# **ASX Announcement**

# Wiluna West Gold Project Golden Monarch Resource Updated

# Highlights

• JORC 2012 Mineral Resource estimate for the Golden Monarch gold deposit of 747,000 tonnes at 2.2 g/t Au for 52,400 oz using a 0.5 g/t lower cut off within a 0.5 g/t wireframe

Resource Type	Tonnes	Grade (g/t Au)	Ounces
Indicated	474,000	2.4	36,600
Inferred	273,000	1.8	15,800
TOTAL	747,000	2.2	52,400

- Includes Indicated Resource estimate of 474,000 tonnes at 2.4 g/t within an optimised pit shell at \$1,600 per oz and an Inferred Resource estimate of 273,000 tonnes at 1.8 g/t Au.
- Combined Mineral Resource estimate for Wiluna West Gold project is now 3.5 million tonnes at 2.3 g/t for 254,500 oz of gold (refer Table 1)
- Very significant increase in Indicated Resources from 46,000 tonnes (JORC 2004) to 474,000 tonnes (JORC 2012) representing a greater than 1000% increase
- Active engagement with Blackham Resources in respect to mining and milling options as per the MOU signed in January 2017
- Under the MoU, GWR is responsible for drilling deposits to JORC-2012 Indicated category and Blackham may conduct a Feasibility Study, and if positive, undertake mining, transport and processing of gold bearing ore
- Streamlined mining approvals process as adjacent to JWD iron deposit where mining approval was granted in 2012;
  - within Clearing Permits already granted for the adjacent JWD iron deposit
  - o geotechnical and hydrological studies already largely completed
  - o Mining Agreement in place with the Wiluna Native title holders
- Eagle and Emu deposits which contain a combined JORC 2004 Inferred Resource of 860,000 tonnes at 2.4 g/t Au for 66,500 oz targeted for additional drilling

GWR Group Limited (ASX: GWR) ("GWR" or "the Company") is pleased to announce that it has completed a JORC Code 2012 Resource estimate update for its Golden Monarch gold deposit at the Wiluna West project (Figure 1). The Resource estimate was undertaken by Consultant Geologist Phil Jones and his full report is provided in Appendix 1 along with JORC 2012 Table 1. The Resource update incorporates the RC drilling undertaken in July 2017 (refer to ASX announcement "Wiluna West Gold Update 6<sup>th</sup> October 2017").

The Wiluna West Gold Project is located approximately 40 km south west of the Blackham Resources Limited ("Blackham") (ASX:BLK)) Matilda / Wiluna Gold Operation which includes a gold processing and treatment plant (Figure 2). In January 2017 GWR executed a Memorandum of Understanding ("MoU") with Blackham for the potential treatment of gold deposits at Wiluna West (refer to ASX announcement; GWR Group and Blackham Resources sign MoU, 31<sup>st</sup> January 2017). Under the MoU,

GWR is responsible for drilling deposits to JORC-2012 Indicated category and Blackham has responsibility for conducting a Feasibility Study, and if positive, undertaking mining, transport and processing of gold bearing ore.

The combined JORC 2012 Mineral Resource estimate for the Golden Monarch gold deposit is 747,000 tonnes at 2.2 g/t Au for 52,400 oz of Au using a 0.5 g/t lower cut off (Table 1). This includes an Indicated Resource of 474,000 tonnes at 2.4 g/t (36,600 oz), which is within an optimised pit shall calculated at \$1,600 per ounce and an Inferred Resource of 273,000 tonnes at 1.8 g/t which is outside of the optimised pit shell. A 31,400 oz increase in Indicated Resources has been achieved compared with the previous JORC 2004 Indicated Resource of 46,000 tonnes at 3.5 g/t Au (5,200 oz).

GWR is now actively engaging with Blackham in respect to mining and milling options as the significant upgrade in Indicated Resources triggers the provisions of the MoU.

A streamlined statutory approvals process is likely as the Golden Monarch gold deposit is adjacent to the JWD iron deposit where GWR was granted mining approval in 2012 and is within the granted clearing permits. Geotechnical and hydrological studies have also been completed as part of the JWD approvals process. A Mining Agreement with the Wiluna Native Title holders was also signed in July 2010 which contemplates the mining of gold. Aboriginal Heritage surveys have also largely been completed over the potential area of disturbance.

GWR via its MoU with Blackham is seeking to build a portfolio of potential mining projects at Wiluna West and now plans to target the Eagle and Emu deposits, which are along strike from each other and contain a combined JORC 2004 Inferred Resource of 860,000 tonnes at 2.4 g/t Au for 66,500 oz.

JORC Status	Prospect	Resource	Tonnes	Grade	Ounces
	recpect	Туре		(g/t Au)	Canoco
JORC2012	Golden Monarch	Indicated	474,000	2.4	36,600
at 0.5 g/t cut off		Inferred	273,000	1.8	15,800
		TOTAL	747,000	2.2	52,400
JORC2004	Bottom Camp	Inferred	329,000	2.0	21,100
at 1.0 g/t cut off	Bowerbird	Inferred	169,000	3.1	17,000
	Bronzewing	Inferred	104,000	2.4	8,000
	Brilliant	Inferred	342,000	2.5	27,900
	Wren	Inferred	61,000	2.5	4,800
	Emu	Inferred	371,000	2.4	28,700
	Eagle	Inferred	489,000	2.4	37,800
	Comedy King	Inferred	183,000	1.8	10,800
	Goldfinch	Inferred	80,000	1.4	3,600
	Iron King	Inferred	481,000	2.3	35,600
	Iron Hawk	Inferred	138,000	1.5	6,800
		TOTAL	2,747,000	2.3	202,100
тот	AL JORC2004 & JORC	3,494,000	2.3	254,500	

# Table 1 Wiluna West Gold Project

#### Notes

Differences may occur due to rounding. For JORC 2004 refer to ASX announcement 14th June 2010. The Mineral Resource Estimates shown as JORC 2004 compliant were first prepared and disclosed under JORC 2004 and have not been updated to comply with JORC 2012 on the basis that the information has not materially changed since they were last reported.

# Mineral Resource Estimate – Summary of material information.

#### Geology and geological information

The gold mineralisation at Golden Monarch is hosted within narrow BIF units and their immediate hanging and footwalls, with depth of weathering being approximately 80 m. The Resource estimate was undertaken over a strike length of 1.4km.

#### Sampling / subsampling and Drilling techniques

The Resource estimate is based on a total of 411 RC drill holes and two diamond drill holes for an aggregate of 18,897 m undertaken during the period 1984 to July 2017; which includes 103 RC drill holes for 6,744 m drilled by GWR. All RC drilling since 2010 has included down hole survey and density measurements and the density applied in the Resource estimate is based upon these down hole density measurements. The Resource estimate is based upon 1.0 m sample intervals, with samples submitted to a number of laboratories generally for fire assay. RC drilling undertaken by GWR included the submission of routine field duplicates and certified reference standards. All drill hole collars were surveyed and the drill hole collars prior to GWR were also checked where possible and found to be reliable.

#### Criteria used for classification

To determine an approximate economic viability of the deposit a Lerch-Grossman optimised pit shell was created at a gold price of \$1600 per oz and estimated mining, milling and metallurgical costs. The Mineral Resource estimates have been classified as either Indicated or Inferred categories after considering numerous factors including drill hole spacing, estimation quality statistics, number of informing samples, average distance to informing samples and overall coherence and continuity of the modelled mineralisation wireframes. Only that portion of the Resource within the Lerch-Grossman pit shell was classified as indicated.

