Intercept Data

Hole	Northing (GDA94_55)	Easting (GDA94_55)	Azimuth	Dip	EOH Depth	From	То	Width	Grade (Au g/t)
CCRC1	7909657	359021	315	55	40	20	27	7	4.50
CCRC2	7909636	359037	315	55	63	37	60	23	2.02
CCRC4	7909610	359000	315	60	68	45	50	5	4.43
CCRC5	7909665	359041	315	60	40	34	37	3	0.94
CCRC6	7909673	359072	314	60	75	61	65	4	3.00
CCRC7	7909722	359085	315	59	50	25	26	1	2.20
CCRC7	7909722	359085	315	59	50	39	42	3	1.46
CCRC10	7909116	358961	315	60	45	31	32	1	0.90
CCRC11	7909095	358933	315	60	52	16	17	1	0.39
CCRC11	7909095	358933	315	60	52	37	39	2	1.78
CCRC12	7909079	358946	315	60	65	27	28	1	3.04
CCRC14	7909041	358925	315	60	54	30	33	3	3.69
CCRC16	7908949	358856	315	60	42	28	40	12	4.87
GC1	7909706	359048	310	59	39	6	25	19	6.48
GC1	7909706	359048	310	59	39	33	39	6	1.13
GC2	7909756	359057	116	59	30	24	30	6	1.09
GC4	7909668	358977	320	59	24	4	10	6	4.88
GC5	7909291	359097	292	56	30	3	9	6	3.89
GC6	7909299	359083	302	55	30	7	9	2	3.38
GC7	7909258	359068	292	56	30	0	8	8	3.38
GC10	7909220	359041	292	54	30	4	8	4	7.91
GC13	7909749	359077	310	54	30	0	9	9	1.89
GC13	7909749	359077	310	54	30	14	18	4	11.49
GC14	7909726	359059	311	55.5	30	0	14	14	4.95
GC15	7909689	359059	310	55	51	30	32	2	0.99
GC15	7909689	359059	310	55	51	34	46	12	3.66
GC16	7909673	358994	310	54	30	2	3	1	0.25
GC16	7909673	358994	310	54	30	7	8	1	1.58
GC18	7909676	359023	306	55	39	5	20	15	5.00
GC19	7909246	359078	297	55	30	13	16	3	0.48
GC22	7909166	358970	306	55	24	5	7	2	0.68
GC24	7909655	359012	308	55	39	26	28	2	1.65
GC25	7909281	359111	297	55	30	19	23	4	5.58
GC27	7909268	359062	297	55	30	0	4	4	2.55
GC28	7909212	359055	292	55	30	21	22	1	1.89
GC30	7909295	359090	297	55	30	13	15	2	2.32
GC32	7909271	359128	300	55	69	30	34	4	11.81
GC32	7909271	359128	300	55	69	51	54	3	1.53
GC36	7909650	359031	310	55	55	28	46	18	4.39
GC38	7909250	359144	298	55	90	46	47	1	2.56
GC39	7909649	358966	291	65	39	12	15	3	1.85
GC42	7909184	358986	298	55	30	10	12	2	1.38
GC44	7909263	359099	300	55	47	22	23	1	1.61
GC44	7909263	359099	300	55	47	30	34	4	2.42
GC46	7909221	359083	300	55	60	28	36	8	1.59

Hole	Northing (GDA94_55)	Easting (GDA94_55)	Azimuth	Dip	EOH Depth	From	То	Width	Grade (Au g/t)
GC47	7909235	359110	300	55	60	33	41	8	1.05
GC47	7909235	359110	300	55	60	46	48	2	1.79
GC48	7909228	359159	300	55	80	61	63	2	0.71
GC71	7908898	358719	319	55	16	48	50	2	1.54
GC72	7909148	359081	303	55	75	67	74	7	3.79
GC73	7909181	359115	301	55	100	78	84	6	1.37
GC86	7909233	359040	312	62	15	0	1	1	0.53
GC87	7909239	359048	313	64	15	1	2	1	1.12
GC88	7909247	359057	310	62	15	4	7	3	4.94
GC89	7909253	359051	319	69	15	0	2	2	1.21
GC90	7909266	359073	318	65	15	0	9	9	3.77
GC97	7909280	359084	315	70	15	7	9	2	0.18
