

12 April 2022 ASX: WMC

# ORE RESERVES UPDATE AND FEASIBILITY PROGRESS REPORT

# **HIGHLIGHTS**

## **ORE RESERVES**

- Updated Ore Reserve now 36.8Mt @ 1.20g/t for 1.42Moz contained gold
- Underground Ore Reserve at Wiluna increased by 51% (tonnes) and 31% (ounces) to 6.52Mt @ 4.11g/t for 861.9koz of contained gold
- Increased underground Ore Reserve supports medium to long-term plans to grow gold production with a focus on high-grade underground mining areas

### **FEASIBILITY STUDIES**

- Feasibility Studies ongoing
- Stage 1 metrics are positive with targeted production of 110kozpa-125kozpa, AISC of A\$1,796/oz (after payable charge of ~A\$400/oz), NPV \$343 Million, IRR 305%
- Based on rapidly escalating input costs, tight labour conditions and incomplete feasibility outcomes, the Board has decided to pause further expansion and focus on optimising Stage 1 and project cashflows until conditions improve
- This allows time to drill out of the Wiluna Mining Centre which contains high-grade mineral inventory of 3.11Moz @ 5.81g/t (above 3.5g/t cut-off) to support further development
- With further minor, lower-cost modifications, Stage 1 could increase incrementally to produce circa 150kozpa

Wiluna Mining Corporation Limited (ASX: WMC) ("Wiluna Mining, WMC or the Company") is pleased to report an Ore Reserve update for the Wiluna Mining Centre, as well as an update on the Feasibility Studies being conducted by the Company.

The Company has made the prudent decision to continue to work on these studies and delay the Stage 2 expansion at this time. We believe more is required for the Stage 2 studies to be considered definitive, especially with additional Resource and Reserve development drilling required, particularly at the southern end of the Wiluna Mining Centre.

Current economic and social circumstances of rising inflation, COVID disruptions, significant shortages of skilled labour in the state of Western Australia, shipping and equipment supply constraints, as well as the uncertainty over the war in Ukraine have played a major role in convincing management and Board that launching into a two year, multi-million-dollar expansion is not prudent at this time and not in the best interest of our shareholders.



Given the potential of the multi-million-ounce scale of the Wiluna ore body, we believe that further drilling to define the Resources and Reserves of the Wiluna Mining Centre and gain a greater understanding of the true size of the opportunity in front of us, along with the associated studies, is a far more prudent and sensible to fully optimise the potential of Wiluna. The Company will concentrate on bringing Stage 1 up to commercial production and to optimise Stage 1, which will be fully ramped up by the end of CY2022 with steady-state production estimated initially between 110,000-125,000 ounces per annum that with further minor, low-cost modifications could increase incrementally to produce circa 150,000 ounces per annum.

### **APRIL 2022 ORE RESERVE UPDATE – SUMMARY**

## **Summary**

- Ore Reserves based on completed internal JORC compliant studies
- 10% total Ore Reserve increase after depletion from 1.29Moz to 1.42Moz
- Wiltails Ore Reserve decreased slightly by 43.3koz due to tailing dam construction impacting on a portion of tailings Ore Reserve
- Importantly, the underground Ore Reserve at the Wiluna Mining Centre increased by 31% (202koz) to 861.9koz @ 4.11 g/t

	Wiluna Mining Corporation 2021 Ore Reserve Summary								
Mining Contro		Proved			Probable	:		Total	
Mining Centre	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Wiluna <sup>3</sup>	0.20	1.80	11.8	6.58	4.09	865.2	6.78	4.02	876.9
Stockpiles	0.37	0.98	11.8	-	-	-	0.37	0.98	11.8
Wiltails <sup>4</sup>	•	-	-	29.61	0.56	535.6	29.61	0.56	535.6
TOTAL	0.58	1.27	23.6	36.19	1.20	1400.7	36.76	1.20	1424.3

<sup>&</sup>lt;sup>1</sup> The reported Mineral Resources are inclusive of the Ore Reserves.

The updated Ore Reserve reaffirms the Company's strategy of underground mining and production of gold in concentrate from the newly commissioned processing flotation plant. This strategy will be supported by the operation of the Wiltails retreatment plant which remains on track for commissioning in mid-2022.

The Ore Reserve estimate (as at 31 March 2022) is based on the Mineral Resources announced on 17 November 2021 and has been updated in accordance with the JORC Code 2012 edition.

This Ore Reserve update has included an assessment of

- Underground mining at the Wiluna Mining Centre.
- Surface stockpiles.
- Retreatment of historical tailings.

 $<sup>^{2}</sup>$  Tonnes are reported as million tonnes (Mt) and rounded to the nearest 10,000; grade reported in grams per tonne (g/t) to the nearest hundredth gold (Au) ounces are reported as thousands rounded to the nearest 100.

<sup>&</sup>lt;sup>3</sup> Wiluna Reserves includes mining from open pit and underground deposits.

<sup>&</sup>lt;sup>4</sup> Wiltails Ore Reserve includes reclaimed tailings material in Dam C, Dam H, TSF West and backfilled pits at Adelaide, Golden Age, Moonlight, and Squib.



- Open-pit mining of Golden Age deposit.
- Processing of free milling ore through the existing CIL circuit on a campaign basis.
- Processing of sulphide ore primarily from underground mining initially through the 750ktpa Stage 1
   Sulphide flotation plant and ramping up to processing through a 1.5Mtpa Stage 2 Sulphide flotation plant.
- A gold price of A\$2,450/oz has been used for all underground Ore Reserve design and evaluation assessments, and a gold price of \$2,500/oz was used for the stockpiled, Golden Age open pit and Wiltails design and evaluation. An updated gold price of A\$2,650/oz was used for the financial evaluation of the Ore Reserve estimate.

The increase in underground Ore Reserves continues to endorse the Company's strategy to expand underground Ore Reserves through methodical infill and extensional drilling around the Mineral Resource, supporting near-term production requirements for Stage 1 processing, whilst also ramping up to the planned expanded production rate.

Full details in relation to this estimate have been provided in the Appendix to this announcement titled JORC (2012) Table 1 (see Page 12 of this report). This new Ore Reserve estimate is an update from the Ore Reserve statement released on 16 March 2021 and the 2021 Company Annual Report.

Resource and Reserve drilling is ongoing at Wiluna with currently four rigs drilling at Wiluna. Further updates on our Ore Reserves will be released in the annual Ore Reserve update due in October 2022.

#### FEASIBILITY STUDY UPDATE - APRIL 2022

The Company has been conducting studies for the past 12 months on Stage 2 and 3 planned expansions of the Wiluna Mining Operations. Stage 1 of the overall expansion has largely been completed with:

- Underground mine development in the northern end of the Wiluna Mining Centre,
- The successful commissioning of the concentrator (see Figure 1) in December 2021; and
- The Wiltails tailings retreatment operation currently under construction and shortly to be commissioned;
   production expected to be ramped up from July 2022

Once fully ramped up by the end of CY2022, Stage 1 steady-state production is estimated to produce initially between 110,000-125,000 ounces per annum (see variables Table 1).



Figure 1. Stage 1 sulphide flotation plant.



Targeted Stage 1 LOM Metrics (Once in Commercial Production)	
Estimated Stage 1 LOM	+10 years
Estimate LOM gold price	A\$2,550/oz
Target Underground Tonnes Mined	+750ktpa
Target Throughput: Concentrator	+750ktpa
Target Recovery: Concentrator	83-87%
Target Head Grade: Concentrator	5.0 g/t
Target Production: Concentrator	~100-105kozpa
Target Throughput: Wiltails & Float Tails	2.2Mtpa
Target Head grade: Wiltails & Float Tails	0.45-0.68 g/t
Target Recovery: Wiltails & Float Tails	37-44%
Target Production: Wiltails & Float Tails	~10-20kozpa
Target Gold Production	~110-125kozpa
Target Cash costs (C1)	A\$1,120/oz
Target AISC	A\$1,396/oz
Target AISC with payability charge included*	A\$1,796/oz
*AISC includes a payability charge of ~A\$400/oz	
Stage 1 Targeted Key Project Outcomes	LOM Value
Gold Recovered	1.5Moz
Gold Sales Revenue at \$2,650/oz	A\$3.2B
Pre-Tax Project IRR	305%
Pre-Tax Project NPV (10%)	A\$343 million

Table 1. Stage 1 metrics.

## Notes:

- Assumes mine grade at 5 g/t from1 July 2022 onwards in line with expectations from drilling
- Stage 1 metrics based on completed internal JORC compliant studies
- Underground mining costs at benchmark levels of ~A\$114/t ore
- Tailings retreatment throughput of 2.2Mtpa



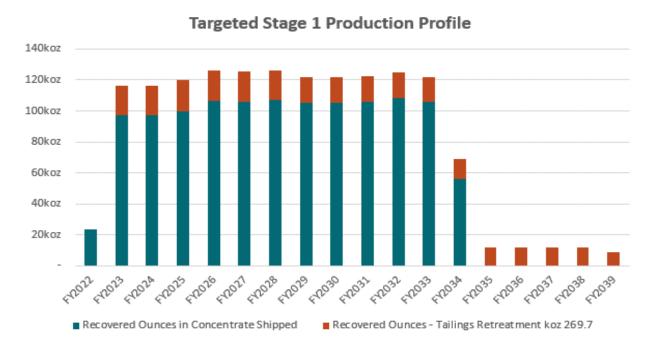


Table 2. Targeted Stage 1 production profile.

#### **FEASIBILITY STUDY SCOPE AND PROGRESS**

WMC's 2022 Feasibility Study (FS) of Stage 2 expansion has considered the following key components:

- Expanding Stage 1 to include underground mining of an estimated mining inventory of 9.9 Mt at an average grade of 4.1 g/t Au at a rate of 1.5 Mtpa with mining services provided through an alliance agreement with the Byrnecut group of companies.
- Provision of a paste backfill production facility and reticulation to the underground mine.
- Construction and operation of a new two-stage crushing and milling circuit and expansion of the Stage 1 concentrator.
- Ongoing wall lifts of tailings dams TSF J and K.
- Provision of 290 new accommodation rooms in an expanded and renovated Village.
- Provision of a wastewater treatment facility.
- Provision of a temporary construction camp to cover the expanded workforce for approximately two years.
- Provision of an expanded power generation facility and associated reticulation infrastructure additional
  to the Stage 2 expansion which included a 4MW solar array. The Stage 3 expansion may also include
  further addition of renewable power generation equipment including wind as well as solar.
- A modest volume of open-pit mining at the end of the schedule encompassing the currently defined Reserves in the West Mine Area. Free milling ore is assumed to be campaigned through the free-milling circuit while sulphides are campaigned through the expanded Stage 2 flotation circuit.
- Tailings retreatment "Wiltails". The CIL plant is assumed as being utilised for the continuous processing of tailings from the concentrator and excavation from historical tailings storage facilities.



In addition, and in a separate Pre-feasibility Study (Stage 3 PFS), WMC is investigating the addition of a pressure leaching processing (POX) facility at the Wiluna mine site with the scope including:

- Construction and operation of a new Pressure Oxidation plant and doré production facility in place of the export of gold concentrate as final product.
- Achievement of a sitewide water balance through management of volumes dewatered from the mine
  extensions as well as provision of a new bore field south of the existing operations to provide low salinity
  water for the hydrometallurgical facility.
- Re-establishment of calcrete mining and haulage activities to provide feed to the neutralisation sections
  of the hydrometallurgical facility.

The existing crushing and grinding circuits are not part of the processing facility envisaged in this study but are free for use on free milling developments in the future.

The CIL plant is assumed as being utilised for the continuous processing of tailings from the concentrator and excavation from tailings storage facilities on site.

Once mined, underground and open pit ores are processed through the Project's comminution circuit, then directed to either the flotation or CIP circuits depending on whether the ore is free milling or refractory. Historical tailings are also reclaimed before first being fed into a drum scrubber / trommel before being processed through the Project's CIP circuit along with the tailings from the flotation circuit recovering 35 – 50% of the contained gold in either stream.

#### SULPHIDE ORE PROCESSING TO CONCENTRATE

GR Engineering Services Limited were engaged to provide an EPC based design, costing, draft contract and study document for the design of a new crushing and milling circuit and expansion of the flotation circuit including the provision of a second identical filter to handle the doubling of concentrate production. The nominal feed rate capacity of the resultant circuit is 1.5 Mtpa of fresh ore. The crush, grind and flotation layout is shown in Figure 2.

This part of the project has an estimated capital cost of \$95.2M, and operating cost of \$41.8Mpa current as at October 2021. The Project construction schedule has a 79-week duration from the date of commencement of early engineering works to practical completion. The schedule assumes that prior to commencement of early works the selected High Pressure Grinding Rolls (HPGR) vendor would undertake confirmation test work that would verify selection of the unit and allow an agreed performance guarantee to be negotiated. This testwork is now complete.



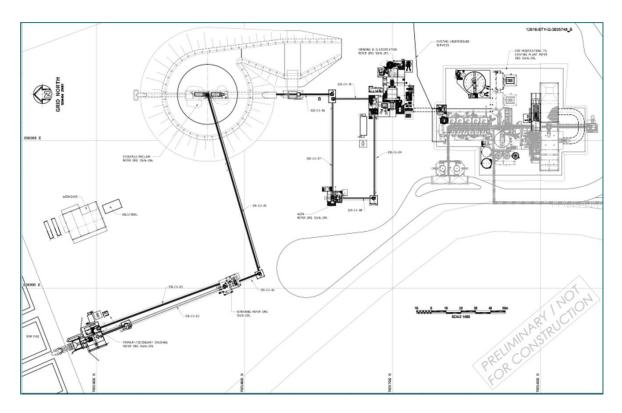


Figure 2- Stage 2 processing plant layout.

## SULPHIDE CONCENTRATE PROCESSING TO DORE (STAGE 3 OPTION)

A study completed by Ausenco Pty. Ltd. has defined the inclusion of a pressure oxidation (POX) hydrometallurgical facility project at a pre-feasibility level with the following key attributes:

- The POX process plant would be located on a 3.3 Ha plot northeast of the Stage 2 flotation concentrator and east of the planned Stage 2 ROM and primary crushing circuit.
- The capacity of the POX facility would be for 100,000 tpa concentrate feed from the Stage 2 concentrator.
- An autoclave residence time of between 3 and 4 hours is required. Four hours was selected as the basis
  of the PFS, however further test work is planned for the next phase to optimise this duration given its
  sensitivity on capital costs.

The project has an estimated capital cost of \$229M, and operating cost of \$32.7Mpa. The project would be developed over a 39-month period (27-month execution phase).

The layout designed in the prefeasibility study is shown in Figure 3.