#### Sample analysis method

All samples have been analysed for Au by the fire assay method

#### **Estimation Methodology**

In February 2010 CSA Global on behalf of GWR undertook a Mineral Resource Estimate under JORC 2004 for a total of 614,000 tonnes at 2.5 g/t Au for 48,800 oz (refer to ASX announcement 10<sup>th</sup> March 2010). The current Resource Estimate has been calculated over the same location as the CSA estimate. The current Resource Estimate was undertaken using MineMap software with the digital model parent cells 2 m by east by 5 m by north and by 1 m in depth to enable good resolution of the narrow mineralised boundaries. Wireframes were generated of the mineralised zone (>0.5 g/t Au) using a minimum down hole width of 2 m and including some internal waste where mineralisation splits up but the overall mineralised envelope still exceeds 0.5 g/t Au. The grades within the wireframes were estimated using an inverse distance cubed algorithm

#### Cut off Grade

As described in Appendix 1 the Mineral Resource estimate deposit was made at various cut off grades within a mineralised zone where wireframes of >0.5 g/t Au and minimum down hole width of 2m were created. A lower cut off grade of 0.5 g/t is considered appropriate considering the style of mineralisation present

#### Mining and metallurgical methods and other modifying factors considered

It is anticipated that mining would be carried out using industry standard open pit mining techniques. Metallurgical testwork was undertaken by previous operators and this demonstrated that the ore could be processed by a conventional CIP / CIL plant and achieve recoveries of > 90%. GWR intends to undertake metallurgical testwork on the most recent RC drill hole samples



Figure 1: Golden Monarch Longitudinal Section.



Figure 2: Wiluna West Gold Project Location

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# **Competent Persons Statement**

#### Golden Monarch JORC 2012 Mineral Resource Estimate

The information in this report which relates to the Golden Monarch Mineral Resource Estimate is based on information compiled by Mr Philip A. Jones, who is a Member of the Australian Institute of Geosciences ("AIG") and the Australasian Institute of Mining & Metallurgy ("AusIMM") and is an independent consultant to the Company. Mr Jones has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves" (JORC Code). Mr Jones consents to inclusion in this Announcement of the matters based on this information in the form and context in which it appears.

#### **JORC 2004 Mineral Resource Estimates**

The information in this report which relates to Exploration Targets, Exploration Results and 2004 Mineral Resource Estimates is based on information compiled by Mr Allen Maynard, who is a Member of the Australian Institute of Geosciences ("AIG"), a Corporate Member of the Australasian Institute of Mining & Metallurgy ("AusIMM") and independent consultant to the Company. Mr Maynard is the Director and principal geologist of Al Maynard & Associates Pty Ltd and has over 35 continuous years of exploration and mining experience in a variety of mineral deposit styles. Mr Maynard has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves" (JORC Code). Mr Maynard consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

# Appendix 1

Resource Estimate Golden Monarch Deposit Including JORC 2012 Table 1 and 2

# PHIL JONES – GEOLOGIST

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# **RESOURCE ESTIMATE**

for the

# **GOLDEN MONARCH DEPOSIT**

# WILUNA WEST GOLD PROJECT

# **WESTERN AUSTRALIA**

PREPARED FOR

# **GWR Group Limited**

Independent Qualified Person:Philip A. Jones BAppSc (App. Geol), MAIG, MAusIMMEffective Date1st October, 2017Date:20th October, 2017

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# Golden Monarch Gold Project – Resources Estimate

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# **EXECUTIVE SUMMARY**

Resources were estimated for the Golden Monarch deposit at GWR's Wiluna West Gold Project, approximately 35 km south-west of Wiluna, Western Australia, as summarised in Table 1Table 1.

			Contained
Classification	Ktonnes	Au	Ounces Au (thousand)
Indicated	479	2.38	37
Inferred	284	1.7	16
Total	763	2.1	52

#### Table 1: Summary of resources at Golden Monarch within >0.5 g/t Au wireframe.

These resource estimates are based on several phases of RC drilling and limited diamond drilling, including drilling commissioned by GWR Group Limited from 2004. This mineralisation is hosted in the oxide and fresh zones within BIF units and footwall and hanging wall schist along the Joyners Find Shear Zone (JFSZ).

This drilling on which these resource estimates are based is at sufficient density to warrant a Project Feasibility Study to determine the feasibility of economically mining the deposit.

The Directors GWR Group Limited 97 Outram Street West Perth, Western Australia 6005

Dear Directors,

# **INTRODUCTION**

This report has been prepared by Phil Jones at your request in relation to reporting of the Mineral Resource estimates for the Golden Monarch Project contained within M53/11018 and M53/971. as at  $1^{st}$  October, 2017.

All tenements are covered by the granted Wiluna Native Title Claim (WCD2013/004) and are subject to a Mining Agreement with the Native Title Holders.

## **Purpose of this report**

This report (Report) provides updated Mineral Resource estimates at the Golden Monarch Prospect (the Prospect) located in Western Australia and owned by GWR Group Ltd (GWR). The Report has been prepared by Philip Jones and reported using the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, December 2012 (the JORC Code 2012).

#### **Use of report**

The Report summarises the Mineral Resource estimates for the Golden Monarch Project as at 1<sup>st</sup> October, 2017 and should not be used or relied upon for any other purpose.

#### **Reporting Standard**

Mr Jones has adopted the JORC Code (2012)<sup>1</sup> as the reporting standard. The JORC Code (2012) requires that a public report concerning a company's exploration targets, exploration results, mineral resources, or ore reserves must be based on, and fairly reflect, the information and supporting documentation prepared by a Competent Person.

#### Basis, Scope and Limitations of this report

This Qualified Persons Report has been prepared in accordance with the requirements of the JORC Code (2012) as adopted by the Australian Institute of Geoscientists ('AIG') and the Australasian Institute of Mining and Metallurgy ('AusIMM').

<sup>&</sup>lt;sup>1</sup> Australasian Joint Ore Reserves Committee (JORC), Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code), 2012 edn, effective December 2012, 44 pp., available <a href="http://www.jorc.org/docs/jorc\_code2012(4">http://www.jorc.org/docs/jorc\_code2012(4</a>).pdf>, viewed 5<sup>th</sup> February 2014.

The information presented in this report is based on technical reports provided by GWR, supplemented by my own inquiries. At the request of Mr Jones copies of relevant technical reports and agreements were made available by GWR.

This, coupled with general knowledge of the area provides sufficient information to form an opinion as to the current status of the mineral assets. GWR has provided Mr Jones with all available technical, relevant financial and other information required for the purposes of preparing this Report.

In performing its services utilising the JORC Code guidelines, Mr Jones has relied upon and assumed the accuracy and completeness of all material information that has been provided to it by GWR.

Mr Jones has no reason to believe that the information provided by GWR is materially inaccurate, misleading, or incomplete. Mr Jones has not audited the information provided, however, he has satisfied himself as to the reasonableness of the information used.

## **Site Visits**

The only site visit by the author was in 1989, well before GWR acquired the project.

# **Statement of Independence**

This report has been prepared by Philip A. Jones BAppSc (App. Geol), a member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and the Australian Institute of Geoscientists (AIG), a geologist with over 40 continuous years in the industry. Mr Jones has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Resources Committee, the Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. The author does not hold any interests in any mineral properties which are subject to this report. GWR will be invoiced and expected to pay a fee for the preparation of this report. This fee comprises a normal, commercial daily rate plus expenses, in accordance to Mr Jones' standard rates and is no way contingent upon the conclusions of this report.

#### Tenure

GWR are 100% holders of seven Mining Leases ("ML") and eight Miscellaneous Licences ("L") and joint owners of one ML, Table 2 and Figure 1. These tenements are all located within the Wiluna West Gold Project area, approximately 35 km south west of the township of Wiluna, in the Eastern Goldfields of Western Australia. The author independently checked with the WA Department of Mines and Petroleum ("DMP") and the titles are in good standing as stated below in Table 2.

