



**PANTORO**

# Quarterly Report

Ending 31 December 2017

## Key Highlights

### Operations

- Record production of 13,841 ounces produced. Production at Nicolson's has increased in every quarter since the first gold pour in September 2015.
- AISC further reduced to A\$990 per ounce and C1 costs reduced to A\$809 per ounce.
- Pantoro committed to the purchase and installation of a Steinert Multi-Sensor ore sorter. Project works are well underway and include replacement of the current mobile tertiary crusher with a fixed plant solution. The ore sorter will be the primary facilitator of continued production increases during the coming year and is planned to be operational by April 2018. Pantoro is continuing to aim for production rates of 80-100,000 ounces per annum PA by the end of CY 2018.
- Surface stockpiles continued to grow with 82,000 tonnes @ 3.35 g/t available for processing, including high grade stockpiles of 15,890 tonnes @ 8.06 g/t.

### Wagtail Underground Target

- Preparatory works for underground development at Wagtail are well underway, with both the Wagtail North and Wagtail South open pits prepared for underground development. Sumps below planned portal positions and portal platforms have been established in both pits.
- Pantoro is targeting commencement of development in April 2018. An updated Mineral Resource and Ore Reserve statement is expected to be completed prior to the commencement of development.
- Drilling continued throughout the quarter. Best results included<sup>^</sup>:
  - » 5.34 m @ 10.62 g/t Au from 112.5 m inc. 0.2 m @ 27.9 g/t and 1.65 m @ 31.7 g/t Au (RDD17002)
  - » 4.75 m @ 15.79 g/t Au from inc 3.7 m @ 18.76 g/t Au from 108 m (RDD17002)
  - » 1.85 m @ 19.07 g/t Au from 158.4 m (RDD17003)
  - » 3.8 m @ 12.21 g/t Au from 176.15m (RDD17003)
  - » 1.95 m @ 23.61 g/t Au from 186.1 m (RDD17003)
  - » 4 m @ 10.53 g/t Au from 33 m inc. 2 m @ 18.35 g/t Au (WSRC17008)
  - » 3 m @ 11.17 g/t Au from 30 m inc. 1 m @ 29.4 g/t Au (WSRC17009)
  - » 2 m @ 23.77 g/t Au from 55 m inc. 1 m @ 14.7 g/t Au (WSRC17014)

### Corporate

- A further 1,500 ounces were repaid to CBA during the quarter reducing total debt to 2,000 ounces. Debt is scheduled to be fully repaid in April 2018.
- The company ended the quarter with \$15.2 million in cash and gold.

### Enquiries

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<sup>^</sup> Full details were reported in an ASX release on 8 November 2017 titled "Highgrade Results Underwrite Wagtail Underground".

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## About Pantoro Limited

Pantoro is an Australian gold producer with its 100% owned Halls Creek Gold Project in the Kimberly Region of Western Australia being the key operational focus. The project provides the company with a platform for growth through the operation of its first producing gold asset, which includes underground and open pit mines, and a modern CIP processing facility. Mineral Resource expansion and project scale exploration drilling is underway with outstanding results to date.

Pantoro commenced construction and refurbishment works at Nicolson's during February 2015 and commenced production in Q3 2015. The Mineral Resource and Ore Reserves have been significantly upgraded since operations commenced, with both higher grades, and additional Ore Lodes identified during mining. The Mineral Resource is open at depth and along strike.

The company is currently producing gold at levels exceeding its feasibility study targets and has expanded to a production rate of 55,000 ounces per annum.

In addition to the Halls Creek Project, Pantoro's exploration portfolio in Papua New Guinea is highly prospective for the discovery of world-class gold and copper deposits. One of the company's key discoveries is the Garaina Prospect in the Morobe Province, where Pantoro has discovered a large surface copper and gold anomaly, which has been further delineated by geophysical surveys, grid based geochemical assays, surface costean sampling and drilling. The discovery has potential to be developed into a large scale deposit through further exploration, however Halls Creek remains as Pantoro's sole focus at the present time.