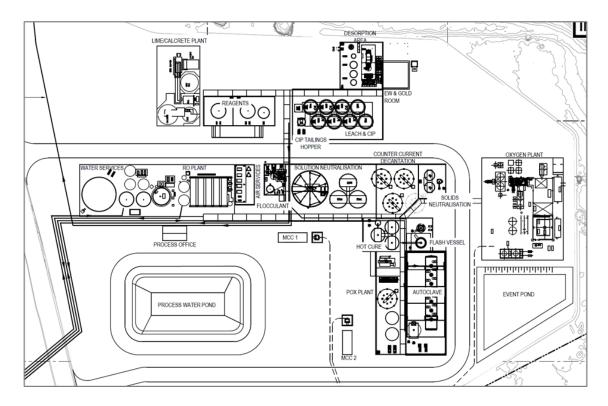


Figure 3. Pressure oxidation processing plant conceptual layout.

Prior to the commitment to the Stage 3 expansion a Feasibility Study (FS) would be required which would include a metallurgical test work program, a geotechnical investigation, a value engineering program and finally delivery of the Feasibility Study. The metallurgical test work program would run for 4 to 6 months. Process design for the Feasibility Study would commence four months into the test work program. Results from a site geotechnical investigation are also anticipated to be completed during this initial period.

### **ACCOMMODATION INFRASTRUCTURE REQUIREMENTS**

As part of the Stage 2 and 3 expansions, the Village capacity would need to be increased and the quality of the older rooms be improved through a replacement program. The expansion of the village would occur via the demolition and replacement of current blocks A through to D. Also, a construction camp would be required through Stage 2 construction, the village replacement project and Stage 3 construction activities.

## **WASTEWATER TREATMENT FACILITY**

WMC currently collects sources of wastewater from various areas such as workshops, processing facilities, offices and the village and disposes of them either through expensive tanker pump out and removal (for all but the village) and evaporation from a series of ponds installed approximately 1,500 metres from the fence line. In line with the Company's ESG objectives as part of the Stage 2 and 3 scopes of work, provision of a centralised wastewater treatment facility has been included.



### **POWER GENERATION & NATURAL GAS PIPELINE CAPACITY EXPANSION**

An additional 15 MW power is required to operate the expanded underground mine and new processing facility. This will be supplied through a plant expanded by WMC's current partner Contract Power Group and include the installation as a 4 MW capacity solar array.

The Natural Gas supply pipeline would need to have its capacity increased for the Stage 2 and 3 expansions. The scope of work to increase the line capacity includes several modifications at the offtake and delivery stations and relevant tie-in works. It is estimated the works would take approximately 12 months.

#### **TAILINGS STORAGE**

Tailings Storage Facilities (TSF) have been constructed for the impoundment of waste slurry from the processing facilities. TSF J and K would continue to be used for the impoundment of tailings. Costs have been estimated for the construction of the dam lifts for the duration of the mining and Wiltails inventories.

Geochemical characterisation work has indicated that the tailings slurry from the Stage 3 hydrometallurgical facility can be co-mingled with flotation tailings post cyanidation so no separate tailings storage facilities should be necessary.

#### **OPEN PIT MINING PLAN**

Wiluna Mining Centre has an estimated open pit in situ Mineral Resource of 1.3Moz (14.3Mt @ 2.8g/t Au) in total, which includes:

- 0.65Moz (6.4Mt @ 3.2g/t) of Measured & Indicated Resources.
- 0.65Moz (7.9Mt @ 2.6g/t) of Inferred Resources.

Design work on the Wiluna pit shells, comprising of various cutbacks on the existing pits, was completed and resulted in the Wiluna West pit design being included with a cutback of the Moonlight and Lone Hand pits calculated to produce 618,000t @ 3.5 g/t (approx. 70,000 oz) of sulphide ore.

Golden Age pit can be cutback to access waste for the construction of wall lifts for TSF K and free milling ore however this has not been considered in this study as the timing for this mining is difficult to determine as the availability of the free milling circuit is an unknown.

There has been conceptual planning to restart open-pit mining of free milling ore in the future but this is subject to further drilling and studies.

## **CALCRETE MINING & HANDLING**

Calcrete, a neutralising agent able to be mined on leases owned by WMC, would be used for the neutralisation of acid produced in the pressure oxidation (POX) process. The annual calcrete requirement for the Stage 2 plant is estimated to be 200,000 tpa. The nearest source of calcrete is located approximately 5 km southwest of the Wiluna Processing plant, along the Matilda haul road. Calcrete in this area is covered by approximately 300 mm of topsoil and is expected to be present in 1-3 m thick layers. The calcrete is likely to be soft and relatively easily excavated. Calcrete resources in that area are estimated to be more than three million tonnes.

## **CONCENTRATE MARKETING & LOGISTICS**

Concentrate marketing, sales and logistics will be similar to current contracts for the Stage 1 development while concentrate continues to be sold to WMC's offtake partners.

### **WATER SUPPLY**

Licenses to extract ground water are in place to supply water to the WMC Operations including the Processing Plant, Village and Mine Workshop, amongst other existing infrastructure. The company also maintains a license to



extract groundwater from the Wiluna pits and underground workings and discharge to Lake Way via an existing settling pond. The addition of a tailing's thickener to the Stage 2 concentrator eliminates the need for further water sources to be established however for Stage 3 a further 1.3 GL/a of low salinity water is required. It is proposed that a new bore field be constructed south of the existing facilities in the calcrete ore zones.

#### CONCLUSION

Feasibility work is ongoing. The studies have identified that additional Resource and Reserve development drilling is required over the next 18-24 months, particularly at the Company's South Mine Area at the Wiluna Mining Centre. The South Mine (comprising the East and West Lodes) has historically been one of Wiluna's better performing mines but because of water and access issues it has not been accessible to develop and fully drill out the deposits from underground. The Company is currently working on a de-water, develop and drill program which will is expected to take 18-24 months, and further studies before we can complete the full feasibility of the entire Wiluna Mining Centre.

For these reasons, along with the current economic, social and political conditions, it has been decided to pause the planned Stage 2 and 3 expansions and concentrate on bringing Stage 1 up to commercial production and to optimise Stage 1 as it stands now.

Other factors included in this decision include:

- 1. Significant capital has been invested into Stage 1 of the project, which can be a robust stand-alone operation in its current form as demonstrated in Table 1
- 2. With further minor, lower cost modifications, Stage 1 could increase incrementally to produce circa 150kozpa
- 3. Current economic, social and political circumstances, with rising inflation, COVID disruptions, manning issues including significant shortages of skilled labour in the state of Western Australia, shipping and equipment /material supply issues with significant delays, as well as the uncertainty over the war in the Ukraine have played a major role in convincing management and Board that launching into a two year, multi-million dollar expansion is not prudent at this time and not in the best interest of our shareholders; and
- 4. Given the potential for multi-million-ounce scale of the Wiluna ore body, WMC believes that further drilling to define Resources and Reserves of the Wiluna Mining Centre and gain a greater understanding of the true size potential of the opportunity, along with the associated studies, is a far more prudent and sensible to fully optimise the potential of Wiluna.

## **FURTHER WORK REQUIRED ON THE STUDIES**

The studies will continue, and our focus will be on drilling out the upper 600 metres of the Wiluna Mining Centre, especially the southern mine which, for reasons outlined above, has had the least amount of drilling.

Additional work will include:

- 1. Assessing free milling opportunities in the project and third-party "stranded" free milling and sulphide opportunities in the Wiluna region.
- 2. Looking at opportunities to monetize for our shareholders the significant Ni and Li opportunities that exist on WMC's large tenement package; and
- 3. Further work on the size and potential for right-sizing the Wiluna operation including additional work on advancing the Pre-Feasibility Study on Stage 3.



## Wiluna Mining Executive Chair, Milan Jerkovic, commented:

"The Ore Reserve increase for Wiluna is the result of focused efforts of our geological and mining teams over the past 12 months to grow our Resources and Reserves in support of the operation of our newly commissioned Stage 1 flotation circuit and the growth strategy being pursued by the Company.

Despite the Open Pit Ore Reserves at Wiluna reducing with the current focus around underground operations, we continue to investigate ways to bring this abundant, broad mineralization back to a Reserve status in the coming years.

Confirmation of the significant Wiltails Reserves after the completion of detailed tailings mining design for the project further verifies the intrinsic value of the project which will be commissioned in Q4FY22.

The potential for extensions to known Mineral Resources at Wiluna remains considerable so we will continue to maintain the momentum we have built to methodically infill drill the significant gaps between defined lodes particularly in the Happy Jack, Bulletin and Essex areas as well as in the South Mine Area.

Regarding our ongoing Feasibility Studies, the Company has made the prudent decision to continue to work on these studies and delay the Stage 2 expansion at this time. We believe more work is required for the Stage 2 studies to be considered definitive especially with additional Resource and Reserve development drilling required in the southern end of the Wiluna Mining Centre. We also believe that pushing ahead with a large scale, capital challenging expansion in this current economic and social environment is not in the best interest of our shareholders and for this reason we will pause and optimise Stage 1, which we believe has considerable stand-alone potential, and seek to continue our drilling and studies to "right size" the Wiluna Mining Operation going forward".

#### **END**

This announcement has been approved for release by the Board of Wiluna Mining Corporation Limited. For further information on Wiluna Mining please contact:

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## **BOARD OF DIRECTORS**

Milan Jerkovic – Executive Chair
Greg Fitzgerald – Non-Executive Director
Lisa Mitchell – Non-Executive Director
Colin Jones – Non-Executive Director
HJ Plaggemars – Non-Executive Director
Rowan Johnston – Non-Executive Director

## CORPORATE INFORMATION

211.3M Ordinary Shares
3.7M Unquoted Options/ZEPO's

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## **APPENDIX 1**

## **ORE RESERVE UPDATE - APRIL 2022**

### Location

The Company's operations, as shown in Figure 1, are located adjacent to the township of Wiluna approximately 1,000km northeast of Perth. Current mining operations and the 2021 Ore Reserves are located within the Wiluna Mining Centre where all underground Reserves exist. In February 2021 the Williamson open pit was completed and ore stockpiles transferred to Wiluna through 2021 where all operational activity is now focussed.

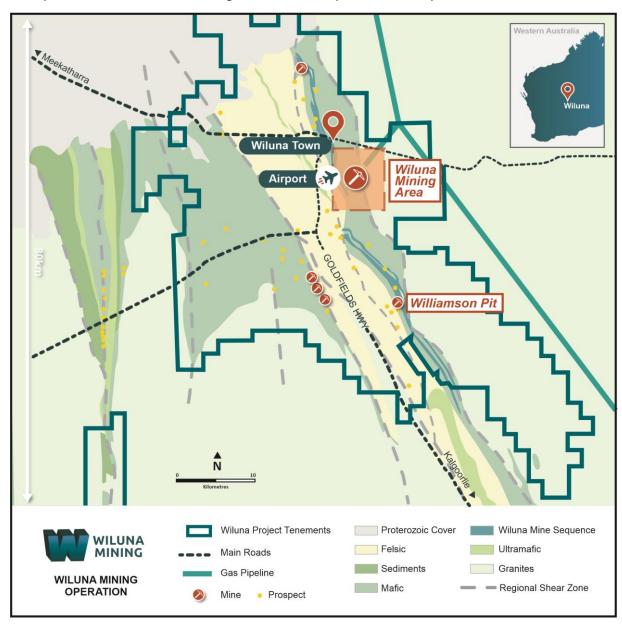


Figure 1: Wiluna Mining Corporation Leases and Operating Areas



## **Ore Reserve Summary**

The 2021 surface and underground Ore Reserves are shown in Table 1 below. The 2021 Ore Reserve is based on the 2021 Mineral Resource Estimate, depleted for production to 31 March 2022.

Table 1: Ore Reserve as at 31 March 2022

Wiluna Mining Corporation 2021 Ore Reserve Summary									
Mining Contro		Proved			Probable			Total	
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TOTAL	0.58	1.27	23.6	36.19	1.20	1400.7	36.76	1.20	1424.3

<sup>&</sup>lt;sup>1</sup> The reported Mineral Resources are inclusive of the Ore Reserves.

## **Underground Operations and Reserves**

- Underground Ore Reserves of 6.52Mt @ 4.11g/t for 861.9koz are declared all of which, except 0.3kozs are classified as sulphide feed for the flotation plant.
- Updated costs, revenue and mining parameters were used to redesign development and production areas resulting in Ore Reserves being delineated at:
  - Squib underground (2% of contained ounces),
  - o Bulletin, Bulletin South, Woodley and Henry the Fifth (33% of contained ounces),
  - o Happy Jack and Essex (9% of contained ounces),
  - o Burgundy and Baldrick (24% of contained ounces), and
  - East/West Lode, East Lode South and Calvert (33% of contained ounces).
- The underground Ore Reserve estimate has been declared based on the Stage 2 Feasibility Progress Report undertaken by Mining Plus Consultancy for Wiluna Mining Corporation.
- Included within the underground Ore Reserve estimate is 3.8kt @2.47g/t for 0.3kozs of free milling ore from the Golden Age underground deposit.
- The extents of the total underground Ore Reserve results are shown in Figure 2.

<sup>&</sup>lt;sup>2</sup> Tonnes are reported as million tonnes (Mt) and rounded to the nearest 10,000; grade reported in grams per tonne (g/t) to the nearest hundredth gold (Au) ounces are reported as thousands rounded to the nearest 100.

<sup>&</sup>lt;sup>3</sup> Wiluna Reserves includes mining from open pit and underground deposits.

<sup>&</sup>lt;sup>4</sup> Wiltails Ore Reserve includes reclaimed tailings material in Dam C, Dam H, TSF West and backfilled pits at Adelaide, Golden Age, Moonlight, and Squib.



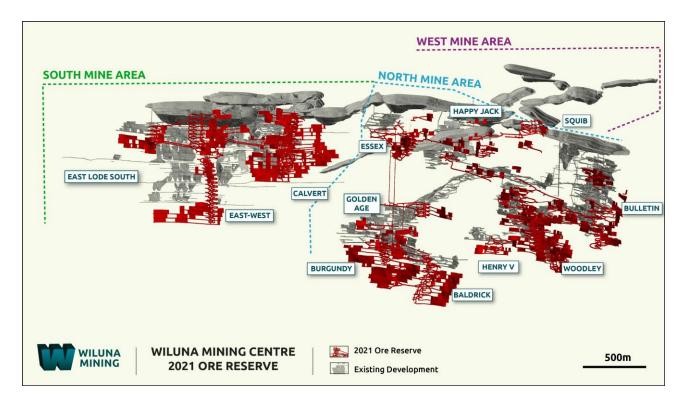


Figure 2: JORC 2012 compliant underground Ore Reserve.