TENEMENT ID	TYPE	STATUS	HOLDER1	HOLDER2	GRANT DATE	EXPIRE DATE	LEGAL AREA	UNIT
M 53/1016-I	Mining	LIVE	GWR GROUP LIMITED		25-01-2006	29-01-2027	617.45	HA.
M 53/1017-I	Mining	LIVE	GWR GROUP LIMITED		25-01-2006	29-01-2027	808.7	HA.
M 53/1018-I	Mining	LIVE	GWR GROUP LIMITED		25-01-2006	29-01-2027	593.65	HA.
				JINDALEE RESOURCES				
M 53/1078-I	Mining	LIVE	GWR GROUP LIMITED	LIMITED	17-01-2007	31-01-2028	745.65	HA.
M 53/1087-I	Mining	LIVE	GWR GROUP LIMITED		23-09-2010	22-09-2031	10837	HA.
M 53/1096-I	Mining	LIVE	GWR GROUP LIMITED		13-04-2016	12-04-2037	200	HA.
M 53/971-I	Mining	LIVE	GWR GROUP LIMITED		17-01-2002	24-01-2023	9.7105	HA.
M 53/972-I	Mining	LIVE	GWR GROUP LIMITED		17-01-2002	24-01-2023	9.713	HA.
L 53/115	Miscellaneous	LIVE	GWR GROUP LIMITED		11-07-2002	10-07-2023	32.5	HA.
L 53/146	Miscellaneous	LIVE	GWR GROUP LIMITED		10-08-2006	09-08-2027	51.8	HA.
L 53/147	Miscellaneous	LIVE	GWR GROUP LIMITED		21-05-2009	20-05-2030	286	HA.
L 53/148	Miscellaneous	LIVE	GWR GROUP LIMITED		10-08-2006	09-08-2027	147	HA.
L 53/177	Miscellaneous	LIVE	GWR GROUP LIMITED		16-10-2014	15-10-2035	12632.786	HA.
L 53/178	Miscellaneous	LIVE	GWR GROUP LIMITED		21-02-2014	20-02-2035	5739	HA.
L 53/179	Miscellaneous	LIVE	GWR GROUP LIMITED		21-02-2014	20-02-2035	8111	HA.
L 53/190	Miscellaneous	LIVE	GWR GROUP LIMITED		14-01-2015	13-01-2036	170	HA.

## Table 2: Summary of GWR tenements at October 1, 2017.

Jindalee Resources Limited has a 20% free carried interest in M 53/1078.



Figure 1: GWR tenements at 1 October 2017. Tenement shaded green is M 53/1078 is subject to a joint venture agreement with Jindalee Resources Ltd.

## **Native Title**

Within Western Australia the Native Title Act 1993 (Commonwealth), also referred to as NTA, is administered by the State government. This legislation provides for Aboriginal people to claim native title and a process for negotiation and compensation where the land is to be leased out by the State.

All the tenements are covered by the granted Native Title Claim (WCD2013/004), and Mining Agreement was signed with the Native Title Holders in July 2010 covering the Company's tenements.

#### **Royalties**

A royalty of 2.5 % of gross gold produced is payable to the Western Australian government.

M 53/1016, M 53/1017 and M 53/1018 are subject to a Royalty Agreement of \$10 per troy ounce to 50,000 ounces of gold produced and \$5 per troy ounce thereafter.

All of the tenements are subject to a Royalty Agreement with Native Title Holders as per a Mining Agreement that was signed in July 2010.

# ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Wiluna West Project is located 35 km south west of the township of Wiluna, Western Australia and approximately 40 km from the Matilda Project plant owned by Blackham Resources Limited. Access is via a sealed road 11 km south of Wiluna and then the well maintained old Sandstone-Wiluna gravel road, Figure 2. The site is accessible all year round except during periods of high rainfall when the gravel road may be closed by the shire for short periods to prevent damage to the road by the passing traffic until the road dries out again.



#### Figure 2: Location map of the Wiluna West Gold Project.

Wiluna experiences a desert climate (Köppen climate classification BWh), though like most of inland Western Australia it has seen its rainfall increase by around 40 % since 1967. The heaviest rainfall, however, was associated with the April 1900 floods when the town received 527.1 mm (20.75 in) or two-and-half-times its normal annual rainfall. Isolated thunderstorms and remnants of tropical cyclones in the summer months provide sporadic and heavy downfalls that can produce substantial runoff. Temperatures in the summer months commonly exceed 35°C, and minimum temperatures during winter commonly drop below 5°C with occasional frosts.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °C	48	46.8	44	40	37.2	32.2	29	33.4	37.5	42.9	43.3	46.9	48
Average high °C	38	36.5	34	29.2	23.8	19.9	19.4	21.9	26.3	30.3	34	36.8	29.2
Average low °C	22.9	22.1	19.6	15.1	10	6.7	5.4	6.8	9.9	13.9	17.8	21.1	14.3
Record low °C	8.3	12.1	9.4	3.9	-0.6	-2.0	-2.2	-2.3	1.2	4.2	4.4	8.3	-2.3
Average precipitation mm	35.1	38	35.8	29	25.2	23.8	15.1	10.2	4.6	7.1	11.2	22.3	257.4

#### Table 3: Climate data for Wiluna. (after Wikipedia).

The physiography of the Joyners Find area is dominated by hills forming a northerly trending range. Relief across areas of Archaean rock is very low in the region, with the exception of two prominent banded iron-formation (BIF) ridges at Joyners Find. Numerous granitoid breakaways, quartz pods, and sand dunes rise above the surrounding alluvial plain. A large east-trending scarp in the northern part of the region marks the unconformity between Archaean and Proterozoic rocks. The breakaways formed where the Neogene plateau surface, which was originally part of an extensive drainage basin (Mabbutt, 1963; Bettenay and Churchward, 1974; Hocking et al., 2002), was elevated and dissected by later erosion.

Western Wiluna lies within the Austin Botanical District, essentially a mulga region. Numerous species of flora have been identified, many of them characteristic of specific physiographic units.

The most abundant of the larger shrubs is Mulga (Acacia aneura), which is present in almost all habitats and commonly associated with broad-leaf acacia species. River red gum (Eucalyptus camaldulensis) is common along the major watercourses, and spinifex (Triodia sp.) and mallee (Eucalyptus sp.) dominate the sandy plains. Several species of everlasting daisies associated with larger annuals (purple mulla mulla and cotton bush) make colourful displays during spring.

# **HISTORY**

The Wiluna West Gold Project has been explored for gold since approximately 1920 and evidence of historical mine workings and prospecting pits are found in more than 20 separate locations over a distance of 15 km confined to the better exposed portions of the Joyners Find Greenstone Belt. Gold exploration has been carried out within the project area since 1980 with a peak between 1984 and 1990. In total, approximately 23,000 metres of reverse circulation and 15,000 metres of rotary air blast drilling was completed. Detailed and regional geological mapping was also undertaken along with aeromagnetic and aerial photography surveys

The ground has been held by GWR Group limited since 2004; where the primary focus has been iron ore exploration.

# **GEOLOGICAL SETTING AND MINERALISATION**

# **Regional Geology**

The Golden Monarch deposit is located within the Mereweather (2844) 1:100,000 geological map sheet within the Archaean Joyners Find Greenstone Belt. This northerly trending belt is approximately 47 km long and ranges between 1 and 7 km in thickness, Figure 3.

The Joyners Find Greenstone Belt is comprised of mafic and ultramafic volcanics and intrusives with BIF, minor intercalated cherts and clastic sediments. To the north the belt is covered by gently

dipping Proterozoic quartzite. All the Archaean rocks have been metamorphosed to upper greenschist facies.



#### Figure 3: Location and Regional Geology

Gold mineralisation in the region is associated with two northerly trending shear zones, the Brilliant Find Shear Zone (BSZ) and JFSZ. The JFSZ extends the length of the belt and is up to 1.25 km wide and contains more than the 75% of identified gold mineralisation. The BSZ lies approximately 1.5 km to the east of the JFSZ.

