



ASX: **NGX**

**Norseman Gold Plc**  
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10 August 2015

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## **Norseman Gold Plc**

### **Company Operational and Exploration Update for the period 1 March 2015 to 30 June 2015**

Norseman Gold Plc (**Norseman** or **Company**) remains suspended on the ASX.

The Company sets out an operational and exploration update in relation to its principal operating subsidiary, Central Norseman Gold Corporation Pty Ltd (**CNGC**), for the four month period from 1 March 2015 to 30 June 2015.

#### ***Highlights***

- Exciting exploration results from RC drilling at Harlequin Mine area below the planned HV5 open pit:
  - HARG01P - **8 metres at 25.2 grams per tonne** gold from 72 metres downhole;
  - HARG06P - **3 metres at 9.5 grams per tonne** gold from 87 metres downhole;
  - **4 metres at 22.4 grams per tonne** gold from 113 metres downhole;
  - HARG11P - **9 metres at 11.3 grams per tonne** gold from 66 metres downhole;
  - HARG14P - **14 metres at 2.2 grams per tonne** gold from 84 metres downhole;
  - HARG16P - **10 metres at 2.3 grams per tonne** gold from 65 metres downhole.
- Alluvial gold in two paleo-channels leading off the Princess Royal and North Royal Mines have been identified as high priority drilling targets.
- Increased faces identified to mine at Bullen Underground
- 23,637 ounces of fine gold produced and sold in the financial year
- Net EBITDA likely for financial year

## OPERATIONS SUMMARY

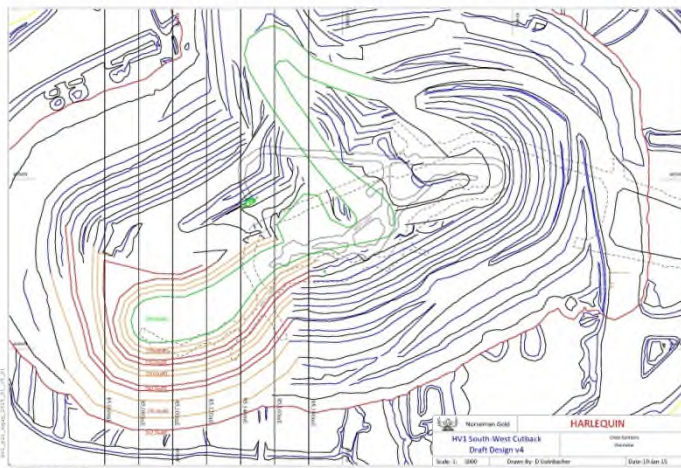
### Current Mining

During the period, the Company has continued remnant mining and has commenced some operations as identified in the resource development review undertaken in the previous period. In summary:

- **Harlequin**

Remnant open pit mining has continued on the pit floor of HV1 to remove the remaining recoverable section of the crown pillar.

Further, the success of the drilling at the south west end of the HV1 pit and along the HV11 strike as previously referred to has seen mining occur in the south west wall of the pit. In order to access the ore in the south west cut back considerable waste had to be removed.



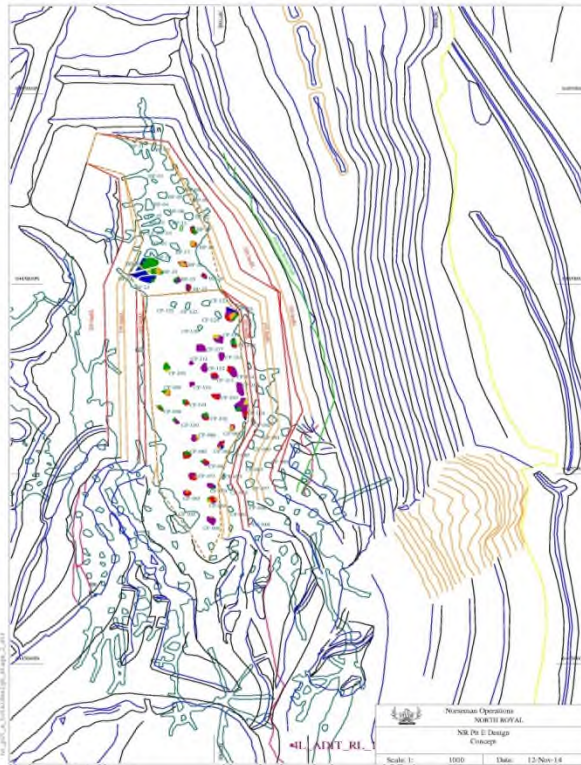
In the period a total of 12,439 tonnes of ore was mined at the HV1 pit.

Unless any further extensions at Harlequin are uncovered it is expected that remnant mining in the existing Harlequin pit will conclude by middle to late August 2015.

**Figure. 1: HV1 Pit – South West Cut Back**

- **North Royal**

The open cut mining of remnant pillars in Pit D was completed in August 2014. An internal study recommended the mining of the remnant underground pillars in the northern section of Pit E by open cut. These pillars are located in the 195RL to 170 RL section of Pit E. Mining at Pit E commenced in early June 2015 and is expected to be completed in September 2015. In June CNGC mined 28 tonnes of ore at North Royal.



**Figure 2. North Royal Pit E – Pillar extraction**

- **Bullen Underground**

During the period, 4,174 tonnes of ore was mined underground at Bullen and hauled to the surface.

CNGC senior management also undertook an extensive review of the Bullen underground operations to maximise productivity and grade. During this review underground mining was suspended for a time to enable this comprehensive review to be completed. As a consequence, a number of additional headings have been identified focussing on 4 reefs; the 2 Mararoa reefs and the St Pats No. 1 and St Pats No. 2 reefs. CNGC has recently recommenced its mining operations at Bullen and is in the process of ramping up its operations. From a mining perspective, CNGC has implemented a new mining method which focuses on in-lode development on ore with the development faces all shanty backed profiled to suit the dip of the hanging wall and to minimise overbreak. This ensures minimal ground control problems. The Company is expecting that the Bullen mine will be a major provider of high grade ore over the next 6 months.