The underground Mineral Resource for the Wiluna Mining Centre is modelled to be mined by diesel electric development and production equipment. Deposit access is by conventional decline drill and blast development access suitable for the latest high efficiency mining equipment. The production method employed is long hole open stoping with in-situ pillars for local support, until the cemented paste fill plant is constructed, and paste distributed to the underground workings. Underground mining contractor Byrnecut Mining Limited has been engaged in an alliance agreement to complete development and production operations, including the supply and maintenance of all mobile equipment requirements and operating fixed plant requirements.

A mine operating plan has been developed for the Wiluna underground sulphide Resources. Modifying factors used within this plan have been sourced from various contracts, agreements, consultant reports and documents operating standards or historical records that exist at the underground operations. The operating plan includes a mine development, production, services, equipment and manning schedule that reflects the continuation of the delivery of underground feed for the Stage 1, 750ktpa plan, ramping up to a planned 1.5Mtpa Stage 2 Sulphide flotation plant. These are based on haul cycles, production rates, availabilities and utilisation measures suitable for the mine as designed.

Resource, geotechnical and representative performance standards were used to complete the stoping and development requirements for the plan.

Infrastructure and services have been designed to support the mine plan, with implementation progressing as planned. Several areas will continue to require rehabilitation to access the required stoping areas.

Processing performance factors have been used from feasibility studies conducted on the Stage 1 Sulphide plant option and recent plant performance now that it is in operation.



A gold price of A\$2,650 per ounce and the concentrate sales agreement terms have been used for revenue calculations.

The financial model collates data from the mining and processing schedules, operating performance criteria, existing site and contractual cost data, and sales forecast revenue to confirm Ore Reserve profitability.

The Ore Reserve is supported by capital expenditure estimates, operating expenditure estimated from a detailed cost model and mining and processing schedules.

Capital and operating costs and mine schedules to support the Ore Reserve reflect processing of the ore through the Stage 1 750ktpa flotation plant and ramping up to processing through a 1.5Mtpa Stage 2 Sulphide flotation plant.

## **Surface Operations and Reserves**

The surface Ore Reserves include open pit mining of the Golden Age deposit, surface stockpiles and tailings for retreatment.

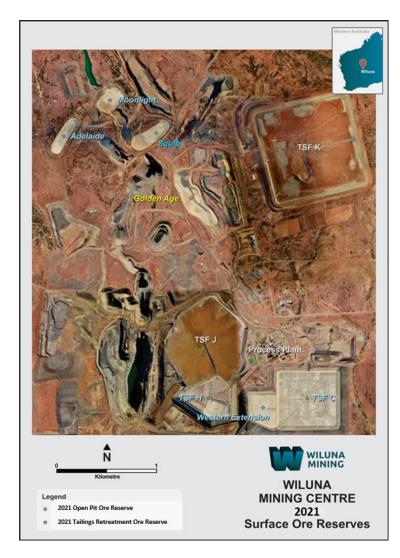


Figure 3: Surface Ore Reserves location.



## **Open Pits**

Open pit and surface stockpile Ore Reserves total 0.63Mt @ 1.31g/t for 26.6koz

The 2021 open pit Ore Reserve has seen a marked reduction in the available material for open pit mining from the 2020 estimate. The reasons for this include:

- Depletion through the completion of mining in the Williamson open pit.
- Mining of the squib deposit now being extracted through underground mining methods has seen a reassignment of the Squib open pit Reserves to the underground Reserves.
- Running down of surface stockpiles during stage 1 flotation plant commissioning.

### Wiltails

The tailings retreatment project (Wiltails) has an Ore Reserve of 29.6Mt @ 0.56g/t for 535.6koz which is a 6% reduction in tonnes and 7% reduction of contained ounces. The decrease can be attributed to the geotechnical recommendation from Knight Piesold Consultants for the purposes of maintaining wall stability when mining TSF H during the first few years of operation.

Several tailings storage facilities and open pits exist at the Wiluna Mining Centre containing tailings from which gold may be economically recovered by re-leaching through the existing CIL processing plant.

Tailings will be recovered using traditional excavator and truck operations with the recovered tailings passed through a new trommel to remove any oversize materials and contamination before being treated in the existing CIL leach tanks. Once the flotation circuit has been commissioned the existing leach tank capacity can be repurposed to treat these tailings.

Tailings Ore Reserves exist in the Moonlight, Squib and Adelaide pits, as well as Tailings Storage Facilities C, H and Western Extension (Figure 3). Tailings within the recently operated tailings storage facilities J and K do not form part of the Wiltails Ore Reserve.

#### **Stockpiles**

Each individual stockpile from current and historical mining areas was assessed at a gold price of A\$2,500/oz and those stockpiles that could be hauled and processed profitably were included in the Ore Reserves. After this assessment the Ore Reserve gold price was positively adjusted to A\$2,650 which maintains their profitability.

The stockpile assessment was based upon the volume status as of March 31, 2022.

#### **Summary**

The component of Ore Reserves excluding previously mined ore in stockpiles and tailings storage equates to 18% of tonnes available for processing and 61% of contained gold as shown in Table 2 and Figure 4.

Table 2: Wiluna 2021 Ore Reserves - Tonnes, Grade and Ounces by Area

Area	Wiluna (OP)	Golden Age (UG)	East West (UG)	Bulletin (UG)	Happy Jack (UG)	Burgundy (UG)	West (UG)	Total (OP/UG)	Stockpiles	Wiltails
Tonnes (Mt)	0.25	0.00	2.16	2.29	0.63	1.32	0.12	6.78	0.37	29.61
Grade (g/t)	1.80	2.47	4.03	3.82	3.83	4.76	5.20	4.02	0.98	0.56
Ounces (koz)	14.8	0.3	280.5	281.5	77.2	202.7	20.0	876.9	11.8	535.6





Figure 4: Wiluna 2021 Ore Reserves – Ore Tonnes, Grade and Ounces by Mining Area.

## **Changes to 2020 Ore Reserves**

This 2021 Ore Reserve (as of 31 March, 2022) has changed since the 2020 Ore Reserve (release 16 March 2021) estimate, for several reasons with the most significant changes outlined as follow:

- Updated Mineral Resource modelling methodology, particularly around top cut evaluation resulted in a significant increase to the grade and associated available ounces of the Burgundy and Baldrick deposits.
- Calculation of underground deposit-specific economic cut-off grades rather than a generic overall cut-off
  grade in 2020 of 3.5g/t, resulted in generally lower cut-off grades applied and greater tonnes, for a lower
  overall Ore Reserve grade. Taking into consideration individual deposit parameters and costs provided a
  more accurate determination of optimal cost-effective mine design.
- A change in the project financials in line with the Company's strategy and a feasibility progress report to ramp up production to achieve a 1.5Mtpa Stage 2 Sulphide flotation plant processing throughput.
- Inclusion of Golden Age underground free milling material that was not previously considered due to the lack of a JORC compliant Resource model.
- Depletion through the completion of mining in the Williamson open pit.
- Mining of the Squib deposit now being extracted through underground mining methods has seen a reassignment of the Squib open pit Ore Reserves to the underground Ore Reserves.
- Running down of surface stockpiles during Stage 1 flotation plant commissioning.



The cumulative effect of the changes on the Ore Reserve tonnes and ounces has been represented in the following Figure 5 and Figure 6 waterfall charts.

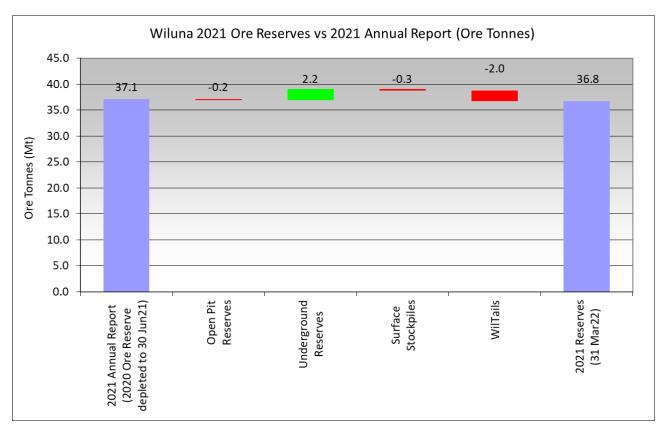


Figure 5: Wiluna 2021 Ore Reserve – Annual Report waterfall chart (ore tonnes)



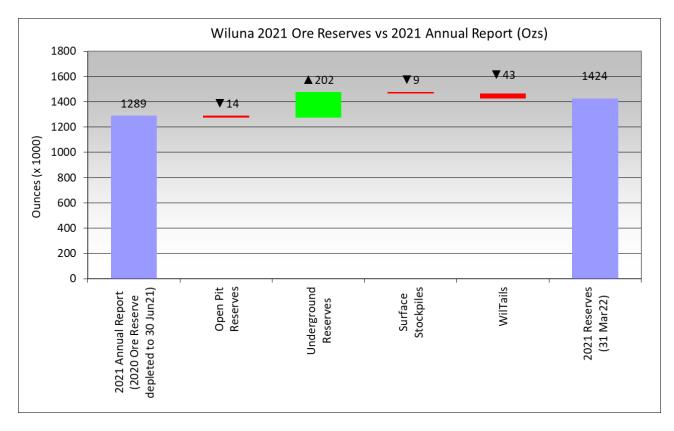


Figure 6: Wiluna 2021 Ore Reserve - Annual Report waterfall chart (ounces).

## **Ongoing Resources and Reserve Development**

The 2021 Mineral Resource and Ore Reserve development program has successfully expanded the underground Reserves in support of the operation of the Stage 1 flotation plant and the ongoing feasibility work centred upon expansion to 1.5 Mtpa ore processing through the Stage 2 plant. This work was part of the in-progress multi-year development of Mineral Resources and Ore Reserves which will increase the Company's confidence in making longer-term business decisions for the redevelopment of Wiluna.



# **ORE RESERVES – MATERIAL ASSUMPTIONS**

The assessment and reporting criteria along with a summary of all other material information pursuant to ASX Listing Rules and in accordance with JORC Code 2012 is presented in the following pages of this announcement.

### **Mining Method**

The 2021 Ore Reserve estimate shall be extracted by conventional underground and open pit mining methods.

Open pit mining will be conducted by standard truck and excavator fleets typical of gold mining operations in the Goldfields. The surface mining operator/contractor will provide drill and blast, load and haul equipment and ancillary fleet. Blasting will take place on 5m benches with excavation on 2.5m flitches.

Underground operations will utilise standard diesel equipment and mechanised mining practices provided by a suitably qualified and experienced mining contractor. Existing declines, lateral development and vertical ventilation infrastructure will be rehabilitated where practical and to provide access for ore production.

Long hole open stoping (LHOS) will be the ore production method with the inclusion of cemented paste fill to maximise ore recovery rather than to provide ground support as the geotechnical conditions are assessed as very competent. An added benefit of utilising paste fill is that it will reduce the surface storage of tailings and mine closure site rehabilitation requirements.

Considerable underground development exists from historical operations and this will be refurbished for use where required and to meet industry accepted safety expectations. The dewatering of flooded mine areas (for access and safety) is also to be conducted for Ore Reserve extraction. The time and cost of the rehabilitation and dewatering has been included in the estimation cost model.

All underground rehabilitation, development and production will be provided by contractors with the Company providing all technical design and direction.

Potential remnant mining around historical underground workings has not been assessed or included within the Ore Reserve estimate and presents an opportunity to add additional Reserves once mine design, scheduling and cost modelling have progressed to the required level.

#### **Ore Reserve Classification**

Ore Reserves were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012).

Material types have been classified within the Mineral Resource Estimate as Measured, Indicated and Inferred based on a combination of quantitative and qualitative criteria. Designs for both open pits and underground are based on Measured and Indicated blocks after the application of modifying factors including allowances for ore loss, dilution and removal of isolated blocks. Proven ore in the Ore Reserve is comprised on Measured ore blocks after the application of modifying factors. Probable ore is comprised of Indicated ore blocks after the application of modifying factors. No Inferred material is included in the Ore Reserve.

### **Cut-off Grade**

The open pit cut-off grade was calculated for oxide, transitional and fresh material types based on known mining costs (contractor rates), processing through the CIL circuit and associated recovery parameters. Table 3 shows the cut-off grade for each of these ore types.



Open Pit Cut-Off Grade				
Oxide Ore	0.49 g/t			
Transitional Ore	0.62 g/t			
Fresh Ore	0.96 g/t			

Table 3: Indicative open pit cut-off grade

The underground cut-off grade was calculated based on the various cost, performance, recovery and sales terms data. The cut-off grade was calculated for each individual orebody and ranged from 3.25g/t to 3.75 g/t, however, an incremental stoping cut-off grade of between 2.0 g/t and 2.5 g/t was applied to stoping optimisations to further expand the economic zone where appropriate. Level by level checks were completed to validate this application of the incremental stoping cut-off grade. Isolated and uneconomic stopes were removed by this process.

#### **Revenue Parameters**

Single commodity pricing for gold only, using a flat gold price of A\$2,450 per ounce has been used for all underground Ore Reserve design and evaluation assessments, whereas A\$2,500/oz was used for the Golden Age pit design and Wiltails design. An updated gold price of A\$2,650 per ounce was used for the financial evaluation of the Ore Reserve estimate.

The revenues generated from the CIL plant are 100% payable of recovered gold less a third-party royalty of 3.6%, the government royalty of 2.5% and a A\$5/oz refining fee.

Ore treated through the flotation circuit is sold as a concentrate and is subject to confidential commercial terms. Revenue is calculated based on concentrate gold grade less shipping costs, a third-party royalty of 3.6% and the government royalty of 2.5%.

### **Mining Costs**

Surface mining costs for the optimisation of the Golden Age deposit were generated from the recently demobilised mining contractor MACA Mining schedule of rates.

Underground mining costs have been sourced from the existing underground mining contractor to generate development, production and support costs for this evaluation. Underground infrastructure capital and operating costs include dewatering, ventilation, electrical and other services distribution have been sourced from supplier quotes or contracts where purchasing has commenced. Wiluna existing costs have been used where appropriate.

## **Metallurgical Processing**

The 2021 Ore Reserve has been estimated based on operation of two processing streams. The existing free milling/CIL plant and the recently constructed 750ktpa Stage 1 sulphide flotation plant that is planned to be expanded to 1.5Mtpa in Stage 2.

Open pit ore sources, tailings retreatment and Golden Age underground ore will be processed through the CIL circuit to produce gold doré. The processing cost parameters for the existing free milling/CIL plant are based on actual and historical data from the existing operation.