#### **Local Geology**

According to Ferdinando (GSWA, 2002):

"...the Archaean Joyners Find greenstone belt is a succession of ultramafic, mafic, and sedimentary rocks, emplaced around 2921–2903 Ma (Greenfield et al., 2001; Wyche et al., 2001). It forms an overturned syncline in the eastern part of the Merewether 1:100,000 map sheet. To the north, granite–greenstones are unconformably overlain by Proterozoic sedimentary rocks of the Yerrida and Earaheedy Groups. To the west are several outcrops of Archaean granitoids, including biotite monzogranite, which were emplaced around 2700– 2680 Ma (Bagas, 1998). Aeromagnetic data indicate that the granitoids are intruded by easterly trending dolerite dykes, although few of the dykes outcrop.

It is uncertain whether the Joyners Find Greenstone Belt is part of the Eastern Goldfields Granite–Greenstone Terrane or the Southern Cross Granite–Greenstone Terrane. However, Myers (1997) assigned the belt to the Southern Cross Granite–Greenstone Terrane.

This correlation is supported by the large volumes of BIF and clastic sedimentary rocks present in the Joyners Find Greenstone Belt, which are typical of Greenstone Bbelts within the Southern Cross Granite–Greenstone Terrane (Eisenlohr et al., 1993)."

At least nineteen gold prospects occur along a 12 km north-south strike zone following a hematite ridge, Figure 4. No previous mining has been undertaken on the Golden Monarch deposit other than a small trial pit, which was dug by Linden Gold Pty Ltd in 2002. The historical Joyners Find mining centre is located approximately 150 m to the east of the Golden Monarch deposit. Joyners Find contains a small pit along with several historic shafts which were mined up to approximately 1945.

Gold is also found along the western JFSZ, and to the east along the BSZ, both striking north-south, as part of the Joyners Find Greenstone Belt.

The gold mineralisation is found in quartz reefs, quartz stockworks, and BIF. At Golden Monarch the lode dips at approximately 70° to the west.

The BSZ contains from the north the prospects Kingfisher, Bottom Camp, Brilliant North, Brilliant, Brilliant South, all in the northern section of the tenements. The JFSZ contains from the north the Top Knot, Bowerbird, Bronzewing, Wren, Quail, Emu, Eagle, Comedy King, Goldfinch, Iron Duke, Golden Monarch, Iron King, Currawong, Hawk and Butcherbird prospects.

The Iron Duke, Monarch and King were found to be one deposit, and was renamed Golden Monarch.





Nb the overview inset is incorrect

#### DRILLING

Various workers have drilled at Golden Monarch since 1984, most notably Sipa Resources Limited ("Sipa") and since 2004 GWR, Table 4.

				Total
Date	Series From	Series To	Count	Metres
1984	JF005	JF108	62	1,958.0
1987	JF142	JF211	40	2,115.0
1988	JF227	JF256	15	624.0
1998	JFD02	JFRC09	7	692.9
1999	JRC003	JRC033	52	3,400.0
2001	DDH11		1	102.0
2001	JRC069	JRC206	133	3,261.0
2004	WWRC0007	WWRC0049	14	1,060.0
2005	WWRC0050	WWRC1813	17	1,330.0
2010	WWRC1831	WWRC2620	27	1,290.0
2011	WWRC2826	WGRC0028	24	1,374.0
2017	WGRC0029	WGRC0049	21	1,690.0
	GWR	TOTAL	103	6,744.0
		TOTAL	413	18,896.9

Table 4: Summary of drillholes used in Golden Monarch resource modelling.GWR drillinghighlighted in yellow.



Figure 5: Drill collar locations at Golden Monarch. GWR drill collars shown as yellow points, historic collars as X.



Figure 6: Typical cross section - 7,033,135N



Figure 7: Long section along Golden Monarch main lode showing significant intersections from latest 2017 drilling program.

# **Historic Drilling**

The majority of the drilling used for the Golden Monarch resource modelling, i.e. 64%, was drilled by Sipa prior to GWR's acquisition of the Wiluna West Gold Project. This drilling was all Reverse Circulation (RC) drilling. Much of the Sipa drilling has been infilled by the GWR drilling and in all cases the logged geology and assay correlations with the earlier drill holes were excellent.

#### **Sipa Drilling**

The Sipa exploration report of May 1988 describes the drilling as being RC hammer (rarely roller), using either a Schramm 64 or Edson 3000 drill rig operated by the Stanley Drilling Company.

All RC drilling since August 1987 was riffle split over each metre drilled. The 10-15 kg samples were collected into plastic bags attached to the cyclone on the rig and then the samples were riffle split down to 2 to 3 kg splits which were then sealed in numbered calico bags and despatched to the assay laboratory. The bulk rejects are stored in numbered plastic bags adjacent to drill sites.

All drilling at Golden Monarch was dry, the water table being generally deeper than 50 to 60 m vertical. Sample recovery and contamination was monitored by the geologist with the drill rig. Very little sample loss or contamination was recorded.

Duplicate splits from the bulk sample residues were taken from selected intersections at all prospects from each drilling program since August 1987. In all, 125 samples from 35 intersections at 10 Prospects were taken. These samples were despatched to Classic Laboratories for Fire Assay. Selected pulps of those samples were then sent to Analabs for Fire Assay as checks by method 309. Sipa concluded from the inter-laboratory check assaying that "*It is considered that no significant bias or inherent assay inaccuracies are indicated.*"

The duplicate sampling results at Iron Monarch Prospect showed some inconsistencies that Sipa concluded was probably caused by laboratory error in sample handling. Except for these few inconsistencies Sipa concluded that the duplicate sampling results *"indicate that the field sampling and splitting provides representative samples for assay for each metre sampled."* 

Sipa also reported that all the drill collars were surveyed by Atkan Exploration Services of Kalgoorlie using an Electronic Distance Measuring Device (SDR2 - Datacom Group Ltd.). The holes were surveyed and levelled into the established AMG grid.

All the Sipa holes were logged by geologists as they were drilled.

# 2004/2017 GWR Drilling

#### **GWR Sample Preparation and Chemical Analyses**

The RC chip samples were collected at 1 m intervals and split into two subsamples of approximately 3 kg each via a cone splitter attached to the RC drill rig at the time of drilling with each sample pair labelled with a prefix "A" or "B".

At the commencement of each hole the cone splitter was checked to ensure that it was level and was continually checked the make sure there was no sample build up inside.

Each sample was visually checked by the site geologist for recovery, moisture content and evidence of contamination then the lithology, alteration, hardness and weathering recorded. Reference chips were also collected and stored in chip trays for future reference as required.

The RC drilling undertaken by GWR prior to 2017 was submitted to the following labs and techniques;

- ALS Fire assay
- Genalysis aqua regia and fire assay
- KAL fire assay
- Ultratrace fire assay
- SGS fire assay

The 2017 drilling samples were then submitted to Nagrom laboratories in Perth where the "A" series samples were dried, pulverised then analysed for gold using their standard Fire Assay method with a detection limit of 0.001 ppm. The sample preparation and quality control procedures followed by Nagrom are considered to have met industry standards and appropriate for the sample type and mineralisation being analysed.

Independent of the laboratory, GWR submitted anonymous field duplicates and Certified Reference Materials (CRMs) as standards at intervals of approximately one every 25 samples.

#### **Field Duplicates**

A total of 76 field duplicates were assayed. A scatter plot of these analyses indicates a generally good correlation with only 4 sample pairs with significant variance from the expected trend and only one pair indicating a possible error or perhaps a nuggetty sample. It is concluded that the sampling is adequate but the one pair (0.86/5.9) should be investigated to determine if there is a problem with sampling.



Figure 8: Scatter plot of field duplicate assays.