GC98	7909308	359082	315	70	15	0	5	5	4.13
GC101	7909263	359085	315	69	15	12	15	3	1.36
GC102	7909227	359050	315	69	15	5	13	8	1.89
GC106	7909678	359026	315	70	15	4	15	11	8.42
GC107	7909690	359038	315	70	15	2	5	3	1.13
GC107	7909690	359038	315	70	15	10	15	5	4.96
GC109	7909734	359079	315	69	15	1	6	5	1.22
GC110	7909673	359005	315	69	15	5	9	4	6.26
GC110	7909673	359005	315	69	15	10	12	2	1.41
GC111	7909703	359025	315	68	15	0	5	5	0.98
GC112	7909716	359035	315	69	15	0	13	13	5.90
GC131	7909008	358876	318	55	18	6	7	1	0.96
GC131	7909008	358876	318	55	18	8	13	5	0.46
GC133	7908998	358856	310	55	18	5	10	5	4.77
GC134	7908990	358837	310	55	18	9	11	2	10.62
GC135	7908984	358824	310	55	18	5	8	3	1.46
GC136	7909014	358894	310	55	30	16	19	3	1.12
GC137	7908976	358812	310	55	18	3	5	2	1.91
GC139	7909028	358889	310	55	21	7	10	3	2.32
GC140	7909040	358901	310	55	24	12	19	7	2.71
GC141	7909056	358919	310	55	33	26	31	5	14.80
GC142	7909119	358930	310	55	30	15	20	5	0.88
GC149	7909151	358956	310	55	30	3	7	4	1.66
GC149	7909151	358956	310	55	30	15	16	1	0.78
GC150	7909139	358967	309	55	30	10	14	4	6.39
GC150	7909139	358967	309	55	30	22	24	2	0.56
GC151	7909110	358907	313	55	30	18	21	3	0.75
GC158	7909028	358911	311	55	36	18	31	13	2.60
GC159	7908982	358842	312	55	30	13	18	5	5.62
GC160	7908975	358834	315	55	33	10	14	4	7.29
GC161	7908976	358871	308	55	33	16	19	3	0.55
GC161	7908976	358871	308	55	33	26	28	2	0.60
GC162	7908988	358891	310	55	30	27	30	3	0.51

Hole	Northing (GDA94_55)	Easting (GDA94_55)	Azimuth	Dip	EOH Depth	From	То	Width	Grade (Au g/t)
GC163	7908967	358855	311	55	30	17	30	13	6.35
GC164	7908966	358821	310	55	24	9	11	2	0.47
GC165	7908958	358844	310	55	33	21	28	7	5.48
GC166	7908956	358832	311	55	30	20	21	1	0.54
GC170	7909158	358979	314	55	21	11	13	2	0.55
GC170	7909158	358979	314	55	21	16	18	2	0.69
GC179	7908937	358823	310	55	48	21	22	1	0.37
GC180	7908935	358854	300	55	48	33	40	7	6.19
GC182	7909001	358918	320	55	36	29	31	2	1.71
GC183	7909044	358963	315	55	48	41	47	6	1.14
GC184	7909104	358945	305	55	39	21	28	7	5.13
GC184	7909104	358945	305	55	39	34	39	5	3.37
GC185	7909123	358980	310	55	36	26	28	2	5.28
GC185	7909123	358980	310	55	36	32	34	2	0.69
GC186	7909159	358999	325	55	24	12	14	2	0.73
GC186	7909159	358999	325	55	24	18	19	1	0.95
GC189	7909639	358976	320	55	34	25	26	1	0.30
GC207	7909649	359028	310	55	50	27	47	20	3.54
GC208	7908965	358869	317	55	40	20	23	3	1.09
GC208	7908965	358869	317	55	40	28	31	3	0.96
GC209	7908981	358882	315	55	35	22	23	1	0.34
GC210	7908993	358898	318	55	40	20	21	1	2.00
GC210	7908993	358898	318	55	40	25	26	1	1.58
GC211	7908997	358907	317	55	40	26	27	1	0.35
GC211	7908997	358907	317	55	40	34	35	1	0.67