Wiluna fresh ore is typically refractory, with most gold occurring in either solid solution or as sub-microscopic particles within fine-grained sulphides. WMC plans to use conventional flotation concentration to produce a gold-sulphide concentrate for sale. Stage 1 processing performance and operating costs are drawn from recent plant performance now in operation Capital and operating costs, as well as processing performance factors for the Stage 2 plant is based on the feasibility study and understanding of the stage 1 facility operation.

#### **Forward Looking Statements**

This announcement includes certain statements that may be deemed 'forward-looking statements. All statements that refer to any future production, Resources or Reserves, exploration results and events or production that Wiluna Mining Corporation Ltd expects to occur are forward-looking statements. Although the Company believes that the expectations in those forward-looking statements are based upon reasonable assumptions, such statements are not a guarantee of future performance and actual results or developments may differ materially from the outcomes. This may be due to several factors, including market prices, exploration and exploitation success, and the continued availability of capital and financing, plus general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance, and actual results or performance may differ materially from those projected in the forward-looking statements. The Company does not assume any obligation to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise.

### **Competent Persons Statement**

The information in the report to which this statement is attached that relates to Surface Ore Reserves for the Wiluna Mining Centres, as well as surface stockpiles and tailings retreatment (Wiltails project) is based on information compiled or reviewed by Mr Anand Krishnamurthy, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM Member No. 314741). Anand is a full-time employee of Wiluna Mining Company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Results, Mineral Resources and Ore Reserves'. Anand consents to the inclusion in this announcement of statements based on this information in the form and context in which it appears.

The information in the report to which this statement is attached that relates to Underground Ore Reserves for the Wiluna Mining Centres is based on information compiled or reviewed by Mr Nigel Bennett, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy (AuslMM Member No. 320995). Nigel is a full-time employee of Mining Consultancy, Mining Plus Pty Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Nigel consents to the inclusion in this announcement of statements based on this information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases, and the form and context of the announcement has not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcements.



# **APPENDIX 2**

# Table 1 JORC Code, 2012 Edition.

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.	<ul> <li>Wiluna Mining has used i) reverse circulation drilling (RC) to obtain 1m samples from which ~3kg samples were collected using a cone splitter connected to the rig, ii) HQ or NQ2 (DDH) with ½ core sampling, or iii) LTK60 with full core sampling.</li> <li>Historical core in this report is either NQ2 or LTK60, predominantly drilled in the mid to late 2000's by Agincourt Resources and Apex Minerals. Apex Minerals alone drilled 1,024 diamond holes for 222,170m, with selective sampling, during their 2007 to 2013 tenure.</li> </ul>
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul> <li>Wiluna Mining's sampling procedures are in line with standard industry practice to ensure sample representivity. Core samples are routinely taken from the right-hand-side of the cut line. For Wiluna Mining's RC drilling, the drill rig (and cone splitter) is always jacked up so that it is level with the earth to ensure even splitting of the sample. Face samples are taken across the face, with sample intervals matched to varying intensity of mineralisation as indicated by shearing and sulphides.</li> </ul>
	• 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	<ul> <li>Historically (pre-Wiluna Mining), drill samples were taken at predominantly 1m intervals in RC holes, or as 2m or 4m composites in AC holes. Historical core sampling is at various intervals, indicating that sampling was based on geological observations at intervals determined by the logging geologist.</li> <li>Wiluna Mining analysed RC and DDH samples using ALS laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS finish. Golden Age and Lennon DDH grade control holes were also analysed at the Wiluna Mine site laboratory for preliminary results, pulverized in an LM5 bowl to produce a 30g charge for assay by Fire Assay with AAS finish.</li> </ul>
	detailed information.	<ul> <li>At the laboratory, samples are weighed and then jaw crushed to 70% passing 6mm. Samples &gt;3kg were 50:50 riffle split to become &lt;3kg. The &lt;3kg splits were crushed to &lt;2mm in a Boyd crusher and pulverized via LM5 to 90% passing 75µm to produce a 50g charge for fire assay. Historical assays were obtained using either aqua regia digest or fire assay, with AAS readings.</li> </ul>
		<ul> <li>Historical core samples were assayed at independent external laboratories Genalysis and ALS in Perth, using the same preparation method described above with either 30g or 50g charge. Analytical procedures associated with data generated by Apex and Agincourt are consistent with current industry practises</li> </ul>



		and are considered acceptable for the style of mineralisation identified at Wiluna.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Wiluna Mining data reported herein is RC 5.5" diameter holes. Diamond drilling is oriented HQ, NQ or LTK60 core.</li> <li>Historical drilling data contained in this report includes RC, AC, RAB and DD core samples. RC sampling utilized face-sampling hammer of 4.5" to 5.5" diameter, AC and RAB sampling utilized open-hole blade or hammer sampling, and DD sampling utilized LTK 60 and NQ2 half core samples. It is unknown if core was orientated, though it is not material to this report. All Wiluna Mining RC drilling used a face-sampling bit.</li> </ul>
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>For Wiluna Mining RC drilling, chip sample recovery is visually estimated by volume for each 1m bulk sample bag and recorded digitally in the sample database. For DD drilling, recovery is measured by the drillers and Wiluna Mining geotechnicians and recorded into the digital database. Recoveries were typically 100% except for the non-mineralised upper 3 or 4m in RC holes, and the weathered upper 50 to 80m of DD holes that is generally more broken and fractured. For historical drilling, most core is in fresh competent rock and recoveries appear to be generally excellent. For DD drilling, sample recovery is maximised in weathered and broken zones by the use of short drill runs (typically 1.5m). For historical drilling, recovery data for drill holes contained in this report has not been located or assessed, owing to incomplete data records. Database compilation is ongoing.</li> <li>For Wiluna Mining RC drilling, sample recovery is maximized by pulling back the drill hammer and blowing the entire sample through the rod string at the end of each metre. Where composite samples are taken, the sample spear is inserted diagonally through the sample bag from top to bottom to ensure a full cross-section of the sample is collected. To minimize contamination and ensure an even split, the cone splitter is cleaned with compressed air at the end of each rod, and the cyclone is cleaned every 50m and at the end of hole, and more often when wet samples are encountered. Historical practices are not known, though it is assumed similar industry-standard procedures were adopted by each operator. For historical drilling with dry samples it is unknown what methods were used to ensure sample recovery, though it is assumed that industry-standard protocols were used to maximize the representative nature of the samples, including dust-suppression and rod pull-back after each drilled interval. For wet samples, it is noted these were collected in polyweave bags to allow excess water to escape; this is standard practice thoug</li></ul>
		drill runs (typically 1.5m).



		For Wiluna Mining drilling, no such relationship was evaluated as sample recoveries were generally excellent.
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>Drill samples have been logged for geology, alteration, mineralisation, weathering, geotechnical properties and other features to a level of detail considered appropriate for geological and resource modelling.</li> <li>Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative.</li> <li>All holes were logged in full. Check-logging was completed on historical intervals retrieved, with only minor edits required to historical logs.</li> <li>Core photography was taken for WMC diamond drilling.</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 insitu 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>	<ul> <li>For core samples, Wiluna Mining uses half core cut with an automatic core saw. Samples have a minimum sample length of 0.3m and maximum of 1.5m, though typically 1m intervals were selected. A cut line is routinely drawn at an angle 10 degrees to the right of the orientation line. Where no orientation line can be drawn, where possible samples are cut down the axis of planar features such as veins, such that the two halves of core are mirror images.</li> <li>For historical drilling sampling techniques and preparation are not known. Historical core in storage is generally half core, with some quarter core remaining; it is assumed that half core was routinely analysed, with quarter core perhaps having been used for check assays or other studies. Holes have been selectively sampled (visibly barren zones not sampled, though some quartz vein intervals have been left un-sampled), with a minimum sample width of 0.3m and maximum of 1.2m, though typically 1m intervals were selected.</li> <li>RC sampling with cone splitting with 1m samples collected, or in the hangingwall 4m scoop composites compiled from individual 1m samples. RC sampling with riffle or cone splitting and spear compositing is considered standard industry practice.</li> <li>For historical samples the method of splitting the RC samples is not known. However, there is no evidence of bias in the results.</li> <li>Wiluna Mining drilling, 1m RC samples were split using a cone splitter. Most samples were dry; the moisture content data was logged and digitally captured. Where it proved impossible to maintain dry samples, at most three consecutive wet samples were obtained before drilling was abandoned, as per procedure. AC samples were 4m composites.</li> </ul>



- Jaw crushing and splitting is considered to be standard industry practice; each sample particle has an equal chance of entering the split chute. At the laboratory, >3kg samples are split so they can fit into a LM5 pulveriser bowl. At the laboratory, >3kg samples are split 50:50 using a riffle splitter so they can fit into a LM5 pulveriser bowl.
- Field duplicates were collected approximately every 20m down hole for Wiluna Mining holes. With a minimum of one duplicate sample per hole. Analysis of results indicated good correlation between primary and duplicate samples. RC duplicates are taken using the secondary sample chute on the cone splitter. AC duplicates were scooped in the field. It is not clear how the historical field duplicates were taken for RC drilling.
- Riffle splitting and half-core splitting are industry-standard techniques and considered to be appropriate. Where sampling occurred through 'stope' intervals, these samples don't represent the pre-mined grade in localized areas.
- For historical drilling, field duplicates, blank samples and certified reference standards were collected and inserted from at least the early 2000's. Investigation revealed sufficient quality control performance. No field duplicate data has been located or evaluated in earlier drilling. Field duplicates were collected every 20m down hole for Wiluna Mining holes. Analysis of results indicated good correlation between primary and duplicate samples.
- Sample sizes are considered appropriate for these rock types and style of mineralisation and are in line with standard industry practice.

## Quality of assay data and laboratory tests

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- Fire assay is a total digestion method. The lower detection limits of 0.01ppm is considered fit for purpose. For Wiluna Mining Exploration drilling, ALS completed the analyses using industry best-practice protocols. ALS is globally recognised and highly-regarded in the industry. Historical assaying was undertaken at Amdel, SGS, and KalAssay laboratories, and by the on-site laboratory. The predominant assay method was by Fire Assay with AAS finish. The lower detection limit of 0.01ppm Au used is considered fit for purpose. Samples analysed at ALS and with Au > 0.3g/t are also assayed for As, S and Sb using ICPAES analysis ("ME-ICP41"). Apex analysed samples at ALS (four-acid digest with ME-ICP finish for S, As, Fe, Pb, Zn, Sb, Bi, Te, and AAS finish for Au), and at Genalysis (four-acid digest with ICP-OES or ICP-EOES finish for S, As, Fe, Pb, Zn, Sb, Bi, Te, and AAS finish for Au, and additional leachwell with tail analysis for Au done on quartz reef samples.



- 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.
- No geophysical tools were required as the assays directly measure gold mineralisation. For Wiluna Mining drilling, down-hole survey tools were checked for calibration at the start of the drilling programme and every two weeks.
- For Wiluna Mining drilling certified reference material, blanks and duplicates were submitted at 1:20 ratios. Check samples are routinely submitted to an umpire lab at 1:20 ratio. Analysis of results confirms the accuracy and precision of the assay data. Duplicates show good correlation between original and repeat analyses with very few samples plotting outside acceptable ranges (+/- 20%). Blanks and quartz flushes are inserted after logged high grade core samples to minimise and check for smearing, analyses of these results typically shows no smearing has occurred. It is understood that previous explorers great Central Mines, Normandy and Agincourt employed QAQC sampling, though historical QAQC data have not been assessed. During the period of 2007-2013 under Apex Minerals' ownership of the Wiluna project, QAQC procedures were undertaken on diamond drilling (DD) sample batches. QAQC samples including CRM and blank material were submitted with original sample batches for laboratory assay. CRMs and blanks were inserted at a rate of approximately 1 in 20. Re-assay of historical samples and assay of umpire batches were also undertaken during this period. Additionally, a procedure for routine insertion of blank material and quartz flushes after samples where visible gold was logged in core was also in place. The Apex QAQC was not previously included in the project database until 2021, when following a review of original Apex DD sample sheets and original laboratory reports, 2709 QAQC samples from 214 DD holes drilled in this period were able to be loaded into the drilling database.

# Verification of sampling and assaying

- The verification of significant intersections by either independent or alternative Company personnel.
- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.

- Wiluna Mining's significant intercepts have been verified by several Company personnel, including the database manager and geologists.
- Wiluna Mining drilled 31 RC and DDH holes to twin historical RC and DDH holes drilled by a variety of previous operators at various resource zones across Wiluna. Correlation between intercepts was generally poor when intercepts were greater than 20m apart reflecting the shortrange variability expected in gold deposits of this style.
- Wiluna data represents a portion of a large drilling database compiled since the 1930's by various project owners.



### Data is stored in Datashed SQL database. Internal Datashed validations and validations upon importing into Micromine were completed, as were checks on data location, logging and assay data completeness and down-hole survey information. QAQC and data validation protocols are contained within Wiluna Mining's manual "Wiluna Mining Geology Manual 2021". Historical procedures are not documented. The only adjustment of assay data is the conversion of lab nonnumeric code to numeric for estimation. Location of Accuracy and quality of surveys used All historical holes appear to have been accurately surveyed to data points to locate drill holes (collar and downcentimetre accuracy. Wiluna Mining's drill collars are routinely hole surveys), trenches, mine surveyed using a DGPS with centimetre accuracy. workings and other locations used in Mineral Resource estimation. Grid systems used in this report are GDA 94 Zone 51 S. Drilling collars were originally surveyed in either MGA grid or Mine Grid • Specification of the grid system used. Wiluna 10 and converted in Datashed to MGA grid. Quality and adequacy of topographic An accurate topographical model covering the mine site has been control. obtained, drill collar surveys are closely aligned with this. Away from the mine infrastructure, drill hole collar surveys provide adequate topographical control. WMC drillholes are routinely surveyed using continuous northseeking gyro at the end of hole, with 'sighter' surveys conducted while drilling. Historical diamond drill holes were surveyed downhole at close regular spacing using a Reflex or Eastman camera attached to a 6m aluminium extension to minimise magnetic interference, at 15m, 50m and every 50m thereafter. A selection of holes were subsequently gyro surveyed to confirm the single shot method has not been significantly affected by magnetic rocks. Down-hole survey tools are calibrated weekly. Data spacing • Data spacing for reporting of Wiluna Mining's exploration holes are generally drilled 25m or 50m and Exploration Results. apart on sections spaced 25m apart along strike. distribution Whether the data spacing and Historical drill hole spacing is typically 50m x 25m of 25m x 25m in distribution is sufficient to establish Indicated Resource areas and 50m x 50m in Inferred areas. the degree of geological and grade continuity appropriate for the The mineralisation lodes show sufficient continuity of both geology Mineral Resource and Ore Reserve and grade between holes to support the estimation of resources estimation procedure(s) and which comply with the 2012 JORC guidelines classifications applied. Samples have been composited only where mineralisation was not

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anticipated. Where composite samples returned significant gold

values, the 1m samples were submitted for analysis and these

results were prioritized over the 4m composite values.