# Activities Report

## Halls Creek Project – Western Australia



*The Halls Creek Project Location*

The Halls Creek Project includes the Nicolson and Wagtail Mines, (35 km south west of Halls Creek) and a pipeline of exploration and development prospects located south-west of Halls Creek in the Kimberley Region of Western Australia.

Pantoro acquired the project during April 2014, and took possession of the site in May 2014 enacting its rapid development plan for the project. First production was achieved at Nicolson in the September 2015 quarter. The mine was developed with a strategy to minimize pre-production capital and to aggressively grow production and the mine Mineral Resource base utilizing early cashflows. The growth phase of the operation is now well underway.

The project currently has a declared Mineral Resource of 376,000 ounces of gold. Mine development and production to date has revealed a significant overcall to the feasibility Ore Reserve. An Ore Reserve upgrade was completed in May 2017, with further ongoing updates planned during 2018.

Production activities have also resulted in silver production with approximately one ounce of silver recovered for every two ounces of gold produced to date.

The project region has been sporadically explored over a number of years. Prospecting has shown significant potential in the immediate area, which remains sparsely explored with minimal drill testing of targets outside of the existing resources (beneath and immediately adjacent to the existing open pits). Early exploration by Pantoro has been highly successful in identifying additional mineralisation. The company is actively drilling depth extensions at Nicolson, underground mining targets at Wagtail, and a number of regional exploration targets. The company strategy is to continue profitable production while substantially growing the Ore Reserve to facilitate further growth at the operation.