GC212	7909031	358919	317	55	42	29	31	2	3.89
GC213	7909643	358994	319	55	45	29	30	1	2.07
GC215	7909683	359052	310	55	50	27	31	4	3.52
GC215	7909683	359052	310	55	50	35	41	6	2.05
GC216	7909704	359074	318	55	50	28	31	3	1.02
GC216	7909704	359074	318	55	50	41	45	4	3.52
GCD01	7909208	359110	315	57	85.05	51	56	5	7.50
GCD02	7909202	359090	315	57	87.8	43.85	54.8	10.95	2.62
GCD02	7909202	359090	315	57	87.8	58.2	65.3	7.1	3.74
GCRC001	7908925	358838	315	55	55	36	38	2	4.23
GCRC002	7908943	358849	315	55	45	32	35	3	1.50
GCRC003	7908955	358864	315	55	50	26	28	2	4.69
GCRC003	7908955	358864	315	55	50	32	37	5	0.79
GCRC004	7908969	358881	315	55	50	24	25	1	0.66
GCRC004	7908969	358881	315	55	50	39	40	1	4.97
GCRC006	7909070	358932	315	55	45	22	23	1	0.61
GCRC007	7908964	358849	315	55	35	18	32	14	3.67
GCRC008	7908989	358878	315	55	30	13	15	2	0.68
GCRC008	7908989	358878	315	55	30	17	19	2	0.42
GCRC009	7909004	358892	315	55	40	13	14	1	0.50

Hole	Northing (GDA94_55)	Easting (GDA94_55)	Azimuth	Dip	EOH Depth	From	То	Width	Grade
GCRC009			045			17	22	5	(Au g/t) 3.64
GCRC010	7909004	358892	315	55	40	14	17	3	0.49
GCRC010	7908996	358886	315 315	55 55	30 30	19	21	2	1.46
GCRC010	7908996 7909633	358886 359002	315	55 55	60	39	41	2	0.71
GCRC011						22	25	3	2.47
GCRC012	7909061 7909021	358923	315	55 55	45 35	21	24	3	7.54
GCRC014	7909021	358908 359089	315 315	55 55	<u>50</u>	26	36	10	4.59
GCRC015	7909226	359069	315	55	50	14	39	25	5.01
GCRC016	7909003	359029	315	55	50	37	38	1	5.39
GCRC017	7909710	359174	315	55	50	19	25	6	9.52
GCRC017	7909265	359107	315	55	50	41	42	1	0.46
GCRC017	7909203	359032	315	73	55	36	41	5	2.17
GCRC018	7909659	359032	315	73	55	46	52	6	3.23
GCRC019	7909039	359032	315	55	45	22	23	1	1.02
GCRC019	7909723	359084	315	55	45	36	38	2	1.36
GCRC020	7909723	359059	315	55	55	27	29	2	0.64
GCRC020	7909695	359059	315	55	55	34	44	10	1.36
GCRC021	7909677	359042	315	55	50	22	36	14	3.02
GCRC025	7909263	359109	315	72	70	26	31	5	3.77
GCRC025	7909263	359109	315	72	70	48	49	1	9.19
GCRC026	7908945	358864	315	67	55	29	31	2	1.66
GCRC026	7908945	358864	315	67	55	35	36	1	3.06
GCRC027	7909272	359127	315	75	50	31	32	1	2.19
GCRC028	7909249	359096	315	55	50	23	25	2	0.30
GCRC028	7909249	359096	315	55	50	31	40	9	18.00
GCRC029	7909241	359103	315	75	55	30	39	9	10.67
GCRC029	7909241	359103	315	75	55	48	50	2	0.92
GCRC030	7909218	359095	315	72	66	37	50	13	8.16
GCRC030	7909218	359095	315	72	66	52	60	8	6.74
GCRC031	7909215	359073	315	60	50	27	33	6	1.31
GCRC032	7909213	359126	315	55	90	49	51	2	0.63
GCRC032	7909213	359126	315	55	90	63	70	7	13.86
GCRC033	7909197	359088	315	55	69	45	47	2	4.89
GCRC033	7909197	359088	315	55	69	61	63	2	0.64