- **Low Grade Trials**

The trials of the low grade waste dumps at Daisy, Bullen waste dump and North Royal waste dumps have continued over the past 4 months. In addition, the trials have been extended to include the Scotia dump. The outcomes of these trials have been inconclusive and a full analysis of the metallurgical reconciliations is being undertaken to determine grade recovery of these trials. CNGC has also been evaluating processes to remove clay from some of the North Royal processed ore stockpiles to provide potential additional recoveries.

Further, preliminary work has commenced on investigating new technologies to remove sulphide from the Red White and Blue stockpiled ore and the other sulphide deposits along the Noganyer sedimentary iron formation (SIF).

A trial has also been undertaken with Tomra at Castle Hill, Sydney in relation to ore sorting capabilities to upgrade some of the low grade dumps through the separation of the gold bearing ore from the waste. No decision has been made as to whether or not to proceed with a more extensive trial on site.

### **Production Results**

In the relevant period, 7,716 ounces of fine gold were produced and sold for \$11,421,512.04 net revenue (i.e. after Royalties and swap fees) at an average price of A\$1,480.23 per ounce.

For the financial year 1 July 2014 to 30 June 2015 a total of 23,637 ounces of fine gold were produced and sold for \$32,911,112 net revenue (i.e. after Royalties and swap fees) at an average price of A\$1,392.32 per ounce.

The operations remain un-hedged.

### **Financials**

CNGC is in the process of finalising its year end results. The company expects to report a net EBITDA for the year excluding interest expenses which have been accrued but not paid.

The Company is in breach of various covenants under its financing arrangements with the Tulla Group and related entities and the Company and its subsidiaries remain subject to the ongoing support of its major shareholder and secured lender, Tulla Resources Group Pty Ltd and related entities.

### **Near Mine Potential**

- **Crown Reef**

In relation to the geotechnical review and internal scoping of the Crown Reef Pillars Project reported in the previous update, that study has been put on hold due to the development costs that the study determined would be required to safely assess the Crown Reef.

- **Butterfly**

A PMP has been submitted to the Department of Mines & Petroleum for a Stage I open pit. The next step is to prepare and submit a Mining Proposal.

- **HV5B**

An initial pit optimisation was prepared for a new open pit at Harlequin and an infill drilling program was prepared, which is currently underway (and is referred to in more detail in the Exploration Section. Once the results of the current drilling program have been analysed the HV5B pit will be remodelled and reoptimised.

- **Maybell**

The economics of this ore body has been reviewed and an infill drilling program has been designed. The outcome of the drilling program will determine the next steps in evaluating this deposit. The deposit will then be remodelled and reoptimised prior to a mining proposal submission.

- **Cobbler**

A pit optimisation has been reviewed and further work has been undertaken to evaluate this deposit. A Native Title review is also underway.

- **Northern Star**

Following the costeaning and trial bulk sampling which was undertaken a drilling campaign will follow up on the initial tests. This campaign has been designed and it is currently anticipated to commence following the drilling at HV5B.

### **Other Projects**

The assessment of the viability of the gypsum and iron ore deposits has continued.

The gypsum deposits are principally located on mining leases at Daisy and Harlequin and on exploration tenements on the edge of Lake Cowan (WSW from the township of Norseman).

The Company is planning a systematic mapping and assaying program, which may lead to shallow drilling to identify resource areas to be mined and trial shipped to market. The Company has employed a specialist gypsum senior geologist to oversee this program.

In relation to the iron ore, the gold potential in the banded irons (BIF) on the Noganyer formation and sedimentary iron formations (SIF) are being further evaluated and assessed.

### **Plant and Processing**

As foreshadowed, further maintenance and significant capital works were expended on the Phoenix Mill during the period. This work enabled the Plant to ramp up to 24 hour continuous production; initially on a Sunday evening to Friday afternoon roster.

For the 4 months from 1 March 2015 to 30 June 2015, the mill processed a total of 102,359 dry tonnes of ore at an average head grade of 2.95 grams per tonne at a recovery rate of 93.9%.

## **EXPLORATION SUMMARY**

### **(1) RC Drilling Results at HV5 within the Harlequin Gold Complex**

#### **Introduction**

The Harlequin gold complex has to date produced about 750,000 ounces at 9 grams per tonne from a number of quartz reefs hosted in gabbro and granodiorite rock units.

The highest grades tend to be located within dilational sites where primary structures have diffracted through more competent host units, and it is found that the main producing reefs tend to occur within two south plunging mineralised shoot complexes.

The Eastern ore corridor has previously been mined from underground and open cut, and near surface ore is currently being mined by deepening and extending the HV1 Open Pit (see above).

The Western ore corridor has previously been mined from underground and 'Whittle Open Pit Optimisation Studies' suggest that it may be profitable to mine the near surface ore from the 'Planned HV5 Pit'. Further drilling has been completed, with more holes in progress, in order to increase the reserve which will hopefully optimise as a deeper open cut.

#### RC drilling (Intersections are not reported as true widths)

The information reported below is for eighteen RC holes for a total of 2,073 metres, which were designed to test outside the 'Planned HV5 Pit Shell' with the possibility of eventually mining deeper than what is currently planned.

Some of the intersections tabled below are very high grade and follow up-drilling is underway.

(See Table 1 and Figures 3 to 5)