• Whether sample compositing has

been applied.



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>Orientation of drilling to mineralisation ranges from 45 to 90 degrees to the strike of the lodes and 20 to 90 degrees to the dip of the lodes.</li> <li>RC drill holes were generally orientated perpendicular to targets to intersect predominantly steeply-dipping north-south or northeast-southwest striking mineralisation, though underground DD holes were in places drilled obliquely; true widths are shown in the significant intercepts table.</li> <li>The perpendicular orientation of the drill holes to the structures minimises the potential for sample bias.</li> </ul>
Sample security	The measures taken to ensure sample security.	• It is not known what measures were taken historically. For Wiluna Mining drilling, samples are stored in a gated yard until transported by truck to the laboratory in Perth. In Perth the samples are likewise held in a secure compound.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No external audit has been completed for this resource estimate.         For Wiluna Mining drilling, data has been validated in Datashed and upon import into Micromine. QAQC data has been evaluated and found to be satisfactory.     </li> </ul>



# Section 2 Reporting of Exploration Results (Wiluna Mining Centre)

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

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 license to operate in the area.</li> </ul>	<ul> <li>The drilling is located wholly within M53/6, M53/30, M53/40, M53/44, M53/95, M53/69, M53/468, M53/200 and M53/32. The tenements are owned 100% by Wiluna Operations Pty Ltd., a wholly owned subsidiary of Wiluna Mining Corporation Ltd, except for M53/30 which is owned 94/96 by Wiluna Operations Pty Ltd and 2/96 by Mr James Murray Jackson.</li> <li>The tenements are in good standing and no impediments exist.</li> <li>Franco Nevada have royalty rights over the Wiluna leases of 3.6% of net gold revenue.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• Modern exploration has been conducted on the tenement intermittently since the mid-1980's by various parties as tenure changed hands many times. This work has included mapping and rock chip sampling, geophysical surveys and extensive RAB, RC and core drilling for exploration, resource definition and grade control purposes. This exploration is considered to have been successful as it led to the eventual economic exploitation of several open pits during the late 1980's / early 1990's, and underground mining to the present day. The deposits remain 'open' in various locations and opportunities remain to find extensions to the known potentially economic mineralisation.
Geology	Deposit type, geological setting and style of mineralisation.	The gold deposits are categorized as orogenic gold deposits, with similarities to most other gold deposits in the Yilgarn region. The deposits are hosted within the Wiluna Domain of the Wiluna greenstone belt.
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> </ul>	Exploration results are not reported in this report for the first time. The reader is referred to numerous separate ASX releases concerning exploration results.



- down hole length and interception depth
- o hole length.
- If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.

## Data aggregation methods

- In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.
- Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.
- The assumptions used for any reporting of metal equivalent values should be clearly stated.

- Significant intercepts are reported as length-weighted averages. For Wiluna: above a 1.0g/t cut-off and > 2.0 gram x metre cut off (to include narrow higher-grade zones) using a maximum 2m contiguous internal dilution.
- In places, broad widths of lower grade mineralisation are identified where the mineralised shear zone is wider and comprises multiple higher-grade zones within a broadly mineralised envelope, which may ultimately upon the completion of relevant mining studies (in progress) be amenable to bulk underground mining methods with lower cost and lower economic cut-off grades. Where this style of mineralisation exists, broad 'halo' intercepts are calculated by allowing no limit to internal dilution and no internal lower cut-off grade. E.g. BUUD0102 = 62.54m @ 1.76g/t from 0m (broad intercept), comprising 7.11m @ 4.57g/t from 0m, 0.3m @ 6.32g/t from 10.28m, 14.05m @ 4.09g/t, and 6.81m @ 2.34g/t.
- High-grade internal zones are reported above a 5g/t envelope, e.g. BUUD0102 contains 7.11m @ 4.57g/t from 0m including 1.25m @ 15.08g/t and 0.68m @ 6.44g/t. Ultra-high grades zones of >30g/t are additionally reported.
- No metal equivalent grades are reported because only Au is of economic interest.

## Relationship between mineralisatio n widths and intercept lengths

- These relationships are particularly important in the reporting of Exploration Results.
- If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.
- Lode geometries at Wiluna are generally steeply east or steeply west dipping. Generally the lodes strike north-northeast to northwest-southeast. Historical drilling was oriented vertically or at -60° west, the latter being close to optimal for the predominant steeply-east dipping orientation. At Golden Age, the lode strikes NW-SE, with drilling from underground oriented at various angles depending on available drill sites. Drill holes reported herein have been drilled as closed to perpendicular to mineralisation as possible. In some cases due to the difficulty in positioning the rig close to remnant mineralisation around open pits this is not possible. True widths are always included in the significant intercepts table when results are reported for the first time.



	• 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').	
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>	Exploration results are not reported in this report for the first time. The reader is referred to separate ASX releases with details provided in the body of this report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>For Wiluna Mining drilling, either all significant assay results are reported or the hole is listed as 'no significant intercepts'. Full reporting of the historical drill hole database of over 80,000 holes is not feasible.</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.	Other exploration tests are not the subject of this report.
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>Follow-up resource definition drilling is likely, as mineralisation is interpreted to remain open in various directions.</li> <li>Exploration results are not reported in this report for the first time. The reader is referred to separate ASX releases with details provided in the body of this report.</li> </ul>



# Section 3 Estimation and Reporting of Mineral Resources (Wiluna Mining Centre)

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

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>	• The WMC corporate geological database is located on a dedicated Microsoft SQL2008R server. The database itself utilises the Maxwell Geoservices 'DataShed' architecture, and is a fully relational system, with strong validation, triggers and stored procedures, as well as a normalised system to store analysis data. The database itself is accessed and managed in house using the DataShed front end, whilst routine data capture and upload is managed using Maxwell's LogChief data capture software. This provides a data entry environment which applies most of the validation rules as they are directly within the master database, ensuring only correct and valid data can be input in the field. Data is synced to the master database directly from this software, and once data has been included, it can no longer be edited or removed by LogChief users. Only the company database manager and assistant have permissions allowing for modification or deletion.
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>	The Competent Person is a full time employee of the Company and regularly visits site.
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>Confidence in the geological interpretation is moderate to high. The geological and mineralogical controls at Wiluna are well understood as the deposits have been mined since the 1930's from both open pit and underground mining methods. Existing stopes and development drives have been used in conjunction with drill hole intercepts to guide the mineralisation interpretation and determine lode geometry.</li> <li>The mineralisation was interpreted using drill hole data (RC chips and diamond core) drilled from surface and underground locations. Existing pit and surface mapping and underground void wireframes were used to guide the current interpretation.</li> <li>Alternative lode orientations could be modelled which would alter lode dip in certain areas. This alternative interpretation would have little effect on reported grade and global tonnage. The current interpretations are based on those used historically.</li> <li>An extensive suite of quality underground geology maps have been used in conjunction with in-pit mapping and observations during open pit mining to assist in the geological understanding of the controls on mineralisation. Geological logging of drill samples</li> </ul>



		which have been used as hard boundaries within the Mineral Resource estimation. Logging of quartz veins have assisted in the interpretation of lodes. Only diamond and reverse circulation drilling samples were used in the final estimate however all available data was used in the geological assessment.  • Gold mineralisation is predominantly associated with second to third order north and northeast trending brittle to brittle-ductile dextral strike-slip faults, localised at dilational bends or jogs along faults, at fault intersections, horsetail splays and in subsidiary overstepping faults. Mineralisation is predominantly shear controlled at Wiluna, although the Golden Age lodes are quartz reef hosted.
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 Wiluna deposits occur along a NS strike extent of greater than 3.6km from 9,220N to 12,835N (local grid) and are encompassed within a 1.6km wide corridor from 9,270E to 10,900E. Drilling extends to a vertical depth of approximately 1,600m and the mineralisation has been modelled from surface to a depth of approximately 1,200m below surface.</li> <li>Lodes vary in strike between 330 and 045 degrees, with most lodes striking between 000 and 015 degrees. The dip of each lode varies from 60° to sub-vertical.</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</li> </ul>	<ul> <li>Estimation of gold grade has been completed using Ordinary Kriging (OK) in all domains.</li> <li>The lode wireframes have been used to define the domain codes used for estimation. The drillholes have been flagged with the domain code and composited using the domain code to segregate the data. Hard boundaries have been used at all domain boundaries for the grade estimations.</li> <li>Compositing has been undertaken in Datamine to 1 m with a merge tolerance of 0.1 to 1.5m. There are no residual samples.</li> <li>The influence of extreme gold assays has been reduced by top-cutting across selected domains. The top-cut thresholds have been determined using a combination of histograms, log-probability and mean-variance plots. Top-cuts have been reviewed and applied to the composites on a domain-by-domain basis.</li> <li>Variography has been determined within Supervisor v8.13 software on grouped domains using top-cut grade values. Where there is insufficient data to generate meaningful variograms, variograms have been grouped or borrowed from other similar domains.</li> </ul>



- characterisation).
- In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
- Any assumptions behind modelling of selective mining units.
- Any assumptions about correlation between variables.
- Description of how the geological interpretation was used to control the resource estimates.
- Discussion of basis for using or not using grade cutting or capping.
- The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

- The drillhole data spacing ranges from less than 10 m spacing in areas of dense data to greater than to 100 m in sparsely drilled generally deep areas.
- The extrapolation distance along strike from the end points was half the drill spacing at each deposit, which generally resulted in extrapolation distances of 12.5m or 25m. Down dip extents were generally half the up dip distance of the previous mineralised intersection which resulted in distances ranging from 25m to 130m.
- The block model parent block size is 10 m (X) by 10 m (Y) by 5 m (Z) and sub-blocks down to 1.25 m (X) by 1.25 m (Y) by 0.625 m (Z), with the sub-blocks estimated at the scale of the parent block. The block size is considered appropriate for the drillhole spacing throughout the deposit.
- Grade estimation has been completed in four estimation passes with the requirements for filling blocks in each pass summarised as:
- o Pass 1 estimations have been undertaken using a minimum and a maximum number of composites (determine using KNA tool in Supervisor v8.13 software) into a search ellipsoid with dimensions equal to one half of the variogram range of the most continuous domain within the deposits. Rotations have been applied on a domain by domain basis taken from the wireframe orientation and variogram.
- o Pass 2 estimations have been undertaken using a minimum/maximum number of composites into a search ellipsoid with dimensions equal to twice the first pass.
- o Pass 3 estimations have been undertaken using a minimum/maximum number of composites into a search ellipsoid equal to the twice the second pass.
- o Pass 4 estimations have been undertaken using a reduced minimum/maximum number of composites into a search ellipsoid equal to the 10 times the first pass.
- o A four-hole limit has been applied to search passes one, two and three.
- Previous estimates have been completed across all the deposits.
   These were a combination of operational models for both underground and open pit, and resource models completed by external consultants. The mineralisation interpretations for the current estimate were based on those used in the previous estimate, and utilised information from active mining areas to guide lode geometry and continuity.
- The Mineral Resource estimate has been validated using visual validation tools, mean grade comparisons between the block



model and composite grade means, and swath plots comparing the composite grades and block model grades by Northing, Easting and RI

- No selective mining units are assumed in this estimate.
- There will be no by-products recovered from the mining of the Au lodes.
- Arsenic and Sulphur were estimated in the model as these are important metallurgical indicators. Pre WMC, these elements were not routinely assayed and were un-evenly distributed across the lodes. A graphite fault has been interpreted and coded within the model.
- The Wiluna deposits have been well drilled from surface and at numerous UG locations. Open pit GC drilling at 5m spacing has been conducted across many of the open pits such as EW Lodes and Happy Jack. The widest regular drill spacing across the Wiluna deposits is 100m NS and 25m EW. The drill spacing was used in conjunction with Quantitative Kriging Neighbourhood Analysis ("QKNA") to determine suitable block sizes and key interpolation parameters.
- An orientated 'ellipsoidal' search was used to select data and was based on parameters taken from the variography. Ellipse adjustments were made to honour lode geometry for the minor lodes.
- The deposit mineralisation was constrained by wireframes constructed using down hole assay results and associated lithological logging. Wireframes were used as hard boundaries in the interpolations at each deposit. Weathering surfaces were generated from drill hole logging and analysis of leach well data and these were used to code regolith types.
- A three-step process was used to validate each model. A qualitative assessment was completed by slicing sections through the block models in positions coincident with drilling and observing estimated block grades against drill results. A quantitative assessment of the estimate was completed by comparing the average grades of the composite file input against the block model output for the mineralised domains. A trend analysis was completed by comparing the interpolated blocks to the sample composite data by generating swath plots along strike, across strike, and at various elevations across all the lodes at each deposit. A volume comparison between the mineralised wireframes and the block model representation of the lodes was also completed.
- The Wiluna model updates focused on interpreting mineralisation beneath existing open pits and as such pit reconciliation data was



		not used in the model validation. Historical reconciliation data is incomplete and was not used.
Moisture	Whether the tonnages are     estimated on a dry basis or with     natural moisture, and the method     of determination of the moisture     content.	Tonnages are estimated on a dry basis. No moisture values were reviewed.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>Surface open pit optimisations have been evaluated using Whittle software and Mineral Resources reported above 0.35g/t for oxide and transitional and 0.70g/t for fresh rock inside \$2,750 optimised pit shell.</li> <li>Determination of the below pit cut-off grade has been calculated based on assumed typical underground mining method adopted as part of the current feasibility studies. The cut-off grade is based on a gold price of A\$2750/oz and mine costs which reflect the current contract rates. The total overall operating cost of A\$175/t ore and overall payable metal recovery of 91.2%. Mineral Resources are reported above 2.3g/t Au below to pit shells.</li> <li>WMC believes the application of these technical parameters suitably reflect reasonable prospects for eventual economic extraction.</li> </ul>
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	<ul> <li>Most of the Wiluna deposits have been extensively mined using UG methods (ore development drives and stoping methods). The updated models have been estimated with the assumption that the deposits will be mined using UG methods utilising existing historical declines and access points.</li> <li>Extensive open pit mining has occurred across the deposits and potential open pit cut backs will be assessed, based on current economic conditions.</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	<ul> <li>In Wiluna fresh ore most gold occurs in either solid solution or as submicroscopic particles within fine-grained sulphides. Historically Au recovery through the Wiluna BIOX plant averaged 83%.</li> <li>WMC has recently outlined a process whereby the sulphides are separated and captured from the gangue minerals through floatation and concentrated. The concentrate is then shipped</li> </ul>



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.

overseas and the gold extracted through pressure oxidation. Recoveries are estimated to be >90%.