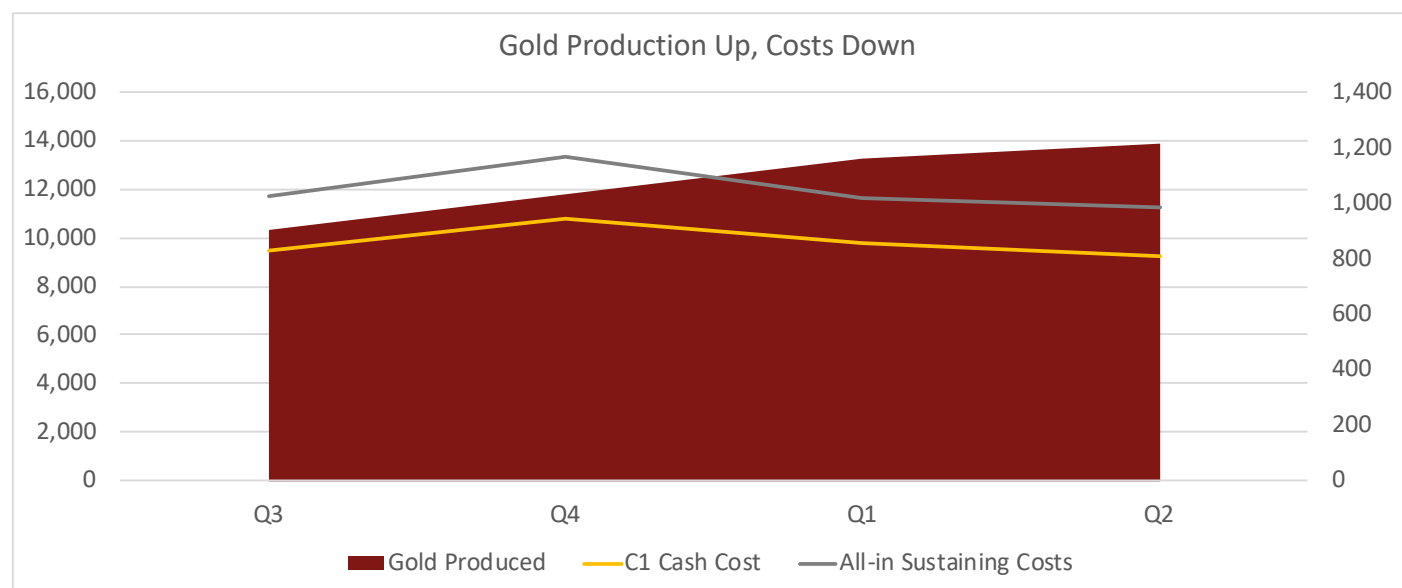
## Quarterly Progress – Nicolson's Mine

The December quarter resulted in continued increases in mine production. Record production of 13,841 was achieved with the Nicolson's processing facility continuing to operate reliably at throughput rates equivalent to 240,000 tonnes per annum. Production at Nicolson's has increased in every quarter since the first gold pour in September 2015.

AISC continued to reduce and was below \$1,000 per ounce for the quarter. C1 operating cost also continued to reduce as set out in the table below. Open pit operations were completed on the 21 December 2017, with works after that date focused on setting up open pits for the planned underground development.

Major project capital of \$162 per ounce was inclusive of an initial \$318,000 payment for the ore sorter purchase and associated project costs. The total cost of the crushing circuit upgrade and ore sorter installation is expected to be \$2.2 million. Key operating statistics for the December quarter (FY2018 Q1) are set out in the table below:

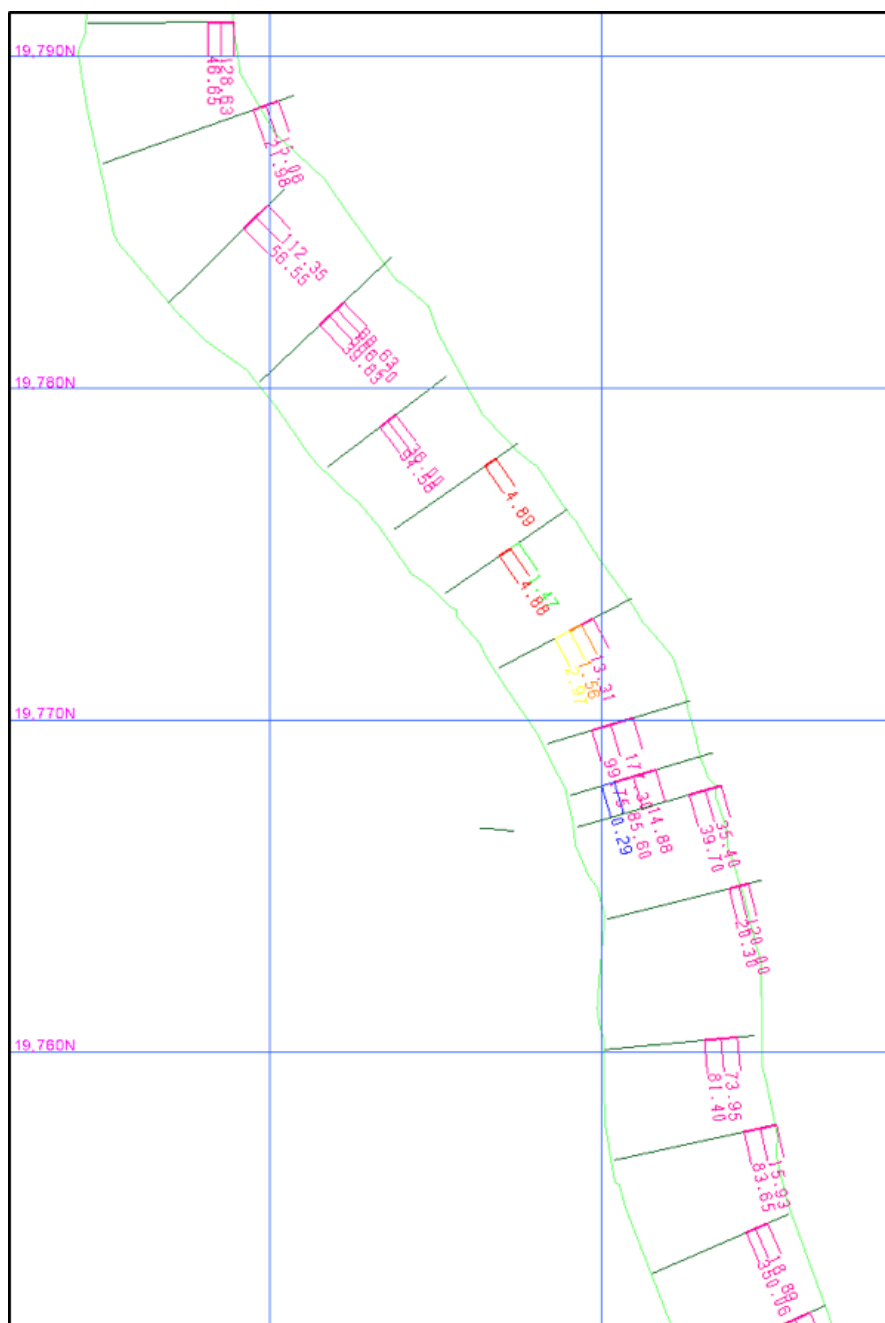
	FY 2017		FY 2018	
Physical Summary	Q3	Q4	Q1	Q2
UG Ore Mined	42,243	40,446	43,904	41,846
UG Grade Mined	7.04	7.22	7.77	8.76
OP BCM Mined	264,392	316,916	205,862	97,671
OP Ore Mined	26,274	31,980	29,385	29,226
OP Grade Mined	4.16	4.18	5.28	5.23
Ore Processed	42,317	55,425	58,723	60,443
Head Grade	7.86	7.06	7.60	7.67
Recovery	96.8%	94.1%	92.5%	92.9%
Gold Produced	10,348	11,828	13,282	13,841
<b>Cost Summary (\$/oz)</b>				
<b>C1 Cash Cost</b>	<b>\$832</b>	<b>\$944</b>	<b>\$853</b>	<b>\$809</b>
Royalties	\$37	\$45	\$30	\$42
Marketing/Cost of sales	\$5	\$5	\$4	\$5
Sustaining Capital	\$144	\$164	\$123	\$128
Corporate Costs	\$11	\$10	\$9	\$7
<b>All-in Sustaining Costs</b>	<b>\$1,028</b>	<b>\$1,165</b>	<b>\$1,019</b>	<b>\$990</b>
Major Project Capital	\$317	\$213	\$223	\$162
Exploration Cost	\$37	\$38	\$125	\$157
<b>Project Capital</b>	<b>\$354</b>	<b>\$251</b>	<b>\$348</b>	<b>\$319</b>