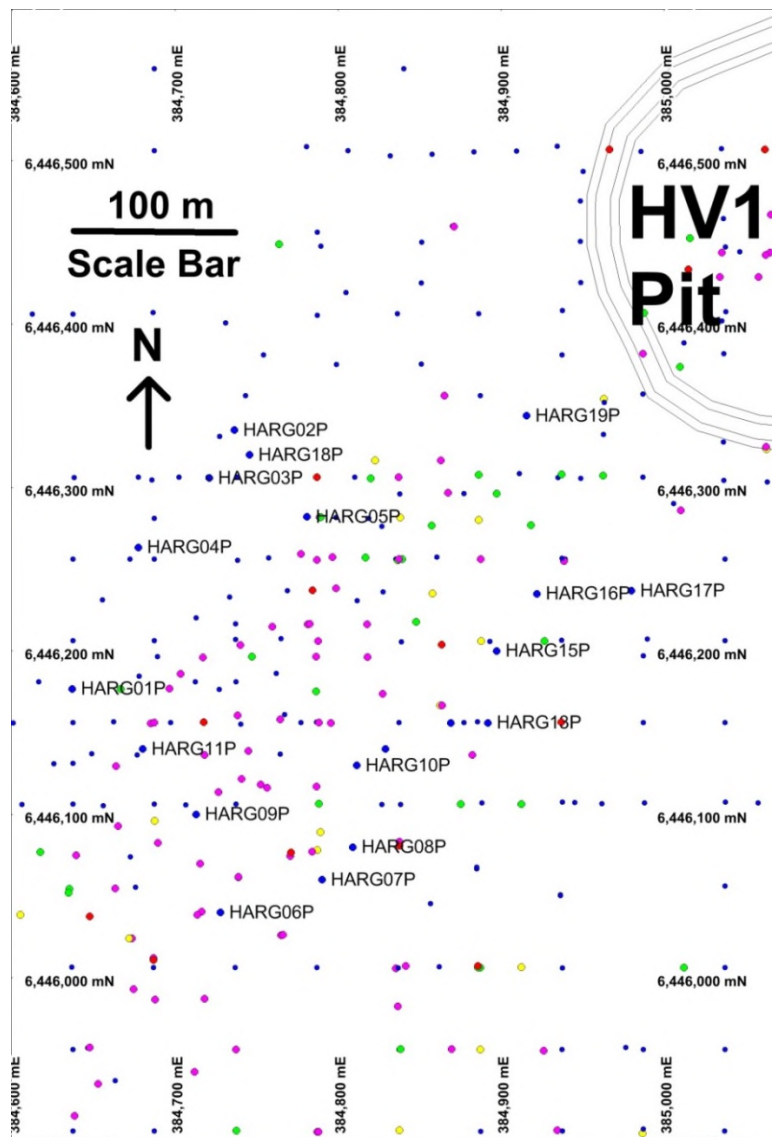


Figure 3: HV5 - Collar Plan including all underground and surface holes - July 2015

Hole Id	MGA North m	MGA East m	MGA RI m	Azi deg	Dip deg	Final Depth m	From m	To m	Down-hole Intercept Length m	Au Grade g/t
HARG01P	6446174	384637	264	90	-60	<b>114</b>	<b>72</b>	<b>80</b>	<b>8</b>	<b>25.2</b>
					incl		72	74	2	5.5
					and		74	76	2	92.6
					and		76	80	4	1.5
							96	100	4	0.73
							<b>102</b>	<b>105</b>	<b>3</b>	<b>4.4</b>
							109	110	1	3
HARG02P	6446340	384735	264	90	-60	126	52	53	1	4.22
							56	57	1	1.68
HARG03P	6446304	384720	264	145	-55	106				NSA
HARG04P	6446233	384681	264	111	-70	114	26	27	1	1.3
HARG05P	6446282	384780	263	270	-70	<b>90</b>	<b>39</b>	<b>42</b>	<b>3</b>	<b>3.19</b>
HARG06P	6446037	384723	263	90	-75	<b>138</b>	<b>87</b>	<b>90</b>	<b>3</b>	<b>9.5</b>
					incl		87	88	1	26
							<b>113</b>	<b>117</b>	<b>4</b>	<b>22.4</b>
					incl		113	115	2	43.9
					and		115	117	2	0.98
HARG07P	6446057	384788	263	270	-60	120	113	114	1	3.51
HARG08P	6446078	384808	263	0	-90	102				NSA
HARG09P	6446106	384712	263	90	-65	138	103	108	5	1.2
HARG10P	6446127	384811	263	0	-90	132	46	50	4	1.8
							97	99	2	1.2
HARG11P	6446137	384679	263	90	-75	<b>117</b>	<b>66</b>	<b>82</b>	<b>16</b>	<b>6.74</b>
					incl		66	75	9	11.28
					and		75	82	7	0.91
HARG12P	6446137	384828	263	270	-75	114	45	47	2	1.6
							96	102	6	1.2
HARG13P	6446154	384891	263	270	-70	108	87	91	4	0.8
HARG14P	6446153	384866	263	270	-70	102	68	70	2	1.66
							84	98	<b>14</b>	<b>2.15</b>
					incl		84	88	4	4.04
					and		88	93	5	0.87
					and		93	98	5	1.93
HARG15P	6446200	384893	263	0	-90	108	66	71	5	0.96
					incl		66	68	2	1.22
HARG16P	6446232	384920	263	270	-65	<b>110</b>	<b>65</b>	<b>75</b>	<b>10</b>	<b>2.27</b>
					incl		65	66	1	10.05
					and		66	74	8	1.0
					and		74	75	1	4.87
HARG17P	6446236	384977	263	270	-55	119	82	83	1	2.92
							100	101	1	1.45
HARG18P	6446323	384744	264	90	-60	115				NSA

Table 1: June Qtr, 2015 - Harlequin HV5 – RC drilling intersections.