 Oxide and transitional ore has generally been oxidised and is free milling to a depth of approximately 80m. Metallurgical analyses resulted in averaged leach recoveries, on the oxide and transitional ores, of 90.8% and 84.3% after 24 hours.

## Environmental factors or assumptions

 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.

- The Wiluna deposits have been mined using open pit and underground methods since the 1930's. The area is currently an active mining area with all relevant infrastructure such as tails dams already in place and well established.
- No environmental, permitting, legal, taxation, socio-economic, marketing or other relevant issues are known, that may affect the estimate.

#### **Bulk density**

- Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
- The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.
- Bulk density values were determined through analysis of rock samples and diamond core.
- A total of 16,206 determinations were completed by Apex staff for every assayed interval over the course of 18 months (mid 2007 to end of 2008). The procedure works on the water immersion method and involved weighing 10cm billet of clean core (no oven drying) followed by suspending and weighing in water to determine volume.
- WMC has accumulated a dataset of more than 4,350 SG determinations on drill core from the Wiluna deposits since 2015.
   Determinations were completed at ALS Laboratory in Perth using the water immersion method, and wax coating (ALS code OAGRA08) at a 1:5 ratio.



Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	•	An average bulk density value was assigned to oxide, transitional, and fresh material based on analysis of sample results at each lode. Lodes without bulk density data have been assigned default bulk densities taken elsewhere in the mine. Waste dump and tailings material was assigned an average value of 1.8t/m3.

#### Classification

- The basis for the classification of the Mineral Resources into varying confidence categories.
- Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).
- Whether the result appropriately reflects the Competent Person's view of the deposit.

- Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012).
- The deposits have been classified as Measured, Indicated and Inferred Mineral Resource based on a combination of quantitative and qualitative criteria which included geological continuity and confidence in volume models, data quality, sample spacing, lode continuity, and estimation parameters (number of informing composites, estimation pass number, average distance of composites, kriging quality parameters).
- The Indicated portion of the Mineral Resource was defined across the main lodes though areas that had generally been filled in the first estimation pass and blocks were estimated by informing composites at an average distance of 40m or less; the kriging efficiency and slope of regression were generally >=0.7; moderate to high confidence was observed in lode continuity (strike and thickness); and areas were defined by RC and Diamond holes on spacings of 40m or less. Digitised strings were used to form regular shapes to code these areas.
- The mineralisation that has been estimated in the second or third
  pass that does not meet the criteria for Indicated has been
  classified as Inferred Mineral Resource. Unclassified material is
  present in some domains generally in areas filled by the final
  fourth pass of the interpolation.
- Although comprehensive stope and void depletion solids are available, there is uncertainty as to whether voids are open, backfilled with waste, or backfilled with mineralised material. It is not clear if all pillars remain or if they were mined out. There is also a risk that not all depletion files have been located, and that material currently estimated as in-situ has been mined historically. These factors were taken into account when applying confidence categories to the various lodes.
- The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent insitu mineralisation. The definition of mineralised zones is based on high level geological understanding from good quality sample data, producing models of continuous mineralised lodes. Validation of the block models showed good correlation of the input data to the block estimated grades.



		<ul> <li>The input data is considered reliable as WMC have implemented Quality Control measures which have confirmed the suitability of data for use in the Mineral Resource estimates.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>Previous Mineral Resource estimates across the Wiluna deposits have been reviewed by external consultants between 2016 and 2019. Results from those audits have been used to improve the existing models.</li> <li>Internal audits of the current models have been completed which verified the technical inputs, methodology, parameters and results of the estimate.</li> </ul>
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	<ul> <li>The Mineral Resource estimate is intended for both underground and open pit mining assessment and reports global estimates.</li> <li>No formal confidence intervals have been derived by geostatistical or other means, however, the use of quantitative measures of estimation quality such as the slope of regression allow the Competent Person to be assured that appropriate levels of precision have been attained within the relevant resource confidence categories.</li> </ul>
	<ul> <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>	The Mineral Resource has been estimated with a moderate degree of confidence which has been reflected in the classification into Indicated and Inferred categories. The deposits have been mined since the 1930's by open pit and underground mining methods thus the controls on mineralisation are well understood. Recent in pit observations and grade control drilling, and historical underground face mapping and drill core logging, have verified the structural controls on mineralisation and have been used in the interpretation of the current mineralised lodes. Data quality is good and drill holes have detailed logs produced by qualified geologists. Recognised laboratories have been used to analyse drill samples and check the quality of results produced by the onsite laboratory.

• There is a lack of confidence in the immediate vicinity of UG stopes and drives with respect to how much insitu remnant material remains as historical documentation is incomplete. Recent



diamond drilling from surface has intersected voids where anticipated which has improved confidence in the position of voids at the local scale across certain areas.

• The Wiluna deposits are actively being mined by open pit and underground methods. Mineral reserves and resources are reconciled and reported monthly. The reconciliation is conducted by spatially comparing the resource and reserve models with the site grade control models, Declared Ore Mined (DOM) and stockpile balancing. The pits have achieved reasonable reconciliation to date. The UG lodes were historically mined with only the Golden Age lode currently being mined intermittently. Stope grades are based on weighted average of drill intersections. The UG material is blended with open pit material so is difficult to reconcile. The UG ore does not form a significant component of monthly totals. The current models have been depleted within all known voids, drives, and stopes.



#### **Section 1 Sampling Techniques and Data (Wiltails)**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Prill Programme 1 – 475.5 m of drilling</li> <li>Rotary auger drill sampling completed in 2017 on two tailings storage facilities (TSF) and in 5 pit voids</li> <li>Holes sampled at 5 m intervals by scraping samples from auger and subsampled with a trowel to produce a nominal 3kg sample for assay. Remaining sample bagged for metallurgical test work.</li> <li>Holes drilled vertically to base of tailings dam or pit void to a maximum depth of 20m</li> <li>Drill Programme 2 - 1576 m of drilling</li> <li>Air Core drilling completed in 2018</li> <li>Holes sampled at 1m intervals from which two ~3kg samples were collected from bulk sample by spear, for fire assay and metallurgical testing.</li> <li>Sampling procedures are in line with standard industry practice to ensure sample representivity.</li> <li>At the laboratory, samples &gt;3kg were 50:50 riffle split to become &lt;3kg. The &lt;3kg splits were pulverized via LM5 to 90% passing 75µm to produce a 50g charge for fire assay.</li> <li>WMX analysed samples using Intertek Genalysis and ALS laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS or Inductively coupled plasma optical emission spectrometry finish.</li> <li>WMX analysed samples using IMO laboratories in Perth for metallurgical testing of gold recovery.</li> </ul>
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Programme 1- rotary auger drilling - hole diameter not recorded</li> <li>Programme 2 - AC 4.5" diameter holes with specialised 'vacuum bit' used to maximise sample recovery on TSF.</li> <li>All holes vertical and not surveyed</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	The auger drilling of tailings with short holes resulted in very high recovery of drilled material. No specific measurement of recovery was completed.



•	Measures taken to maximise sample
	recovery and ensure representative
	nature of the samples.

- Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.
- For AC drilling, sample recovery is visually estimated by volume for each 1m bulk sample bag and recorded digitally in the sample database. Recoveries were typically 100%, however lesscompacted zones near the top of the hole sometimes had a reduced recovery.
- In order to maximise recovery a specialised 'vacuum bit' was used while AC drilling.
- Preliminary metallurgical test work suggests there is no significant segregation of grade between coarser and finer fractions mitigating against any significant sampling bias.

#### Logging

- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.
- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.
- The total length and percentage of the relevant intersections logged.

• No geological or geotechnical logging was completed

#### Sub-sampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.
- Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling.
- Whether sample sizes are appropriate to the grain size of the material being sampled.

- Auger drilling sampled wet with a trowel. No further sampling detail captured.
- AC samples were split on 1m intervals using a cone splitter and spear sampled from bulk sample. Most samples were moist; the moisture content data was logged and digitally captured. Where it proved impossible to maintain dry samples, at most three consecutive wet samples were obtained before drilling was abandoned, as per procedure.
- At the laboratory, >3kg samples are split so they can fit into a LM5 pulveriser bowl. At the laboratory, >3kg samples are split 50:50 using a riffle splitter so they can fit into a LM5 pulveriser bowl.
- AC drilling field duplicates were collected approximately every 40m down hole for WMX holes. Analysis of results indicated good correlation between primary and duplicate samples. AC duplicates were speared in the field.
- Sample sizes are considered appropriate for homogenised fine grain-size tailings.



#### Quality of assay data and laboratory tests

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.

- 50g charge fire assay used for both drilling programmes, through Intertek Genalysis (Welshpool) for programme 1 and ALS laboratories in Perth for programme 2.
- Intertek applies a 0.005ppm detection limit and ALS 0.01ppm both considered fit for purpose.
- Fire assay is a total digestion method. The certified laboratories both completed the analyses using industry best-practice protocols.
- For the auger drilling laboratory inserted standards and blanks were inserted and duplicate assays made
- For the AC drilling certified reference material, blanks and duplicates were submitted at approximately 1:20. Check samples are routinely submitted to an umpire lab at 1:20 ratio
- Results show good correlation between original and repeat analyses with very few samples plotting outside acceptable ranges (+/- 20%).

#### Verification of sampling and assaying

- The verification of significant intersections by either independent or alternative Company personnel.
- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.

- WMX's significant intercepts have been verified by several company personnel, including the database manager and exploration manager.
- Twinned holes were not drilled owing to the preliminary stage of drilling.
- Data is stored in Datashed SQL database. Internal Datashed validations and validations upon importing into Micromine were completed, as were checks on data location, logging and assay data completeness and down-hole survey information. QAQC and data validation protocols are contained within WMX's manual "WMX Exploration Manual 2020". Historical procedures are not documented.
- The only adjustment of assay data is the conversion of lab nonnumeric code to numeric for estimation.

## Location of data points

- Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
- Specification of the grid system used.
- Quality and adequacy of topographic control.
- Auger drill collars were surveyed using a GPS to metre-scale accuracy with nominal RL applied
- AC drill collars were surveyed using a GPS to metre-scale accuracy including height
- Grid systems used in this report are Wil10 local mine grid and GDA 94 Zone 51 S.



		<ul> <li>An accurate topographical model covering the mine site has been obtained, drill collar surveys are closely aligned with this. Away from the mine infrastructure, drill hole collar surveys provide adequate topographical control.</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>AC holes generally drilled 100m apart on a square pattern.</li> <li>Spacing of 100m is considered appropriate to establish grade continuity given the nature of mine tailings.</li> <li>The mineralisation shows sufficient continuity of both geology and grade down and between holes to support the estimation of resources which comply with the 2012 JORC guidelines</li> <li>Samples have been composited to 5m for auger samples and 2m for AC samples</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>Auger/AC drill holes have been drilled vertically to base of TSF/pit or to 20m deep maximum for auger holes</li> <li>With the sub horizontal layering resulting from the progressive deposition of TSF material the drilling direction is optimal to prevent any sampling bias.</li> </ul>
Sample security	The measures taken to ensure sample security.	Drill samples are delivered to McMahon Burnett freight yard in Wiluna by WMX personnel, where they are stored in a gated locked yard (after hours) until transported by truck to laboratories in Perth. In Perth the samples are likewise held in a secure compound.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audit has been completed. The drilling, data has been validated in Datashed and upon import into Micromine. QAQC data has been evaluated and found to be satisfactory.



#### **Section 2 Reporting of Exploration Results (Wiltails)**

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

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 license to operate in the area.</li> </ul>	<ul> <li>The drilling is located wholly within M53/200 and M53/96. The tenements are owned 100% by WMX Ltd.</li> <li>The tenements are in good standing and no impediments exist.</li> <li>Minor royalty payments accrue to third parties based on gold production.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No previous drilling has been completed on the TSF tailings or pit void tailings.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The tailings material has been derived from the treatment of the ores around the Wiluna mine area. The mineralisation is shear hosted typical of Archean gold deposits. Rock types range from sedimentary rocks and Felsic to Mafic volcanics.</li> <li>Gold is contained in quartz vein and in alteration zones. In unweathered rock the mineralisation is commonly associated with sulphides such as pyrite and arsenopyrite.</li> <li>TSF and pit voids containing tailings typically exhibit subhorizontal layering resulting from the progressive deposition of tailings</li> <li>All tailings areas tested (excepting Dam C) are reported to have been filled during the treatment of fresh sulphidic ores and have no discernible structure or layering</li> <li>Dam C contains sulphidic ores in the upper volume and primarily oxide ore residues in the lower part of the Dam.</li> <li>Metallurgical testing is being used to determine the ore type and recovery</li> </ul>



#### Drill hole Information

- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
- easting and northing of the drill hole collar
- elevation or RL (Reduced Level elevation above sea level in metres) of the drill hole collar
- o dip and azimuth of the hole
- down hole length and interception depth
- o hole length.
- If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.

• Exploration results are not reported in this report. The reader is referred to numerous separate ASX releases concerning exploration results.

### Data aggregation methods

- In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.
- Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.
- The assumptions used for any reporting of metal equivalent values should be clearly stated.

- Exploration results are not reported in this report. The reader is referred to numerous separate ASX releases concerning exploration results.
- No metal equivalent grades are reported because only Au is of economic interest.



Relationship
between
mineralisation
widths and
intercept lengths

- These relationships are particularly important in the reporting of Exploration Results.
- If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.
- If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').

- No relationships exist between mineralisation widths and intercepted lengths.
- Drilled width is true width.

#### **Diagrams**

- Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.
- Exploration results are not reported in this report. The reader is referred to numerous separate ASX releases concerning exploration results.

## Balanced reporting

- Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.
- For Wiluna Mining drilling, either all significant assay results are reported or the hole is listed as 'no significant intercepts'. Full reporting of the historical drill hole database of over 80,000 holes is not feasible.

## Other substantive exploration data

- Other if exploration data, 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 results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.
- Further metallurgical assessment of treatment characteristics ongoing.
- IMO Project Services completed the "Wiluna Tailings Retreatment Project "scoping study report in 2016 that provided indicating gold recovery data and assessed methods for reclaiming the tailings.
- Further test work commenced using the AC drilling samples, again through IMO
- A small third drilling campaign using Sonic core drilling was completed in July 2018. Main purpose was to use Standard Penetration Tests periodically during drilling to obtain density, strength and consolidation characteristics for the tailings. The analysis of the data indicated a range of dry bulk density for the tailings of 1.4-2.0. For the current Mineral Resource Estimate a figure of 1.6t/m3 was assigned as the global dry bulk density





#### Further work

- The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).
- Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.
- Follow-up resource definition drilling is contemplated to drill
  holes on a closer grid spacing to permit a higher JORC
  classification and for any further metallurgical characterisation as
  required,
- All tailings areas have now been tested with the exception of two small pits further north of those tested at the Gunbarrel North and South pits.