#### **Certified Reference Material**

Six reference samples were included in sample batches submitted for chemical analysis. The assays of these CRMs indicate that the analyses are within expected limits however there is a slight negative bias for CRM1 with an expected analysis of 2.14 g/t Au achieving an actual average assay of 2.06 g/t Au, Figure 9.



#### Figure 9: Certified Reference Material (CRM) assays.

All the GWR drill hole collars and approximately 25% of the historic drill holes have been surveyed by Southern Cross Surveys Pty Ltd using GNSS (mmGPS) with manufacturers specifications of +/- 10 mm North & East and +/- 15 mm RL. The grid system used was MGA GDA94 Zone 50.

All the GWR holes were down hole surveyed by Wireline Services Group using a Surface Reference MEMS gyroscope.

#### **Bulk Density**

Twenty of the GWR drill holes were logged using a radiometric probe by Wireline Services Pty Ltd to measure the in-situ density of the rocks. This logging showed, as expected, a strong correlation between depth and density with the ore having a slightly higher density at the same depth by 0.16, Figure 10.



#### Figure 10: Specific Gravity Vs Depth

Based on the graph Figure 10, densities were modelled by depth as summarised in Table 5.

				Waste Bulk	Ore Bulk
De	pth	R	L	Density	Density
0	40	595	555	2.22	2.38
40	80	555	515	2.38	2.54
80	120	515	475	2.51	2.67
120	160	475	435	2.73	2.89
160	200	435	395	2.85	3.01



# **DATA VERIFICATION**

The drillhole data compiled earlier by GWR; i.e. hole collar locations, down hole surveys, down hole geology logging and assays, was supplied as several Excel files. This data was validated and checked by the author for errors statistically and graphically comparing the geological logging with the assays in MineMap software and the very few errors corrected as required.

The three main drilling data sets; i.e. pre-GWR, trial mining grade control and GWR drilling, were compared graphically to check if there is any obvious bias, Figure 11. These graphs indicate that the assay populations are very similar.



Figure 11: Comparison of assays for different data sets.

# MINING AND MINERAL PROCESSING

It is envisaged that all the reported resources will be mined by the open cut method with the ore processed and gold recovered by toll treating at a nearby conventional Carbon in Pulp (CIP) processing plant.

All the mining overburden from any new excavations and tailings from the processing plant will be stored as either approved surface dumps or as backfill in abandoned pits.

Since most of the ore is at least partly weathered it is expected that the ore will be amenable to processing using a conventional CIP plant. Some of the deeper primary ore with associated sulphides may require oxidising to increase gold recoveries to match the ore from the weathered zone.

Metallurgical testwork is planned to determine gold recovery rates using the most recent RC drill hole samples.

# **MINERAL RESOURCES**

This report, including the resource and reserve estimates, complies with the 2012 edition of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the 'JORC Code (2012)'). Key definitions of this code are as follows:

A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location,

quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

An '**Inferred Mineral Resource**' is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

A '**Measured Mineral Resource**' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

An '**Ore Reserve**' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Reserves are defined is usually the point where the ore is delivered to the processing plant.

'**Modifying Factors**' are considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

A '**Probable Ore Reserve**' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.

A '**Proved Ore Reserve**' is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

The General relationship between the resource and reserve categories is summarised in Figure 12.



Figure 12: General relationship between Exploration Results, Mineral Resources and Ore Reserves.

# **Resource Modelling**

#### **Previous Resource Modelling**

In February 2010 CSA Global on behalf of GWR undertook a Mineral Resource Estimate at Golden Monarch under JORC 2004 for a total of 614,000 tonnes at 2.47 g/t Au using a 1.0 g/t Au cut off for 48,800 ounces as summarised in Table 6 (refer ASX announcement 10<sup>th</sup> March 2010)

Class	Volume	Tonnes	Au g/t	Ounces
Indicated	16,000	46,000	3.54	5,200
Inferred	197,000	568,000	2.39	43,600
Total	213,000	614,000	2.47	48,800

Table 6: Golden Monarch Resource Estimate at 1 g/t Au cut off CSA 2010

This Resource Estimate was carried out over the same location (northing and easting) as the current estimate. A density of 3.1 g/cm<sup>3</sup> was applied

# **Current Resource Modelling**

The author used MineMap<sup>©</sup> software with the digital block model parent cells 2 m EAST by 5 m NORTH by 1 m DEPTH to enable good resolution of narrow lode boundaries. This compares to an average drillhole spacing of 10 m along most of the strike and 2 m within the mined out trench.

The drill samples were composited to standard 1 m intervals to eliminate volume variance effects.

Wireframes were generated of the mineralised zone (>0.5 g/t Au) using a minimum down-hole width of 2 m and including some internal waste <0.5 g/t Au where the mineralisation splits up but the overall mineralised envelope still exceeds 0.5 g/t Au.

The model parameters are summarised in Table 7.

	Easting	Northing	RL	
Minimum	793300	7032950	420	
Maximum	793700	7034500	620	
Cell size	2	5	1	
Number	200	310	200	
Algorithm	Inversed distance cubed			
Ellipse (within				
wireframe)	100	20	100	
Dip	0	degrees		
Strike	0 degrees			
Plunge	70 degrees south		outh	

#### Table 7: Resource model parameters.

The Mineral Resource is reported using a 0.0 g/t Au lower cut-off but within the >0.5 g/t Au wireframe, a generally conservative cut-off grade for potential open pit mining based on current industry mining costs.

The resource model was validated both visually and statistically prior to final reporting.

# **Eventual Economic Extraction and Mineral Resource Classification**

To determine an approximate economic viability of the deposit, a Lerch-Grossmann shell was created using approximate current mining and metallurgical recovery costs and a gold price of \$1600 per ounce close to the current gold price.

The Mineral Resource estimates have been classified as either Indicated or Inferred categories after considering numerous factors including drillhole spacing, estimation quality statistics, number of informing samples, average distance to informing samples (<50 m for Indicated) and overall coherence and continuity of the modelled mineralisation wireframes. Only the portion of the resource model within the Lerch-Grossmann shell was considered for Indicated (Figure 13).



#### Figure 13: Resource classifications. Yellow=Indicated, Orange=Inferred

#### **Mineral Resource Estimates**

All the quoted Indicated resources lie within a Lerch-Grossmann shell using realistic mining and processing costs and parameters as well as the current gold price. All the resources within 50 m of a drillhole but below the Lerch-Grossmann shell are classified as Inferred.

The resource estimates as at  $1^{st}$  October, 2017 for the Golden Monarch within the >0.5 g/t Au wireframe totalling some 763 thousand tonnes at 2.1 g/t Au are summarised below in Table 8.

			Contained
			Ounces Au
Classification	Ktonnes	Au	(thousand)
Indicated	479	2.38	37
Inferred	284	1.7	16
Total	763	2.1	52

 Table 8: Resource Summary for Golden Monarch within the >0.5 g/t Au wireframe.

	INFERRED		INDICATED		TOTAL	
Grade Range Au (ppm)	Ktonnes	Au (ppm)	Ktonnes	Au (ppm)	Ktonnes	Au (ppm)
>10			1	13.45	1	13.5
>5.0	7	5.7	22	6.41	29	6.3
>2.5	51	3.5	182	3.60	233	3.6
>1.0	221	2.0	431	2.55	653	2.4
>0.5	273	1.8	474	2.40	746	2.2
>0.0	284	1.7	479	2.38	763	2.1

 Table 9: Total Resources for Golden Monarch at various cut-offs.



Figure 14: Tonnage Vs Grade curve for resources.

# **Exploration Potential**

Further RC and diamond drilling is warranted along strike and in-filling existing drilling along the Joyners and Brilliant fault zones to explore for additional resources and improve the understanding of the current resources prior to mining.

# **ORE RESERVES**

No ore reserves have been estimated at Golden Monarch.

# ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

The author has not considered in detail the environmental and social impacts of mining this deposit; however no special features or circumstances have been identified at the project site that would adversely affect the applications for all the necessary permits and approvals from the government that need to be obtained before mining can commence.