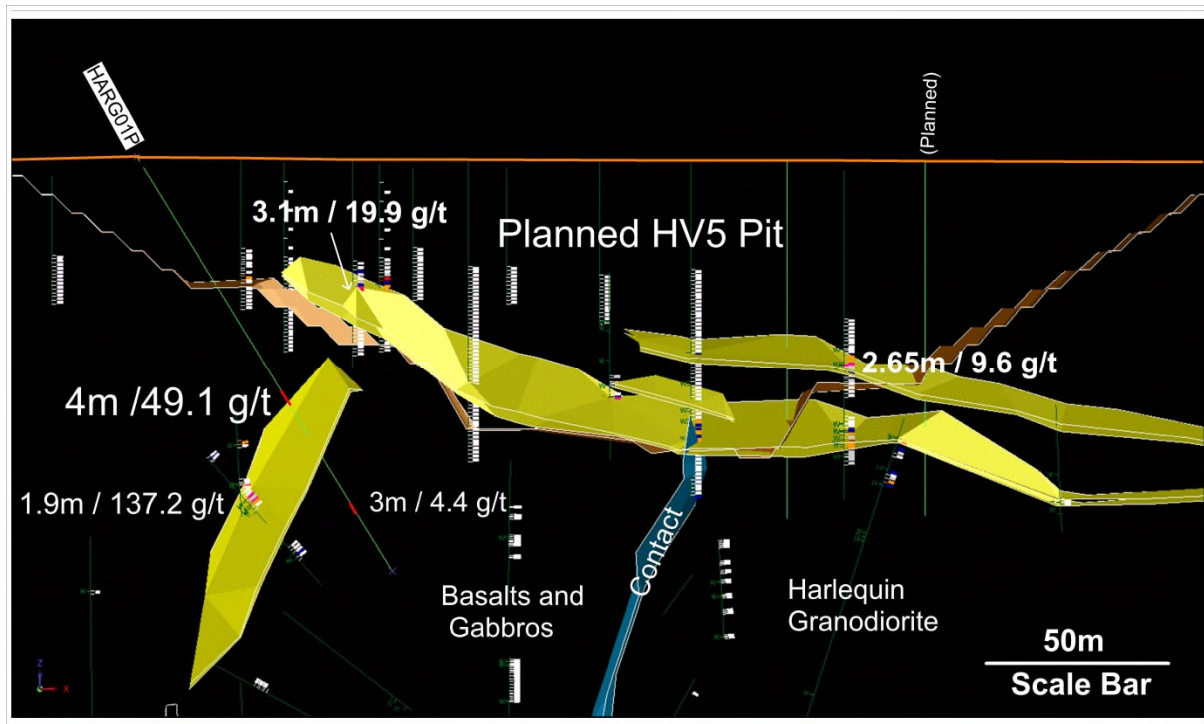


Figure 4: Harlequin HV5 Interpreted cross-section at 6,446,180 North

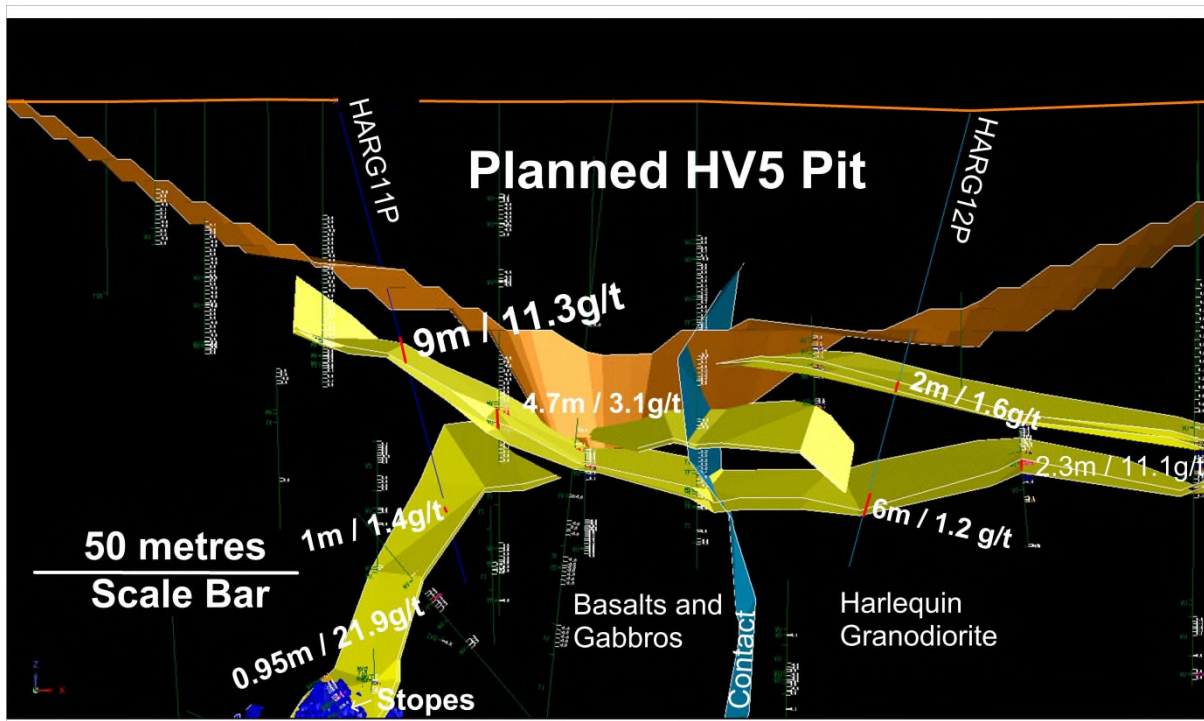


Figure 5: Harlequin HV5 Interpreted cross-section at 6,446,140 North



## **(2) High Priority Alluvial Gold Targets Identified at the Royal Gold Complex**

### **Introduction**

The 'Royal Gold Complex' has to date produced about 1.8 million ounces of gold at 14 grams per tonne from a system of quartz reefs hosted within basalts and gabbros and cross cutting porphyries of Archaean age.

The mining method employed in the past has been a combination of narrow vein underground stoping plus open pit mining of the near surface ore, and currently the North Royal Open Pit is being deepened in places to extract remnant high grade pillars from where the reef system has 'rolled over' into a semi-horizontal orientation.

The most prominent regional geological feature is the Princess Royal Fault which strikes north-west and dips to the south-west and apparently offsets the local stratigraphy; the gold mineralising event is possibly associated with the fault and (as a generalisation) the mining grades improve with proximity to the fault.

The weathering profile is up to 50 metres deep at the Royal Complex and the historic open pits have mined a combination of auriferous quartz veins plus remobilised gold in heavily weathered shear zones and country rock.

### **Exploration Strategy for Alluvial Gold**

Gold at the base of a paleo-channel was historically mined within the North Royal Pit, and alluvial ore was also mined from within the Slippers Pit.

Desktop studies have located what is believed to be an extensive palaeo- channel system at the Royal Complex which may have potential for further commercial exploitation, and it is now recognised that there is a need for additional drilling.

Once DMP permits to drill are granted the Company will aggressively explore the palaeo-channel system with traverses of close spaced vertical RC holes.

See Figure 6 and Figure 7.