GCRC034	7909183	359073	315	55	66	31	32	1	1.16
GCRC034	7909183	359073	315	55	66	56	60	4	4.90
GCRC035	7909198	359060	315	55	50	17	18	1	0.78
GCRC035	7909198	359060	315	55	50	35	36	1	0.57
GCRC036	7908994	358914	315	55	50	34	35	1	4.82
GCRC036	7908994	358914	315	55	50	38	40	2	1.14
GCRC037	7909191	359119	310	60	102	63	67	4	0.34
GCRC037	7909191	359119	310	60	102	74	75	1	1.88
GCRC038	7909203	359134	305	60	120	58	59	1	0.56
GCRC038	7909203	359134	305	60	120	73	75	2	2.16
GCRC039	7909243	359113	308	60	70	30	39	9	5.69

Hole	Northing (GDA94_55)	Easting (GDA94_55)	Azimuth	Dip	EOH Depth	From	То	Width	Grade (Au g/t)
GCRC039	7909243	359113	308	60	70	49	52	3	0.46
GCRC040	7909239	359126	315	60	95	41	42	1	6.67
GCRC040	7909239	359126	315	60	95	57	58	1	0.27
GCRC041	7909183	359101	315	60	90	59	67	8	8.80
GCRC042	7909160	359094	300	60	108	50	57	7	0.47
GCRC042	7909160	359094	300	60	108	76	80	4	1.20
GCRC043	7909643	359045	315	70	96	47	48	1	0.58
GCRC043	7909643	359045	315	70	96	66	70	4	5.13
GCRC044	7909663	359052	310	55	70	38	41	3	0.96
GCRC044	7909663	359052	310	55	70	49	54	5	4.80
GCRC045	7909683	359051	305	55	54	27	30	3	1.24
GCRC045	7909683	359051	305	55	54	35	42	7	0.79
GCRC046	7909229	359100	302	60	80	30	38	8	1.68
GCRC046	7909229	359100	302	60	80	43	52	9	4.43
GCRC047	7909215	359131	310	55	90	48	50	2	1.68
GCRC047	7909215	359131	310	55	90	67	69	2	1.44
GCRC048	7909167	359091	315	55	108	46	51	5	1.45
GCRC048	7909167	359091	315	55	108	72	76	4	5.67
GCRC049	7909175	359085	315	57	90	36	37	1	1.53
GCRC049	7909175	359085	315	57	90	66	71	5	1.86
GCRC050	7909194	359071	315	57	72	20	21	1	0.47
GCRC050	7909194	359071	315	57	72	43	44	1	6.08
GCRC051	7909168	359078	315	58	84	39	43	4	2.07
GCRC051	7909168	359078	315	58	84	65	70	5	3.91
GCRC052	7909171	359063	315	57	84	29	33	4	2.30
GCRC053	7909171	359100	315	58	84	62	63	1	0.34
GCRC053	7909171	359100	315	58	84	77	79	2	0.77
GCRC054	7909190	359048	315	57	60	15	19	4	2.43
GCRC054	7909190	359048	315	57	60	29	38	9	2.53
GCRC055	7909189	359037	315	57	42	12	14	2	0.78
GCRC055	7909189	359037	315	57	42	24	26	2	2.40
GCRC058	7909185	359128	315	60	96	74	78	4	14.34
GCRC059	7909198	359144	315	57	96	67	68	1	0.72
GCRC059	7909198	359144	315	57	96	81	82	1	1.76
GCRC060	7909222	359138	315	60	84	70	71	1	0.37
GCRC061	7909279	359132	315	57	48	31	32	1	4.40
GCRC065	7908910	358859	305	61	84	45	47	2	7.48
GCRC065	7908910	358859	305	61	84	54	57	3	9.30
GCRC066	7908957	358848	310	60	42	24	27	3	2.81
GCRC067	7909210	359098	315	61	72	41	51	10	6.79
GCRC067	7909210	359098	315	61	72	54	63	9	1.69
GCRC068	7909653	359030	313	54	57	22	42	20	4.60
GCRC071	7909119	358953	315	60	48	19	20	1	1.12
GCRC073	7909733	359091	313	54	45	17	18	1	1.04