#### **Native Title agreements**

All tenements are covered by the granted Wiluna Native Title Claim (WCD2013/004) and are subject to a Mining Agreement with the Native Title Holders.

# **OTHER RELEVANT DATA AND INFORMATION**

There is no other data not included or referred to in this report and known to the author that would assist with the understanding of the Golden Monarch project.

# **INTERPRETATION AND CONCLUSIONS**

The Golden Monarch gold deposit follows the contact between a BIF unit and the underlying metasediments along the Joyners Find Shear.

The author estimates that there is an Indicated Resource of 479,000 tonnes at 2.38 g/t Au along with a further Inferred resource of approximately 284,000 tonnes at 1.7 g/t Au outlined to date at Golden Monarch.

#### **Risks**

The following risk analysis has been adopted by the Competent Person in assigning risk factors to various aspects. Risk has been classified from major to minor as follows:

**Major Risk**: the factor poses an immediate danger of a failure which, if uncorrected, will have a material effect (>15% to 20%) on the project cash flow and performance and could potentially lead to project failure.

**Moderate Risk**: the factor, if uncorrected, could have a significant effect (10% to 15%) on the project cash flow and performance unless mitigated by some corrective action.

**Minor Risk**: the factor, if uncorrected, will have little or no effect (<10%) on project cash flow and performance.

#### **Overall Risks**

The likelihood of a risk event occurring within a nominal 7 year time frame has been considered as:

Likely:	will probably occur
Possible:	may occur
Unlikely:	unlikely to occur

The degree or consequence of a risk and its likelihood are combined into an overall risk assessment, as shown in Table 10:

Likelihood of Risk	Consequence of Risk			
(within 7 years)	Minor	Moderate	Major	
Likely	Medium	High	High	
Possible	Low	Medium	High	
Unlikely	Low	Low	Medium	

#### Table 10: Risk Assessment Guidelines.

#### **Project Risks**

This Section identifies the areas that Competent Person regards as the major risks associated with an investment in the Golden Monarch project.

The main (but not exhaustive) risks pertaining to this project are as follows:

- Resource risk due to changes in geological interpretation, assumed mining and processing parameters and new geological information and or sampling data;
- Commodity prices and exchange rates are constantly changing;
- Risks inherent in exploration and mining include, among other things, successful exploration and identification of ore reserves, satisfactory performance of mining operations if a mineable deposit is discovered and competent management;
- Risks associated with obtaining renewal of tenements upon expiry of their current term, including the grant of subsequent titles where applied for over the same ground. The grant or refusal of tenements is subject to ministerial discretion and there is no certainty that the renewal of tenements will be granted.
- The risk of material adverse changes in the government policies or legislation of Western Australia that may affect the level and practicality of mining activities;
- Environmental management issues with which the Company may be required to comply from time to time. There are very substantive legislative and regulatory regimes with which the Company needs to comply for land access and mining which can lead to significant delays.
- Poor weather conditions over a prolonged period which might adversely affect mining and exploration activities and the timing of earning revenues;
- Unforeseen major failures, breakdowns or repairs required to key items of mining and processing equipment, mining plant and equipment or mine structure resulting in significant delays, notwithstanding regular programs of repair, maintenance and upkeep;

This is not an exhaustive list. Further clarification of the major risks follow:-

# **Resource Risk**

Estimates of Mineral Resources may change when new information becomes available or new modifying factors arise. Interpretations and assumptions on the geology and controls on the mineralisation on which Resource or Reserve estimates based on may be found to be inaccurate after further mapping, drilling and sampling or through future production. Any adjustment could affect the development and mining plans, which could materially and adversely affect the potential revenue from the Project and the valuation of the Project. If the Resources are over estimated in either quantity or quality of ore, the profitability of the project will be adversely affected. If however the quantity or quality is underestimated the profitability of the project will be enhanced. The Golden Monarch Project is in the advanced exploration stage. Gold metal value fluctuations, dilution, grade and mining losses all could potentially change the value of the Resource estimate.

# **Mining Risk**

Mining risks include the uncertainties associated with projected continuity of an ore deposit, fluctuations in grades and values of the product being mined, and unforeseen operational and technical problems.

Mining may be adversely affected or hampered by a variety of non-technical issues such as limitations on activities due to seasonal changes, industrial disputes, land claims, legal challenges

associated with land ownership, environmental matters, mining legislation and many other factors beyond the control of the Company, including many that are partly or wholly unforeseeable.

The cost of maintaining mining properties which depends on the Company having access to sufficient development capital, poses another form of risk.

Changes in the Western Australia mining law and regulations may affect the feasibility and profitability of any mining operations.

#### **Commodity Price and Demand, and Exchange Rates Risks**

The Company's project is prospective for mainly gold and iron ore and various other minerals as perceived by the Company. Therefore, it would be reasonable to expect that the Company's market appeal, and in the event it commences mining any of the other commodities besides gold, its revenue will be affected by the price of such minerals. Mineral and metal prices and currency exchange rates may fluctuate widely and are affected by numerous industry factors beyond the Company's control.

## **General Economic Factors and Investment Risks**

General economic conditions may affect inflation and interest rates, which in turn may impact upon the Company's operating costs and financing. Other factors that may adversely affect the Company's activities in Western Australia include changes in government policies, natural disasters, industrial disputes, and social unrest. Some of these risks include:

#### **Currency Exchange Rate Fluctuations**

Fluctuations in currency exchange rates can affect the value of operating and capital costs as well as the price received for any concentrates sold.

#### **Taxation**

Changes to tax legislation and regulation or their interpretation may affect the value of mine output.

#### **Unforeseeable Risks**

There are likely to be risks that the author is unaware of or do not fully appreciate at any point in time. Over time or with the benefit of hindsight these sometimes become apparent. Such risks may be related to legislation, regulation, business conditions, land access, conflicts and disputes at a local or international level, data issues and a variety of other unforeseen eventualities.

A summary of the main Project risks are included, summarized and ranked by their importance as follows in Table 11.

Risk Issue Likelihood Consequence	Likelihood	Consequence Rating	Risk
Geological			
Resource tonnes and grades significantly not achieved beyond the limits implied by the JORC resource classifications	Unlikely	Major	Medium
Economic Conditions Commodity Price	Possible	Moderate	Medium

Risk Issue Likelihood Consequence	Likelihood	Consequence Rating	Risk
Loss of Demand	Unlikely	Major	Medium
Inflation Increase	Possible	Moderate	Medium
Change in Interest Rate	Possible	Moderate	Medium
Sovereign Risk	Unlikely	Moderate	Low
Environmental			
Unexpected Unauthorised Ecological	Unlikely	Moderate	Low
Damage			
Extra costs in environment restoration	Possible	Minor	Low
Contamination of Local Water System	Possible	Minor	Low
Capital and Operating Costs			
Capital Costs	Possible	Moderate	Medium
Operational Risk			
Operating Costs	Possible	Major	Medium

Table 11: Summary of Main Project Risks.

# RECOMMENDATIONS

The following recommendations are made with respect to further evaluating and increasing confidence in the project:

• Further drilling is warranted to extend the known resources in all directions from the modelled resource but especially at depth in the higher grade sections of the mineralised lode.

# **COMPETENT PERSON STATEMENT**

# Competent Person for Mineral Resources and Ore Reserves: Mr Philip A. Jones

I, Philip A. Jones, confirm that I am a Consultant Geologist and that I am the Independent Qualified Person responsible for the report titled "Resource Estimate, the Golden Monarch Prospect, Wiluna West Gold Project, Western Australia" with an effective date of 1st October 2017.

I confirm that I am independent of GWR Group Limited (the Company), its directors, and substantial shareholders. In addition, I have no interest, direct or indirect, in the Company and will not receive benefits other than remuneration paid to me in connection with the independent qualified persons report (IQPR). Remuneration paid to me in connection with the IQPR is not dependent on the findings of this report.