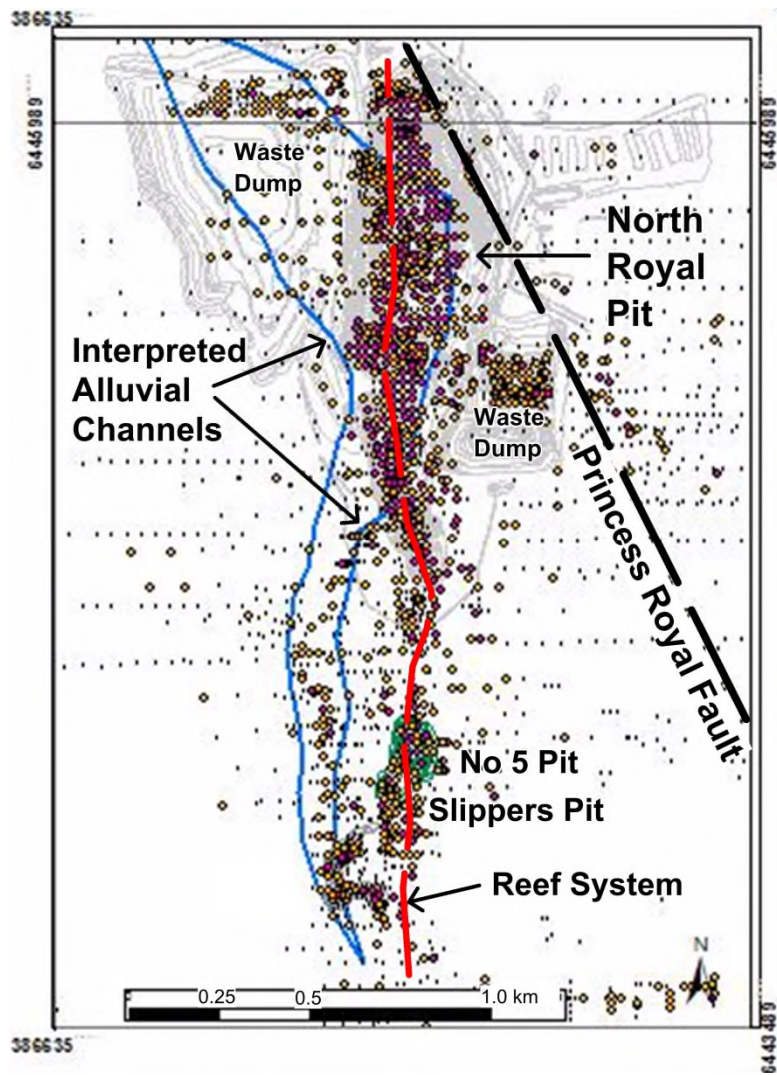


Figure 6: Royal Complex – Interpreted alluvial channels, drill hole collars, open pits, waste dumps and Princess Royal Fault.

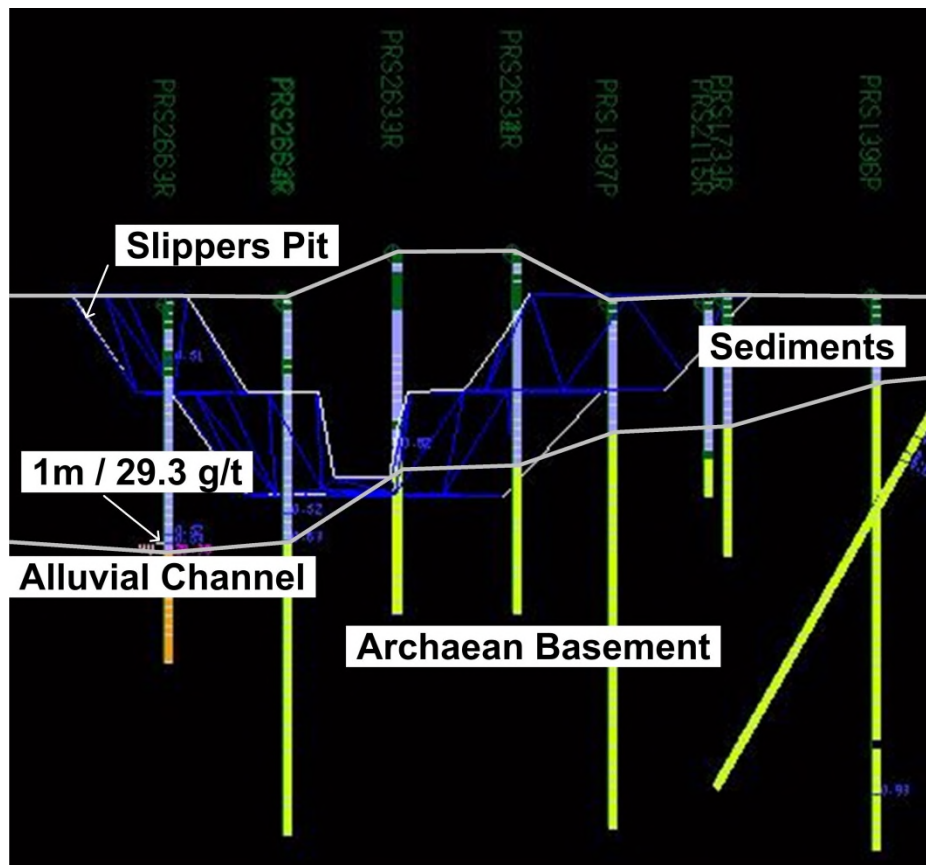


Figure 7: Slippers Pit - interpreted drilling cross section at 6,444,170 North showing gold at the base of an alluvial channel.