#### Section 3 Estimation and Reporting of Mineral Resources (Wiltails)

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

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>	• The WMC corporate geological database is located on a dedicated Microsoft SQL2008R server. The database itself utilises the Maxwell Geoservices 'DataShed' architecture, and is a fully relational system, with strong validation, triggers and stored procedures, as well as a normalised system to store analysis data. The database itself is accessed and managed in house using the DataShed front end, whilst routine data capture and upload is managed using Maxwell's LogChief data capture software. This provides a data entry environment which applies most of the validation rules as they are directly within the master database, ensuring only correct and valid data can be input in the field. Data is synced to the master database directly from this software, and once data has been included, it can no longer be edited or removed by LogChief users. Only the company database manager and assistant have permissions allowing for modification or deletion.
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>	The Competent Person is a full-time employee of the Company and regularly visit site.
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 deposit is historic tailings, comprised of sediments pumped into either a purpose-built tailings storage facility (TSF) or an existing open pit. The tailings material has been derived from the treatment of the ores around the Wiluna mine area.</li> <li>The confidence in the geology and the associated mineralisation is high.</li> <li>The tails are constrained within either an existing open pit or a TSF. Digital terrain models (DTMs) based on surveys conducted prior to the tails deposition were constructed for the open pits with current topographic models being used for the TSF taking into account any material being used for building bunds and/or walls of the TSF.</li> <li>Drill hole data was used to locate the positions of the sample data.</li> <li>No alternate interpretations have been considered</li> <li>Some stratification of the tails sediments was observed in the drilling and the grade interpolation attempted to honour this stratification.</li> </ul>



		Tails were deposited according to the location of the discharge points resulting in varying grades of metal over time, based upon the performance of the processing facility (recoveries of ore).
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 tails are constrained within either an existing open pit or a TSF.</li> <li>The open pits are irregular DTMs based on surveys conducted prior to the tails deposition. They range in size from between 250 and 360 metres long and between 90 and 195 metres wide. Depth is variable between 40 and 55 metres</li> <li>Current topographic models are being used to define the TSF taking into account any material being used for building bunds and/or walls. Dam C is the largest being approximately 660 metres by 710 metres with a depth of 40 metres.</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 about correlation</li> </ul>	<ul> <li>Average block grades were estimated using the Inverse Distance Squared (ID2) interpolation method. This interpolation technique is considered suitable as it allows the measured spatial continuity to be incorporated into the estimate and results in a degree of smoothing which is appropriate for the nature of the mineralisation. The deposits have been defined by regular spaced drill data. Surpac software was used for the estimation.</li> <li>Drill hole sample data was coded using wireframes. A composites string-file was then created in Surpac with a 4.0 m composite length. Although drill sampling occurred predominantly at 1m intervals the 4m composite length was deemed appropriate due to the low variance of the data.</li> <li>One search pass was used to populate blocks allowing for a maximum of 2 samples per drill hole with a maximum of 8 samples per block estimate.</li> <li>Historical mine processing and metallurgical data was compiled to verify volume and grade of processed tails that was deposited.</li> <li>No assumptions have been made regarding the recovery of byproducts.</li> <li>The deposit has Au, Ars and S analyses reported.</li> <li>The block size is approximately half the typical drill spacing of the well drilled areas.</li> <li>No assumptions were made regarding selective mining units.</li> <li>The flat nature of the tails strata required a flat search ellipse to be used to interpolate the block grades.</li> </ul>

between variables.



	<ul> <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>The parent block size was 25m NS by 25m EW by 5m vertical. The sub-cell size was 6.25m NS, 6.25m EW, and 2.5m vertical.</li> <li>The deposit mineralisation was constrained by an existing open pit or a TSF.</li> <li>Top cuts were used to cap high grade data that had possibly occurred due to contamination. All high-grade metal was recovered during processing of the primary ore prior to tails deposition any assays that appeared as outlies from the median grade were cut.</li> <li>A three-step process was used to validate each model. A qualitative assessment was completed by slicing sections through the block models in positions coincident with drilling and observing estimated block grades against drill results. A quantitative assessment of the estimate was completed by comparing the average grades of the composite file input against the block model output for the mineralised domains. A trend analysis was completed by comparing the interpolated blocks to the sample composite data by generating swath plots along strike, across strike, and at various elevations across all the lodes at each deposit. A volume comparison between the mineralised wireframes and the block model representation of the lodes was also completed. Results were also compared to historical mine processing and metallurgical data.</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.	Tonnages are estimated on a dry basis. No moisture values were reviewed.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	No cut-off grade is used to report the resource. All blocks within the block model are reported.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an	No mining factors or assumptions have been made as mining methods are not considered as part of the tailing reclaim process.



	explanation of the basis of the
	mining assumptions made.
Metallurgical factors or assumptions	<ul> <li>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.</li> <li>A scoping study was competed for the Wiluna tailings retreatment in 2016 by independent consultant group IMO Project Services. The study comprised of preliminary metallurgical test work using Dam H tailings data and a review of potential recovery and treatment options for all storage facilities and pits. The options considered produced acceptable financial returns and indicated a potential metallurgical recovery of 40-50% for gold.</li> </ul>
Environmental 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>
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>Bulk Drilling completed in July 2018 using sonic core drilling aimed at providing additional samples for test work. The programme completed Standard Penetration Tests (SPT) periodically during drilling to obtain density, strength and consolidation characteristics for the tailings.</li> </ul>



	<ul> <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> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	The analysis of the data indicated a range of dry bulk density for the tailings of 1.4 t/m3 -2.0 t/m3. For the current Mineral Resource Estimate a figure of 1.6 t/m3 was assigned as the global dry bulk density.
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>Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012).</li> <li>The deposits have been classified as an Indicated Mineral Resource based on a combination of quantitative and qualitative criteria which included geological continuity and confidence in volume models, data quality, sample spacing, lode continuity, and estimation parameters (number of informing composites, estimation pass number, average distance of composites).</li> <li>A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate including:</li> <li>Drill hole spacing;</li> <li>Quality of dill hole information accounting for type, and sampling technique; and</li> <li>Available mining information.</li> <li>The classification for this model has predominantly being based on the drill hole type and spacing. In resources drilled by Air Core with 4.5" diameter holes with the specialised 'vacuum bit' with at least 100m x 100m on the TSF and 50m by 50m in the open pits an indicated classification was given.</li> <li>Validation of the block models showed good correlation of the input data to the block estimated grades.</li> <li>The input data is considered reliable as WMX have implemented Quality Control measures which have confirmed the suitability of data for use in the Mineral Resource estimates.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
Audits or reviews	The results of any audits or reviews     of Mineral Resource estimates.	No external audits or reviews have been undertaken



# Discussion of relative accuracy/confidence

- Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.
- The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.
- These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.

- The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
- No formal confidence intervals have been derived by geostatistical or other means.
- The Mineral Resource statement is a global estimate. No domaining of grade has taken place and all classified blocks in the tails model are reported.
- Historical mine processing and metallurgical data was compiled as a check to verify volume and grade of processed tails that was deposited against the mineral resource estimation.



#### Section 4 Estimation and Reporting of Ore Reserves (Open Pit/Surface)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul> <li>The Mineral Resource estimate was compiled by Kane Hutchinson. Kane Hutchinson is a full-time employee of Wiluna Mining Corporation Limited and is the Competent Person for the Wiluna Mining Operation Mineral Resource estimate.</li> <li>The stated Mineral Resource (November 2021) is inclusive of the Surface/Open Pit Ore Reserves.</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>The Competent Person is a full-time site-based employee since 2018 and has a full understanding of open pit deposits at Wiluna, Matilda, Lakeway and Galaxy Mining Centres of WMC.</li> <li>The Competent Person has also relied on reports from other independent consultants and site surveys in determining the viability of the Open pit/Surface Ore Reserve.</li> </ul>
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul> <li>A Pre-Feasibility or higher level of estimation of costs, modifying factors and parameters were used to convert mineral resources to Ore Reserves.</li> <li>The Ore reserves determined were a outcome of mine plan that is technically achievable and economically viable, wherein all material Modifying Factors have been considered</li> <li>Costs and modifying factors have also been reviewed against recent (Yr 2020-21) operational performance and experience. This includes mining and milling reconciliations and wall stability performance from a range of mined deposits in the Wiluna mining centre.</li> </ul>
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	<ul> <li>The cut-off grades applied were based on a gold price of \$2,500/oz is in line with WMC gold price framework.</li> <li>Open pit mining unit costs were based on most recent (Yr 2020-21) contract rates with the earthmoving contractor for Wiluna Golden Age mine.</li> <li>Metallurgical recoveries were estimated by WMC and are based on extensive historical CIL plant operating data</li> <li>Other administration costs were based on WMC operational data</li> <li>Royalty estimates were provided by WMC based on current agreements.</li> </ul>



•	Α	CIL	process	route	were	estabiisne	ea to	treat	all	oxiae,
	tra	nsiti	onal, fres	h ores,	Wiluna	a tailings a	nd pro	duce d	oré	bars of
	gol	ld.								
	•	tra		transitional, fres	transitional, fresh ores,	transitional, fresh ores, Wiluna	transitional, fresh ores, Wiluna tailings a	transitional, fresh ores, Wiluna tailings and pro	transitional, fresh ores, Wiluna tailings and produce d	transitional, fresh ores, Wiluna tailings and produce doré gold.

• Declared Reserve cut off grades for ore are 0.49 g/t for oxide, 0.62 g/t for transitional and 0.96 g/t for fresh non-refractory mineralisation at Wiluna for the CIL plant.

## Mining factors or assumptions

- The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).
- The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.
- The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.
- The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).
- The mining dilution factors used.
- The mining recovery factors used.
- Any minimum mining widths used.
- The manner in which Inferred
   Mineral Resources are utilised in
   mining studies and the sensitivity of
   the outcome to their inclusion.
- The infrastructure requirements of the selected mining methods.

#### Wiluna Open Pit

- Wiluna Open Pit Reserves includes Measured and Indicated Resources only and which is compatible for processing through free-milling CIL plant.
- The Open Pit Ore Reserve at Wiluna (Golden Age) has been reported as a depletion of the current open pit designs at 31/12/2021.
- Viability of depleted Golden Age pit is validated using Whittle Optimisations.
- Conventional Open pit mining methods using 120t excavators and 90t trucks is planned to be employed for mining open pit reserves. Mining methods used are widely used in the mining industry and production rates and costings are based on recent (2020-21) contract rates supplied by the contractor.
- Geotechnical parameters are based on investigations by Peter
  O'Bryan and Associates utilising existing pit wall experience.
   Parameters have allowed pit designs at Wiluna to be completed
  conforming to the recommendations. Probe drilling will be
  utilised for existing void detection.
- The Mineral resources declared in Section 3 have been modified with additional fields to flag different material types to assist calculation of the Open Pit Ore Reserves including the dilution and ore loss by regularisation.
- Also, additional 4% Mining dilution and 6% ore loss factors were applied
- The resource classifications consist of Measured, Indicated and Inferred. The Open Pit Ore Reserve does not include any Inferred resource and the Open Pit Ore Reserve is technically and economically viable without the inclusion of any Inferred resource.

#### Wiltails (Tailings Retreatment Process)

 Mining of the tailings is planned to be undertaken with conventional open pit mining methods using 50t excavators and 30t articulated dump trucks.



•	The Ore Reserves for Wiltails have been reported based on
	extraction within existing CIL facilities along with a scrubber and
	trommel arrangement.

- Wall parameters for mining tailings (TSF H & Western Cells) are as recommended by Knight Piesold, based on their 2021 Geotechnical assessment.
- All tailings' Ore Reserves are indicated resources.

#### **Stockpiles**

- Mining of the Stockpiles is planned to be undertaken with conventional hauling methods using WA-500 loader and 30t articulated dump trucks.
- All Stockpile Ore Reserves are measured resources.

## Metallurgical factors or assumptions

- The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.
- Whether the metallurgical process is well-tested technology or novel in nature.
- The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.
- Any assumptions or allowances made for deleterious elements.
- The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.
- For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications?

- No deleterious elements of any note have been detected during test work or processing.
- The Wiluna ore were previously treated as free-milling ore via a conventional crush-grind-gravity-separation-carbon in leach (CIL) circuit. No non-free-milling ore has been included in the Open Pit Ore Reserves.
- Recent processing plant production data exists to estimate metallurgical recoveries and throughput rates to a suitable degree of accuracy.



#### **Environmental**

- The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.
- Wiluna Mining holds Operating Licence L5206/1987/10, issued pursuant to the Environmental Protection Act 1986 by the Department of Water and Environment Regulation which expires on 30 June 2040.
- Wiluna Mining operates under the conditions set out by the Mining Proposals submitted to, and requirements of, the Department of Mines, Industry Regulation and Safety (DMIRS) and is not aware of any deviation to the tenement conditions that would adversely affect this surface/open pit Ore Reserve estimation

#### Infrastructure

 The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.

- Substantial infrastructure exists on-site at the Matilda Gold Project (MGP), which has been operating for several years.
- The site is located proximal to the township of Wiluna and the allweather Goldfields Highway. Whilst the nearby Wiluna airport services both the mine and the town, the Mt Keith Airport (approximately 1 hour via Goldfields Highway) is currently the main airport utilised by site personal.
- Labour is currently sourced from Perth on a fly in-fly out basis.
- Sufficient water will be available for operations from mine dewatering and operational borefields.
- Existing permitted and operational village, borefields, power supply and communications.
- A 2Mtpa CIL process plant and 0.75Mtpa flotation plant exists on site. The new Wiltail (Tailings retreatment) plant is permitted, and a construction contract has been signed.
- Haulage routes assessed with multiple viable options.

#### Costs

- The derivation of, or assumptions made, regarding projected capital costs in the study.
   The methodology used to estimate operating costs.
- Allowances made for the content of deleterious elements.
- The source of exchange rates used in the study.
- Derivation of transportation charges.
- The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.

- Open Pit mine operating costs are based on recent (2020-21) contract rates for Wiluna covering haulage distances, monthly total movement, drill and blast targets and overheads with the previous contractor. No capital costs are included in the open pit assessments.
- Wiltails mining costs are based on estimates that are comparable
  with the current cost profiles of equipment's used in WMCs
  Surface operation. This includes unit rates for mining, diesel
  usage, along with administrative flights, and accommodation
  costs.
- Mine administration and ancillary costs have been based on current market levels.