I have read and understood the requirements of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).

I am a Competent Person as defined by the JORC Code, 2012 Edition and meet all the requirements for an Independent Qualified Person under the Catalist Rule 442, having greater than five years' experience that is relevant to the style of mineralisation and type of deposit described in this report for which I am accepting responsibility.

I also verify that this report is based on and fairly and accurately reflects, in the form and context in which it appears, the information in my supporting documentation relating to Exploration Results, Mineral Resources and Ore Reserves for which I am accepting responsibility.

I am a Member of The Australian Institute of Geoscientists and The Australasian Institute of Mining and Metallurgy in good standing. I have not been found in breach of any relevant rule or law and am not denied or disqualified from membership of, subject to any sanction imposed, the subject of any disciplinary proceedings or the subject of any investigation which might lead to a disciplinary action by any regulatory authority or any professional association.

I have reviewed the report, to which this Consent Statement applies, and I consent to the release of this report.

20<sup>th</sup> October, 2017

Philip A. Jones - Competent Person

## **REFERENCES**

FERDINANDO, D. D., 2002, Geology of the Merewether 1:100 000 sheet: Western Australia Geological Survey, 1:100 000 Geological Series Explanatory Notes, 24p.

GWR ASX Announcements as follows:

- 21 September 2017 Significant Wiluna Gold Drilling Results
- 24 July 2017 Wiluna West Gold Drilling Update
- 28 June 2017 Exploration ramps up at Wiluna West Gold Project
- 31 January 2017 GWR Group and Blackham Resources sign MoU

World Wide Web

Wikipedia

https://en.wikipedia.org/wiki/Wiluna, Western Australia

# JORC CODE, 2012 EDITION – TABLE 1, GOLDEN MONARCH – FOR GWR DRILLING (AFTER 2004)

# Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is</li> </ul>	All of the drilling was undertaken using a 5 ¼ inch face sampling RC hammer.
oriented and if so, by what method, etc).		The other laboratories used by GWR and their assay techniques usedare:••ALS•Fire assay•Genalysis•KAL•fire assay•Ultratrace•SGS•fire assay
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</li> </ul>	The sample recovery was visually assessed and recorded on drill logs and is considered to be acceptable.
	<ul> <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>	The samples were visually checked for recovery, moisture and contamination. A cyclone and cone splitter were utilised to provide a representative sample and were regularly cleaned. The drilling contractor 'blew out' the hole at the beginning of each rod to remove any water.
		The ground conditions were good and the drilling returned consistent sized dry samples and the possibility of sample bias through selective recoveries is considered negligible.
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> </ul>	All drill holes have been logged by a geologist from sieved chips in the field at 1 m intervals; with lithology, alteration, hardness and weathering recorded. Reference chip trays have also been collected and stored.
	The total length and percentage of the relevant intersections logged.	The drill sample logging was qualitative.
		Each individual metre of the total length of drilling was logged.
Sub-sampling techniques	<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</li> </ul>	No core samples were collected for assay.
and sample preparation	<ul> <li>sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ</li> </ul>	The RC drilling chip samples were collected using a cyclone and then duplicate sub samples of 2 to 4 kg in size collected using a cone splitter attached to the cyclone. All samples were dry.
		All samples were submit to Nagrom Laboratories Pty Ltd, using their standard fire assay technique and industry standard procedures are

Criteria	JORC Code explanation	Commentary
	material collected, including for instance results for field duplicate/second-half sampling.	employed. The approximate 3 kg sample was dried and pulverised to 90% passing 100 uM
	Whether sample sizes are appropriate to the grain size of the material being sampled.	These sample preparation procedures followed by the laboratory meet industry standards and are appropriate for the sample type and mineralisation being analysed.
		Industry standard quality control procedures are used by Nagrom. Independent of the laboratory, GWR submits blind field duplicates and Certified Reference Materials as standards at intervals of approximately every 25 samples and analysis of this data has shown results consistent with industry expectations.
		Field duplicates of the drilling samples were routinely collected and these were all found to agree within acceptable limits with the original samples.
		The sample size is considered appropriate to the grain size of the material being sampled.
Quality of assay data and laboratory testsThe nature, quality and appropriateness of the assaying and lab procedures used and whether the technique is considered partial For geophysical tools, spectrometers, handheld XRF instrument parameters used in determining the analysis including instrument model, reading times, calibrations factors applied and their derivation	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and</li> </ul>	Fire Assay techniques are considered appropriate and industry standard for the elements analysed using this technique with the detection limits as stated.
	model, reading times, calibrations factors applied and their derivation, etc.	The assaying technique used is total analyses.
	• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of	No geophysical or field analytical equipment was used.
	accuracy (i.e. lack of bias) and precision have been established.	Certified reference materials, blanks and replicates are analysed with each batch of samples. These quality control results are reported along with the sample values in the final report provided by Nagrom. The accuracy and precision revealed by this data is consistent with the levels routinely achieved for assay data. No significant grade bias or precision issues have been observed.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	Al Maynard of Al Maynard and Associates, who are consultants to GWR, has checked and verified the data pertaining to the significant intercepts against original field logs, laboratory certificates and by checking cross sections.
	Discuss any adjustment to assay data.	No holes were twinned as the purpose of the drilling was to test strike extensions and infill gaps in existing data.

Criteria	JORC Code explanation	Commentary
		Paper field logging is submitted to the database manager for digitisation and loading into a SQL database with the process logged and time stamped at each point.
		All drill hole data is electronically stored and managed within a SQL based database supplied and maintained by Cube Consulting.
		No adjustments were made to the assay data.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used</li> </ul>	All the GWR drill hole collars were surveyed by Southern Cross Surveys Pty Ltd using GNSS (mmGPS) with manufacturers Specifications of +/- 10 mm North & East and +/- 15 mm RL.
	Quality and adequacy of topographic control.	All holes were down hole surveyed by Wireline Services Group using a Surface Reference MEMS gyroscope.
		The grid system used in this report is MGA GDA94 Zone 50.
		High resolution aerial photogrammetry was collected using an unmanned aerial vehicle (UAV) survey undertaken in August 2015 with an accuracy of +-40 mm in all three dimensions.
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>	The GWR drill holes were collared with a design to fill out the pattern of existing drilling to a nominal spacing of 40 m N by 20 m E. However there is significant historical drilling near surface and the spacing ranges between 5 m N by 5 m E and 20 m N and 10 m E.
		Data spacing is sufficient to demonstrate both geological and grade continuity.
		All the RC drill samples were collected over 1 m intervals and no additional sample compositing was undertaken.
Orientation of data in relation to geological	<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>	All holes are drilled inclined at minus $60^{\circ}$ on an azimuth of $090^{\circ}$ . The mineralisation trends north-south and is steeply dipping at approximately $70^{\circ}$ to west.
structure		No orientation bias has been introduced. Testing on adjacent deposits suggests that any volume imprecision caused by a lack of downhole surveys is unlikely to be significant.
Sample security	The measures taken to ensure sample security.	Samples for chemical analysis were collected in calico bags, then bulked in polyweave bags and sealed with a cable tie. The polyweave

Criteria	JORC Code explanation	Commentary
		bags were placed into several bulka bags and transported via traceable transport systems (Toll IPEC) to Nagrom Laboratories in Perth.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	Regular internal reviews of sampling techniques and project data are undertaken and by Brian Varndell and Al Maynard, independent geological consultants from Al Maynard and Associates.

# Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commenta	ıry		
Criteria       JORC Code explanation       Co         Mineral tenement and land tenure status       • Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.       The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.       The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.       Mineral         Mineral tenure       • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.       Mineral         Mineral tenure       • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.       Mineral         Mineral tenure       • Obtaining a licence to operate in the area.       Mineral         Mineral tenure       • Obtaining a licence to operate in the area.       Mineral         Mineral tenure       • Obtaining a licence tenure       • Obtaining a licence       • Obtaining a licence         Mineral tenure       • Obtaining a licence tenure       • Obtaining a licence       • Obtaining a licence       • Obtaining a licence         Mineral tenure       • Obtaining a licence tenure       • Obtaining a licence       • Obtaining a licence	Commenta The Wiluna 45 km south the project Tenement M53/971 M53/972 M53/1016 M53/1017 M53/1018 M53/1087 M53/1096	West project is located in West h east of the township of Wilun are listed below; Holder GWR 100% GWR 100% GWR 100% GWR 100% GWR 100% GWR 80%, Jindalee Resources 20% GWR 100% GWR 100%	tern Australia a The tenen Expiry 24/01/2023 24/01/2023 29/01/2027 29/01/2027 31/01/2028 22/09/2031 12/04/2037	A approximately nents comprising 9.71 9.71 617.45 808.70 593.65 745.65 10837.00 200.00	
	All teneme GWR Group carried inte The drilling M53/971. All teneme (WCD2013/ Title Holde	nts with the exception of M53/ Limited. Jindalee Resources Lie erest in M53/1078. g described within this report is nts are covered by the granted 004) and are subject to a Minin rs.	1078 are 100 imited hold a located over Wiluna Nativ g Agreement	% owned by 20% free 7 M53/1018 and re Title Claim with the Native	

Criteria	JORC Code explanation	Commentary
		M53/1016, M53/1017 and M53/1018 are subject to a Royalty Agreement of \$10 per troy ounce to 50,000 ounces of gold produced and \$5 per troy ounce thereafter
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Wiluna West Gold Project has been explored for gold since approximately 1920 and evidence of historical mine workings and prospecting pits are found in more than 20 separate locations over a distance of 15 km confined to the better exposed portions of the Joyners Find Greenstone Belt. Gold exploration has been carried out within the project area since 1980 with a peak between 1984 and 1990. In total, approximately 23,000 m of RC and 15,000 m of RAB drilling was completed. Detailed and regional geological mapping was also undertaken along with aeromagnetic and aerial photography surveys.
		The ground has been held by GWR Group limited since 2004; where the primary focus has been iron ore exploration.
Geology	• Deposit type, geological setting and style of mineralisation.	Gold mineralisation is related to two regional shear zones within the Archaean Joyners Find Greenstone Belt; the Joyners Find and Brilliant Shear Zones. Mineralisation within the Joyners Find Shear Zone is dominated by BIF hosted mineralisation, whilst mineralisation within the Brilliant shear is hosted by quartz reefs and quartz stockworks.
		The gold mineralisation and anomalies described in this report are understood to be related to the Joyners Find Shear Zone.
Drillhole 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 drillholes: <ul> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	All relevant data for GWR's RC drilling is summarised in the body of the report.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No aggregated intercepts are reported. No upper cuts were applied to the data. Metal equivalents have not been used.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	All holes are inclined at -60° on an azimuth of 090°. The mineralisation trends north-south and is sub-vertical, steeply dipping to west. Drill hole intercepts shown are down hole lengths with true widths estimated as being between 50% and 75% of the downhole intercept
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 drillhole collar locations and appropriate sectional views.</li> </ul>	Drilling locations are shown in the 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.	No significant assays have been reported, only a global resource estimate.
Other substantive exploration data	<ul> <li>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.</li> </ul>	Refer to previous ASX releases made by GWR.
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>	Further RC and diamond drilling is warranted at the various deposits to explore for additional resources and improve the understanding of the current resources prior to mining.

# Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
<ul> <li>Database         <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> </li> </ul>	<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> </ul>	Available data have been compiled into a series of Excel spreadsheets for validation purposes.
	Data validation procedures used.	Assay data were checked against original assay sheets where available and, in particular, where the results were considered potentially erroneous.
		Errors generated due to from-to and assaying or lithology overlap errors were rectified when the data from the Excel spreadsheets was exported into the software used in the estimation.
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 only site visit by the author was in 1989, well before GWR acquired the project.
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> </ul>	The gold mineralisation follows a clearly identified BIF unit and shear zone. There is no other feasible alternative geological interpretation.
•	<ul> <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>	The mineralisation was wireframed according to the logged geology in the drill holes and assays.
		There is extremely good geology and grade continuity down dip and along strike.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The Golden Monarch deposit extends over 1.4 km north-south along strike and open at depth for at least 200 m.
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> </ul>	Polygons of minimum thickness 2 m were constructed for each lode according to the geological understanding and >0.5 g/t Au grade distribution of the mineralisation on cross sections which were linked by triangulation. The grades within the wireframes were then modelled using an inverse distance cubed algorithm with a search ellipse plunging 70° to the south and 20 m along strike and100 m down dip within the wireframes.
	<ul> <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> </ul>	The resource model was compared visually on cross sections with the drilling.

Criteria	JORC Code explanation	Commentary
	<ul> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>	The cell dimensions of the digital block model (2 m EW x 5 m NS x 1 m Vertical) allows the lode to be properly represented on plots etc.
		Only gold was modelled.
		Grade cutting was not considered to be necessary since all the highest grades were within the densely drilled area (2 m x 2 m) within the trial pit which has been extracted from the model as mined. Using an Inverse Distance Cubed algorithm restricted the extrapolation of these higher grades.
		There has been no mining data that can be used to reconcile the model against.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The density used is considered to be equivalent of a dry in situ bulk density.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	A cut-off of 0.0 g/t Au within the wireframes that were based on >0.5 g/t Au drill intercepts was selected to reflect approximately current break-even open cut mining costs and practical mining considerations.
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.	It has been assumed that the deposit will eventually be mined using open pit mining methods and appropriate consideration was applied to minimum mining widths and mining dilution and losses.
		A Lerch-Grossmann shell using current mining and metallurgical costs and gold price was used to determine the likelihood of eventual mining recovery and to limit the depth of the Indicated resources.
<i>Metallurgical factors or assumptions</i>	• 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.	It is expected that the ore will be processed using a conventional Carbon in Pulp (CIP) processing plant. Since most of the resource is from within the weathered zone metallurgical recoveries will be similar to other nearby mines although the deeper fresh/sulphide ore may require special treatment to liberate some of the gold in the sulphides to achieve acceptable recoveries.
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,</li> </ul>	The generated waste materials are expected to be used to backfill mined-out pits or delivered to an approved waste dump.

Criteria	JORC Code explanation	Commentary		
	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.			
<ul> <li>Bulk density</li> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, 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</li> </ul>		Twenty of the GWR drill holes were logged using a radiometric probe to measure the in-situ density of the rocks. This logging showed, as expected, a strong correlation between depth and density with the ore having a higher density at the same depth by 0.16. Based on this data densities were modelled by depth as summarised in the table below.		
	process of the unterent materials.	Waste Bulk Ore Bulk		
		Depth RL Density Density		
		40 80 555 515 2.38 2.54 80 120 515 475 2.51 2.67		
		120 160 475 435 2.73 2.89		
		160 200 435 395 2.85 3.01		
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 (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	The Mineral Resources have been classified by considering the confidence of the estimate based on the distance from the nearest drill hole (<50 m). Only modelled resources within the Lerch-Grossmann shell were considered to be Indicated. The average distance from the nearest hole for the Indicated resources was less than 20 m.		
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits or reviews have been completed.		
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.	No statistical or geostatistical method was applied. Factors impacting the accuracy and confidence of the Mineral Resources: Accuracy of historical drilling data used within the current drilling areas is unknown for certain.		

Criteria	JORC Code explanation	Commentary
	<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>	Geological control of the gold mineralisation within the BIF and shears is not fully understood. Hence at a local scale the spatial continuity and geometry of mineralisation between drillholes cannot be predicted with certainty.