### (3) Lake Dundas Gypsum Project

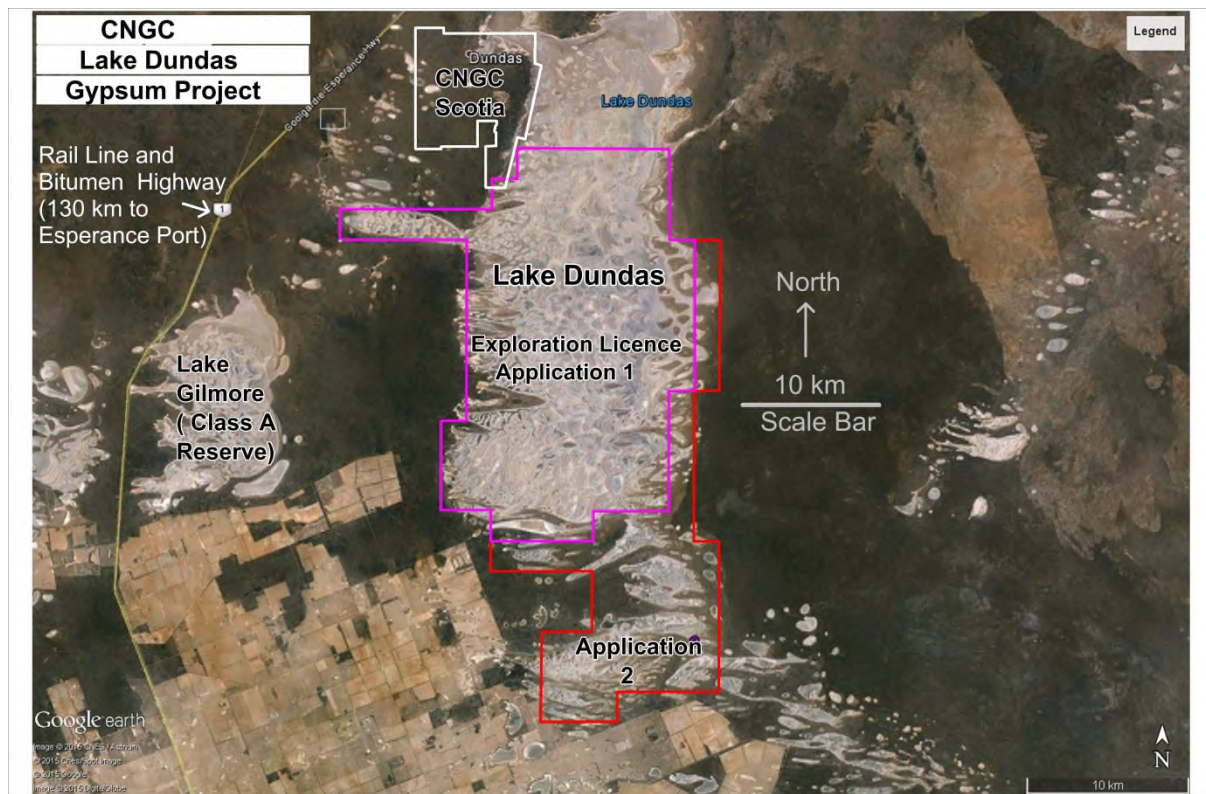
#### Introduction

The Norseman Field is one of the oldest producers of gold in Australia and there is definitely a strong future in gold for the Company, but in addition there is potential for other commodities including gypsum, nickel, copper and magnetite iron ore.

The Company believes it is well located with regard to tenure and infrastructure and is actively looking for new opportunities.

In terms of gypsum potential, the Company's Lake Cowan tenements host 'evaporite' style gypsum ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) deposits in the form of wind-blown dunes and gypsum banks which are on granted mining tenements.

In addition, the Company has recognised the world class gypsum potential at Lake Dundas and two 'Exploration Licence Applications' have recently been lodged with the West Australian 'Department of Minerals and Petroleum' and the Company is planning to explore this area as soon as the tenements are granted.



**Figure 8: Lake Dundas Gypsum Project Area with exploration licence applications and existing transport infrastructure.**

### Uses of Gypsum

Large quantities of gypsum are consumed on a global basis and some of the common usages of gypsum include:

- As an agricultural additive for crop improvement.
- As an ingredient in cement manufacture.
- As an essential component in the manufacture of many plaster board and building product materials.

A strategy in relation to the gypsum potential is in progress. The gypsum deposits are conveniently located on rail and road hubs with excellent access to Esperance, which is an export port with bulk handling facilities.

As part of this strategy, the Company has commenced a 'soft' marketing campaign and there is a degree of interest being shown by both national and international end users of gypsum.

### Tenements

CNGC entered into a Tenement Swap Agreement with Mt Henry Gold Pty Ltd (a wholly owned subsidiary of Panoramic Resources Ltd) and Australian Strategic and Precious Metals Investment Pty Ltd (a wholly owned subsidiary of Masta Resources Ltd) whereby CNGC transferred P63/1890 in consideration for 3 tenements; P63/1391; P63/1392 & P63/1393.

During the period 2 tenements expired – E63/1293 & P63/1851.

## **Corporate**

The Company's Annual Report 2014 was released on 8 April 2015.

On 18 May 2015 the Company announced the untimely passing of John Watkins, the resident General Manager of CNGC. The Company recognises John's contribution in the short time he was General Manager and expresses its condolences to his family and many friends in the industry and personal.

### *Competent Persons Statement*

*The information in this report which relates to Exploration Results is based on information compiled by Mr Ernest Poole, an employee of Central Norseman Gold Corporation Pty Ltd and a Member of the Australian Institute of Geoscientists. Mr Poole has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Mr Poole consents to the inclusion in this announcement of the statements based on this information in the form and context in which it appears. Exploration results are based on standard industry practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Reverse circulation (RC) samples are collected as 1 meter samples. Core samples are taken as half NQ core or quarter HQ core and sampled to geological boundaries where appropriate. The quality of RC drilling samples is optimised by the use of riffle and/or cone splitters, dust collectors, and use of field duplicates to measure sample representivity. For soil samples, PGM and gold assays are based on an Aqua Regia digest with Induced Coupled Plasma (ICP) finish and base metal assays may be based on Aqua Regia or Four Acid Digest with Inductively Coupled Plasma Optical Emission spectrometry (ICPOES) or Atomic Absorption Spectrometry (AAS) finish. Sample preparation and analysis is undertaken at Bureau Veritas laboratories in Perth and Kalgoorlie, Western Australia. The quality of analytical results is monitored by the use of internal laboratory procedures and standards together with certified standards, duplicates and blanks and statistical analysis where appropriate to ensure that results are representative and within acceptable ranges of accuracy and precision. Intersections are length and density weighted where appropriate as per standard industry practice. All sample and drill hole co-ordinates are based on the GDA/MGA grid and datum unless otherwise stated. Exploration results obtained by Sirius have not necessarily been obtained using the same methods or subjected to the same QAQC protocols. These results may not have been independently verified because original samples and/or data may no longer be available.*