	The allowances made for royalties payable, Government and private.	<ul> <li>No deleterious elements of any note have been detected, and therefore no other cost allowances have been made.</li> <li>All costs and revenue are in Australian Dollars.</li> <li>Transportation costs have been determined through a combination of existing arrangements, as well as agreed contract and quoted rates.</li> <li>Process operating costs has been determined by:</li> <li>Existing operating costs at Wiluna Mill for free milling material</li> <li>PFS level cost estimation for tailings retreatment.</li> <li>Royalties for a 2.5% WA State Government royalty and additional 3.6% third party royalty on the gold produced.</li> </ul>
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul> <li>Single commodity pricing for gold only, using a long-term gold price of A\$2,500 per ounce. The price setting process follows an established methodology utilising Wiluna Mining corporate guidance market assessment of prevailing spot prices, analysts' forecasts, gold forward price curves and peer price selection comparison.</li> <li>The Competent Person considers this to be an appropriate commodity price assumption based on the time of reporting and the current environment.</li> </ul>
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	Gold doré from the mine is further refined at an independent LMBA certified refiner, and then then sold to the company's various gold sale counterparties. Gold doré refining contracts in place.



Economic	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul> <li>Financial modelling that has been prepared from existing contracts and current operating inputs to support the Open pit, Stockpile &amp; Tailings Ore Reserve estimate.</li> <li>Details of contract arrangements and associated economic inputs have been considered as commercially sensitive.</li> <li>The NPV is positive and sensitivity analysis has been completed for the commodity price, operating costs and capital costs.</li> <li>No discounting has been applied due to the relative size of each deposit within the surface/open pit Ore Reserve. No discounting has been applied to the Wiltails modelling</li> </ul>
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	<ul> <li>Wiluna Mining has established land access agreements as well frequent consultation and engagement with the Wiluna township and hold a good standing with the local community.</li> <li>Wiluna Mining will continue to communicate and negotiate in good faith with key stakeholders, as part of the ongoing mining and processing operation and it is not expected that there will be any significant impediments to continuation and possible expansion of the project.</li> </ul>
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	<ul> <li>All legal agreements and marketing arrangements for Gold doré in place.</li> <li>All tenements held in good standing.</li> <li>All Government approvals in place for existing operations and the construction of Wiltails plant.</li> </ul>



#### Classification

- The basis for the classification of the Ore Reserves into varying confidence categories.
- Whether the result appropriately reflects the Competent Person's view of the deposit.
- The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).
- Classification of the Surface/ Open pit Ore Reserve is based on the Mineral Resource classification.
- The Indicated Resource has been converted to a Probable Reserve.
- The Wiltails Indicated Resource has been converted to a Probable Reserve.
- The Stockpiles are measured resources and thus have been classified as a Proved Reserve.
- No Measured Mineral Resource was modified to a Probable Ore Reserve classification.
- No Inferred Resources are included in the Open pit Ore Reserve estimate.
- The results appropriately reflect the Competent Person's view of the respective deposits.

### Audits or reviews

- The results of any audits or reviews of Ore Reserve estimates.
- Open pit Ore Reserve process are in line with 2020 reserve estimate and inputs has been audited by suitably qualified employees of Wiluna Mining.

# Discussion of relative accuracy/confidence

- Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.
- The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.

- The design, schedule and financial model for the Wiluna Surface/Open Pit Ore Reserve has been completed to a Pre-Feasibility standard with a corresponding level of confidence.
- A degree of uncertainty is associated with geological estimates and the Reserve classification reflects the level of confidence in the Resource.
- There is a degree of uncertainty regarding estimates of modifying mining factors, geotechnical and processing parameters that are of a confidence level reflected in the level of the study. The Competent Person is satisfied that a suitable margin exists that the Reserve estimate would remain economically viable with any negative impacts applied to these factors or parameters.
- There is a degree of uncertainty in the commodity price used however the Competent person is satisfied that the assumptions used to determine the economic viability of the Open Pit Ore Reserve are based on reasonable current data.





•	Accuracy and confidence
	discussions should extend to
	specific discussions of any applied
	Modifying Factors that may have a
	material impact on Ore Reserve
	viability, or for which there are
	remaining areas of uncertainty at
	the current study stage.



#### **Section 4 Estimation and Reporting of Ore Reserves (Underground)**

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul> <li>The Mineral Resource estimate was compiled by Kane Hutchinson. Kane Hutchinson is a full-time employee of Wiluna Mining Corporation Limited and is the Competent Person for the Wiluna Mining Operation Mineral Resource estimate.</li> <li>The details of the development of the Mineral Resource estimates for 2021 can be found above in the Explanatory Notes which accompany the Mineral Resource estimate.</li> <li>The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.</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>The author and principal engineer for the study (Daniel Marchesi) and Ore Reserve estimation visited the site in August and November 2021, inspected the active surface and underground mining areas. The site visit included other AusIMM members who were part of the Study.</li> <li>The competent person, Nigel Bennett, has not conducted a site visit but has reviewed the Ore Reserve estimate. Nigel interviewed Daniel in relation to the Ore Reserves process and was satisfied as to the accuracy of the Ore Reserve.</li> <li>The Competent Person has also relied on reports from other independent consultants and site surveys in determining the viability of the underground Ore Reserve Estimate.</li> </ul>
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul> <li>A Feasibility level estimation of costs, modifying factors and parameters resulting in a mine plan that is technically achievable and economic using the determined underground Ore Reserve Estimate.</li> <li>Costs and modifying factors have been reviewed against existing operational performance where available and/or considered for reasonableness based on experience.</li> </ul>
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The cut-off grade is based on a gold price of A\$2,450/oz as selected by Wiluna Mining Corporation (WMC) in line with its gold price framework.



- Underground development and production operating unit costs are based on underground mining contract rates.
  - Wiluna sulphide resource treatment costs are sourced from a sulphide processing plant feasibility study carried out by independent consultants GR Engineering.
  - Wiluna metallurgical recoveries were estimated by WMC based on extensive test work for the sulphide processing plant. A flotation circuit will process refractory fresh ores to produce gold in flotation concentrate.
  - Other administration costs were based on existing operational data provided by WMC.
  - Royalty payments were provided by WMC based on current agreements.
  - Revenue estimates are based on the sales agreements for contract sales.
  - The underground Ore Reserve is based on the application of hillof-value cut-off grade estimate, to select the cut-off grade for each deposit based on providing the highest margin. Economic checks were conducted to confirm that the areas generated a positive economic return.
  - Cut-off grades of between 3.25 g/t Au and 3.75 g/t Au were applied to the different deposits, based on the highest margin. An incremental cut-off of between 2.0 g/t Au and 2.5 g/t Au was applied to stoping optimisations
  - A development ore cut-off grade (1.3 g/t Au) was included in the Ore Reserve estimate, which covers rehandle, processing and administration costs.

## Mining factors or assumptions

- The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).
- The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.
- The mine is an ongoing underground operation with many years of production history. A mine operating plan was developed to convert the Mineral Resource to an Ore Reserve.
- Conventional underground mining methods for mine access and mine production are currently employed in the existing operations at Wiluna. Mining methods are widely used in the mining industry and production rates and costings are based on existing performance and contract rates.
- Geotechnical parameters are based on years of underground mine performance and analysis conducted by geotechnical consultants for the Feasibility Study. These parameters have been successfully applied over many years at Wiluna and form the basis of the current Ground Control Management Plan used at Wiluna.



- The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.
- The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).
- The mining dilution factors used.
- The mining recovery factors used.
- Any minimum mining widths used.
- The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.
- The infrastructure requirements of the selected mining methods.

- All modifying parameters and ground support requirements are based on the standards outlined in this document.
- Ore drives are 4.5 m wide x 4.5 m high.
- Development recovery has been set at 100%.
- Level intervals vary from 20 m to 25 m.
- Stope planned hanging wall dilution of 0.5 m at the block model grade.
- A minimum mining stoping width of 1.5 m for 20 m level intervals, and 2.0 m for 25 m level intervals. These minimum mining widths are exclusive of the planned stope dilution.
- Ore drive development dilution has been set to zero to prevent the generation of metal. All other development has a dilution of 10% applied.
- Mine stope recovery of 95% is applied.
- The Mineral Resource classifications consist of Measured, Indicated and Inferred. The underground Ore Reserve does not include the value of any Inferred resource and the Underground Ore Reserve is technically and economically viable without the inclusion of any Inferred resource.
- Infrastructure to support the mining plan such as dewatering systems, mine ventilation, power supply and services have been designed, scheduled and included within cost estimates.

## Metallurgical factors or assumptions

- The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.
- Whether the metallurgical process is well-tested technology or novel in nature.
- The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.
- Any assumptions or allowances made for deleterious elements.

- The underground reserves are based on processing sulphide ore through a flotation circuit to produce gold in concentrate.
- Metallurgical test work for the design of the new float circuit has confirmed operational performance and been used to confirm metallurgical operating parameters.
- The Wiluna ore does not contain metals deleterious to the flotation performance, however, gold is associated with arsenopyrites and this mineralisation is concentrated in the flotation process. Resultant arsenic in concentrate is considered a deleterious element and can incur penalties. This penalty is calculated as 1% Au per 1% As, above 6.5% As.
- The flotation process is designed to deliver concentrate within the sales agreement specifications.
- Flotation concentrate has been tested to confirm compatibility with downstream processors' chosen technology.



	The existence of any bulk sample	
	or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.  • For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications?	
Environmental	environmental impacts of the mining and processing operation.  Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Wiluna Mining holds Operating Licence L5206/1987/10, issued pursuant to the Environmental Protection Act 1986 by the Department of Water and Environment Regulation which expires on 30 June 2040.  Waste characterisation test work is consistent with previously mined underground material which confirms that the minor potentially acid component of waste production has high net neutralising capacity and no acid generation issues are expected.  Wiluna Mining operates under the conditions set out by the Mining Proposals submitted to, and requirements of, the Department of Mines, Industry Regulation and Safety (DMIRS) and is not aware of any reason why permits will not be renewed, amended or approved as required.
Infrastructure	infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.	Substantial infrastructure exists on-site, which has been operating for several years.  The site is located proximal to the township of Wiluna and the all-weather Goldfields Highway. The Wiluna airport, and near-by Mt Keith airport (BHP) services both the mine and the town.  Labour is currently sourced primarily from Perth on a fly in fly out basis.  Sufficient water will be available for operations from mine dewatering and operational bore fields.  Existing permitted and operational village, bore fields, power supply and communications.  Expansion of the mine village and power supply infrastructure is required. Discussions have commenced with suitable suppliers/contractors and will be advanced as required to meet schedule requirements.



Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>Permitted processing facilities are in place, and a Feasibility Study has been constructed by GRES on the installation of the upgraded Stage 2 processing facilities.</li> <li>Concentrate haulage contracts are in place.</li> <li>All costs and revenue are in Australian dollars.</li> <li>Royalties for a 2.5% WA State Government royalty and additional 3.51 third party royalty on the gold produced.</li> <li>Mining, processing and administration costs reflect the Stage 2 Sulphide Expansion processing rate of 1.5 Mtpa.</li> <li>Underground mining costs are based on an alliance style contract in place with mining contractor Byrnecut Australia and reflect the timing and production levels for the fleet and work program required to achieve the schedule.</li> <li>Processing costs reflect the outcome of the Sulphide Expansion Feasibility Study conducted by GR Engineering Services.</li> <li>Concentrate transport and shipping costs are based on signed contracts with an experienced logistics company.</li> <li>Site administration costs reflect current site costs modified where required.</li> </ul>
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul> <li>Single commodity pricing for gold only, using a flat gold price of A\$2,650 per ounce. The price-setting process follows a set corporate methodology utilising Wiluna Mining corporate guidance market assessment of prevailing spot prices, analysts' forecasts, gold Forward price curves and peer price selection comparison. The Competent Person considers this to be a reasonable commodity price assumption based on the current environment.</li> <li>Gold in concentrate sale price derived from signed offtake agreements.</li> </ul>
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> </ul>	<ul> <li>Gold doré refining contracts are in place.</li> <li>Bulk concentrate offtake agreements in place with two partners</li> <li>All gold in concentrate sales are based on contracted off-take agreements and contracted party future demand.</li> <li>Test work supports that concentrate production will meet required sales specifications without activating penalty conditions.</li> </ul>



Economic	<ul> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul> <li>Financial modelling that has been prepared from detailed cost estimates, existing contracts and current operating inputs to support the Ore Reserve estimate.</li> <li>Details of contract arrangements and associated economic inputs have been considered as commercially sensitive.</li> </ul>
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	<ul> <li>Wiluna Mining has established land access agreements as well as frequent consultation and engagement with the Wiluna township and hold good standing with the local community.</li> <li>Wiluna Mining will continue to communicate and negotiate in good faith with key stakeholders, as part of the ongoing mining and processing operation and it is not expected that there will be any significant impediments to the continuation and possible expansion of the project.</li> </ul>
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	<ul> <li>First three years of concentrate production fully committed in signed concentrate purchase agreements. Ongoing engagement with offtake parties indicates ongoing high demand. First concentrate shipment was January 2022.</li> <li>All tenements held in good standing.</li> <li>All Government approvals in place for existing operations and the construction of the sulphide processing plant.</li> </ul>



Classification	Any identified material naturally occurring risks.  The basis for the elastification of	
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul> <li>Classification of the underground Ore Reserve is based on the Mineral Resource classification.</li> <li>No Insitu Measured Mineral Resource was included in the Mineral Resource Estimate</li> <li>No value from Inferred Resources are included in the underground Ore Reserve estimate.</li> <li>The results appropriately reflect the Competent Person's view of the respective deposits.</li> </ul>
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	<ul> <li>Mining Plus conducted an internal peer review process on the Wiluna Ore Reserve process and assumptions for reasonableness.</li> <li>Internal review of the underground Ore Reserve process and inputs has been conducted by suitably qualified employees of Mining Plus consultancy and Wiluna Mining.</li> </ul>
Discussion of relative accuracy/confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</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.</li> <li>Documentation should include assumptions made and the procedures used.</li> </ul>	<ul> <li>The design, schedule and financial model for the Wiluna underground Ore Reserve has been completed to a Feasibility standard with a corresponding level of confidence.</li> <li>A degree of uncertainty is associated with geological estimates and the Reserve classification reflects the level of confidence in the Resource.</li> <li>There is a degree of uncertainty regarding estimates of modifying mining factors, geotechnical and processing parameters that are of a confidence level reflected in the level of the study. The Competent Person is satisfied that a suitable margin exists that the Reserve estimate would remain economically viable with any negative impacts applied to these factors or parameters.</li> <li>There is a degree of uncertainty in the commodity price used, however, the Competent person is satisfied that the assumptions used to determine the economic viability of the underground Ore Reserve are based on reasonable current data.</li> </ul>





 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.