## Appendix

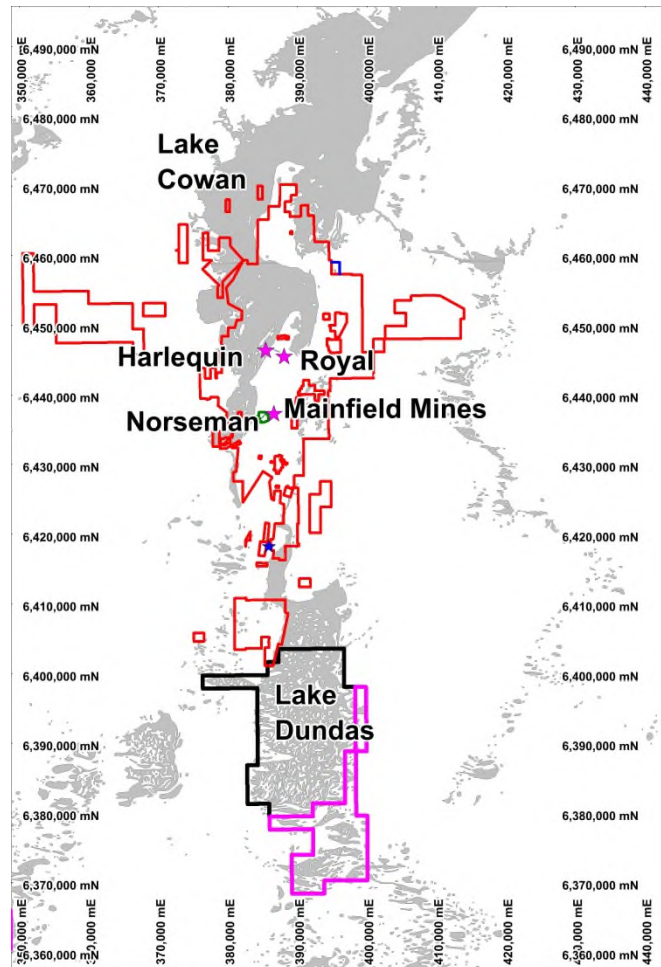


Figure 7: Norseman Gold Plc Exploration projects reported in the June 2015 Quarter.



The following Tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of exploration results.

## JORC Code, 2012 Edition – Table 1 report template

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <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. 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 style="list-style-type: none"> <li>The <b>HV5</b> prospect has been sampled by vertical and angled RC drilling on an irregular pattern of 18 infill holes.</li> <li>Sampling was carried out under CNGC protocols and QAQC procedures as per industry best practice.</li> <li>RC drilling was sampled every one metre downhole using a 'cone' splitter to produce a bulk 3 kg sample.</li> <li>Samples were crushed, dried and pulverised (total prep) to produce a 50 g charge for fire assay (gold exploration)</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Reverse circulation (RC) drilling was conducted at HV5 Prospect.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No method is employed to measure RC chip sample recovery, but wet areas or areas of lesser sample recovery are noted in the logging. Overall recoveries are good and there are no significant sample recovery problems.</li> <li>• The RC drill has sufficient air volume and pressure to ensure that a 'dry face' is being drilled and the samples are not excessively wet.</li> <li>• Drill cyclone is cleaned between rod changes in wet ground and after each hole is completed to minimise downhole and/or cross hole contamination.</li> <li>• Every 1 metre interval of cuttings is collected in a separate clean plastic bag and stored temporarily at the drill site for future resampling checks</li> <li>• RC drilling samples were occasionally wet which may have resulted in sample bias due to preferential loss/gain of fine/coarse material. This typically occurred in the barren Quaternary lake sediments, and not in oxidised or fresh basement rocks. No known studies have been completed in recent years to determine a relationship between sample recovery and grade</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Logging of RC records lithology, mineralogy, mineralisation, veining, alteration, weathering, colour and other features of the sample.</li> <li>• No photographs were taken of the RC cuttings, but a sample from each metre downhole is collected in a 'chip tray' and stored in a locked shed.</li> <li>• All drill holes were logged in full.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative</i></li> </ul>	<ul style="list-style-type: none"> <li>• No core drilling was carried out as part of this program.</li> <li>• 1 metre RC samples were collected via an on-board cone splitter. Samples were collected both wet and dry.</li> <li>• The sample sizes and number of field duplicates for (potentially) nuggetty-Au intersections is considered to be appropriate to appropriately represent the targeted mineralisation style.</li> <li>• The sample preparation follows industry best practice in sample preparation. All samples were pulverised using Essa LM1, LM2, LM3 or</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <ul style="list-style-type: none"> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>LM5 grinding mills determined by the size of the sample. Samples are dried, crushed as required and pulverised to produce a homogenous representative sub sample for analysis. A grind quality target of 85% passing 75 microns has been established and is relative to sample size, type and hardness.</p> <ul style="list-style-type: none"> <li>Certified Reference Materials (CRM's) and in-house controls, blanks, splits and replicates are analysed with each batch of samples. These quality control results are reported along with the sample values in the final lab report. Selected samples are also re-assayed to confirm anomalous results.</li> </ul> <p>Regular field duplicates and /or CRM's are inserted every 25 metres.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The analytical technique used a 50 gram charge with fire assay with AAS finish which gives total digestion.</li> <li>No geophysical tools were used to determine any element concentrations used in this report or in any resource model.</li> <li>Sample preparation checks for fineness were carried out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 micron was being attained. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>CNGC's Senior Geologist on site has visually verified significant intersections in samples from all prospects reported.</li> <li>No twin holes were drilled to date.</li> <li>Primary data was collected using a set of standard Excel templates using look up codes. The information was validated and compiled into a SQL database on site.</li> <li>No adjustments or calibrations were made to any assay data reporting.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li><i>Specification of the grid system used.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drillhole collars were located by DGPS. Elevation values were in AHD. Expected accuracy is +/- 0.05m for elevation co-ordinates with DGPS.</li> <li>The grid system used was MGA94 (Zone 51) with local easting and northing in MGA and elevation values in AHD RL. All tabulated, quantitative data is reported in MGA94.</li> <li>Topographic control is sourced from published government survey data to calibrate the Leica base station to known survey points. Additional</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	topographic control uses CNGC's regional aerial photography flown on 29/3/1982 and photogrammetrically compiled by Aerial Surveys of Australia in September 1983 into 1:7,500 base sheets at 5m contour intervals.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The nominal sample spacing is 1m and line spacing in the order of 20-100m, dependant on the location of pre-existing drilling.</li> <li>The mineralised domains have demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource and Reserves by the classification applied under the 2012 JORC Code.</li> <li>No sample compositing has been applied to the exploration results.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No orientation based sampling bias has been identified in the data at this point.</li> <li>No variable orientation of the Harlequin Reef Complex is such that it is not possible to report all intersections as true widths and hence the reporting states that 'intersections are not reported as true widths'.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody is managed by CNGC. Samples are stored on site and collected by Pat Hogan Transport and delivered direct to the assay laboratory. Whilst in storage they are kept in a locked yard. Tracking sheets have been set up to track the progress of batches of samples.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No exhaustive audit of the data has been carried out, but the on-site Database Manager has performed QAQC checks on incoming data prior to loading into the database.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Harlequin Project is on mining tenement M63/48. Registered holder Central Norseman Gold Corporation Pty Ltd Registered Mortgage 387124: STEINEPREIS, David Christian 96/96 shares CENTRAL NORSEMAN GOLD CORPORATION LTD (now known as Central</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>Norseman Gold Corporation Pty Ltd) Registered Mortgage 395688 : Tulla Resources Group Pty Ltd ( mortgaged Shares 96/96 shares CENTRAL NORSEMAN GOLD CORPORATION LTD (now known as Central Norseman Gold Corporation Pty Ltd)</p> <ul style="list-style-type: none"> <li>Royal Project is on mining tenement M63/156. Registered holder Central Norseman Gold Corporation Pty Ltd Registered Mortgage 387124: STEINEPREIS, David Christian 100/100 shares CENTRAL NORSEMAN GOLD CORPORATION LTD (now known as Central Norseman Gold Corporation Pty Ltd) Registered Mortgage 395688 : Tulla Resources Group Pty Ltd ( mortgaged Shares 100/100 shares CENTRAL NORSEMAN GOLD CORPORATION LTD (now known as Central Norseman Gold Corporation Pty Ltd)</li> <li>All CNGC tenements are within the Ngadju Native Title Claim (WC99/002)</li> <li>The tenements are in good standing and no known impediments exist.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Multiple phases of work have been completed in the main field and surrounding areas including mining for more than 120 years. Numerous underground workings exist as well as many drill holes. Shafts and other openings are present from surface. Numerous phases of geological mapping and interpretation of the reefs have been completed.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Norseman area lies at the southern extent of the Norseman-Wiluna Greenstone Belt of the Eastern Goldfields Province of the Yilgarn Block, Western Australia. The Archaean aged rocks overall become younger towards the west but folding and faulting, including thrusting with repetition of strata resulting in near vertical stratigraphy complicates the sequence.</li> </ul> <p>The reefs tested are hosted by the <b>Woolyeenyer Formation</b> which unconformably overly the older Noganyer and Penneshaw Formations. The Woolyeenyer consists dominantly of a sequence of basaltic pillow lavas, with minor interflow sediments and a series of intrusive gabbro to ultramafic dykes and sills. Felsic porphyry dykes have extensively</p>

Criteria	JORC Code explanation	Commentary
		<p>intruded the sequence.</p> <p>The Norseman style of gold mineralisation applicable to the veins tested consist of hydrothermally emplaced quartz veins of Si-Au +/-Cu-/-Zn +/- Pb with pressure release resulting in the material separating from hydrothermal fluids. Veins tend to be thicker and higher grade in coarse grained mafic rocks. Gabbro sills and dykes; glomeroporphyritic basalts (Blue Bird Gabbro) and granodiorite are the main hosts for the laminated Au bearing quartz veins in the main field.</p> <p>The Jimberlana Dyke and other <b>Proterozoic aged</b> dominantly doleritic dykes are intruded into the older stratigraphy: The Jimberlana Dyke is a cumulate, layered, funnel shaped dolerite dyke up to 2km wide which trends approximately E-W transecting the Norseman greenstone belt. Costeans have the potential to expose dolerite dykes to the south of the Jimberlana Dyke.</p> <p>The regional metamorphic grade in the Norseman Greenstone Belt varies from greenschist facies in the central field to middle amphibolite facies to the south around the Scotia mine where the greenstone sequence is highly attenuated between granite. In the area of costeaning the rocks are greenschist facies.</p> <p>Only narrow alteration haloes are associated with the gold deposits at Norseman implying that the deposits formed during deformation at high temperatures and pressures at depth and probably near peak metamorphism.</p>
Drill hole Information	<ul style="list-style-type: none"> <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: <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• If the exclusion of this information is justified on the basis</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to Tables in body of text.</li> <li>• Exclusion of vital information is not a factor.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>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.</i>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly no metal equivalent values are used for reporting exploration results should be stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>All reported intersections have been length weighted. No top-cuts have been applied.</li> <li>A nominal 0.5 g/t lower cut-off is used for the RC intersections.</li> <li>High grade gold and base metal interval to broader zones of mineralisation are reported as included intervals.</li> <li>No metal equivalent values were used for reporting exploration results.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>The Harlequin quartz veins are on a variety of different orientations which makes interpretation complicated, but there is a database of well documented geology from both underground mining and historic drilling (both surface and underground). The new holes reported in the body of this report add to an already large database and the geological interpretations are made with a reasonably high degree of geological confidence.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to Figures in body of text.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All sampled intersections for the drilling programme have been reported.</li> </ul>
<i>Other substantive exploration</i>	<ul style="list-style-type: none"> <li><i>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;</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to body of text.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>data</i>	<i>metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>At this stage mineralisation is only indicative and requires further infill to test for coherency. Refer to Figures in body of text.</li> </ul>