## Nicolsons Underground Mine

Mining at Nicolsons has continued as planned, with the key focus on establishing the stoping front in the Hall Lode. Production for the quarter was 41,846 tonnes @ 8.76 g/t for 11,780 ounces. In addition to several ore development and ore drive benching faces available throughout the quarter, the Hall Lode had four active stoping levels (2185, 2170, 2155, and 2140) at the end of December, with a further three levels (2125, 2105 and 2085) due to commence during the current quarter.

Ore Development is currently underway in the 2045 level in the Hall/Anderson Lodes, approximately 100m vertically below the current stoping front. Development on the 2105, 2085 and 2065 revealed a number of bonanza zones of very high grade mineralisation superior to that indicated in the current Mineral Resource estimate. These zones will be re-modelled in the next Mineral Resource and Ore Reserve update which is planned to be completed in the June 2018 quarter. The 2045 level cross cut is also being extended to intersect the northern end of the Johnston lode which will provide access to an additional ore development heading ahead of the current schedule.



Example of very high grades encountered in the levels recently developed at Nicolsons. The plan is 2065mRL  $\pm$  1m, Nicolsons local grid. Grades are shown in g/t Au.



Underground scheduling is now focused on increasing output from Nicolsons to 25,000 tonnes per month commencing in the June 2018 quarter, with additional increases to 30,000 tonnes per month anticipated during the later half of 2018. The planned increase, will take advantage of the extensive developed stocks available for production at Nicolsons, which will be utilised in conjunction with the installation of ore sorting in the Nicolsons processing plant to increase overall site production.

In addition to the increased production from stoping in the Hall Lode, additional increases will be realised through multiple stoping levels becoming available for extraction in the Anderson Lode during the March 2018 quarter, along with additional development levels being accessed in the Johnston Lode from the North Decline.

### **Wagtail Deposits**

Open pit mining was completed at Wagtail on the 21 December. High grade ore continued to be delivered to the processing plant until completion, with surface ore stockpiles continuing to build on site. Both Wagtail North and Wagtail South were mined during the quarter delivering production for the period of 29,226 tonnes mined at a grade of 5.23 g/t Au, inclusive of low grade material stockpiled separately.

Upon completion of open pit mining, works preparing the open pits for underground development commenced. Works included establishment of portal platforms and of pit sumps below the planned development elevations.



*Wagtail North pit with the portal platform, in-pit sump and new access ramp established for underground development.*

Pantoro is currently finalising approvals documentation for the planned underground development and intends to commence mining immediately after the current wet season in April 2018. Mineral Resource modelling is underway at Wagtail, with a new Mineral Resource and Ore Reserve to be published prior to commencement of underground mining.

Resource development drilling continued at Wagtail throughout the quarter, with outstanding assay results confirming the underground mining potential of the deposits. Results reported during the quarter included:

- 5.34 m @ 10.62 g/t Au from 112.5 m inc. 0.2 m @ 27.9 g/t and 1.65 m @ 31.7 g/t Au (RDD17002)
- 4.75 m @ 15.79 g/t Au from inc 3.7 m @ 18.76 g/t Au from 108 m (RDD17002)
- 1.85 m @ 19.07 g/t Au from 158.4 m (RDD17003)
- 3.8 m @ 12.21 g/t Au from 176.15 m (RDD17003)
- 1.95 m @ 23.61 g/t Au from 186.1 m (RDD17003)
- 0.8 m @ 14.1 g/t Au from 130.5 m (RDD17004)
- 1 m @ 15.0 g/t Au from 121.45 m (RDD17005)
- 1.05 m @ 28.57 g/t Au from 64.7 m inc. 0.5 m @ 99 g/t Au (WNDD17018)
- 2 m @ 9.24 g/t Au from 48 m (WNDD17023-2m composite)
- 0.25 m @ 114 g/t Au from 94.45 m (WSDD17004)
- 1.1 m @ 10.84 g/t Au from 159.7 m (WSDD17004)
- 1.95 m @ 15.59 g/t Au from 172.6 m inc. 0.25 m @ 107 g/t Au (WSDD17006)
- 1 m @ 9.56 g/t Au from 181.2 m (WSDD17006)
- 4 m @ 10.53 g/t Au from 33m inc. 2 m @ 18.35 g/t Au (WSRC17008)
- 3 m @ 11.17 g/t Au from 30 m inc. 1m @ 29.4 g/t Au (WSRC17009)
- 2 m @ 23.77 g/t Au from 55 m inc. 1m @ 14.7 g/t Au (WSRC17014)
- 2 m @ 8.43 g/t Au from 47 m inc. 1m @ 43.8 g/t Au (WSRC17015)
- 2 m @ 13.75 g/t Au from 73 m inc. 1m @ 27 g/t Au (WSRC17037)

Full details were reported in an ASX release on 8 November 2017 titled "Highgrade Results Underwrite Wagtail Underground".

## **Processing Plant**

The processing plant operated at a nominal 240,000 tonne per annum run rate for a second consecutive quarter with a total throughput of 60,443t @ 7.67g/t. Recovery was 92.9%, primarily due to the higher throughput rate reducing mill residence time. Engineering work for the installation of additional leaching capacity is ongoing.

Pantoro announced a major plant upgrade during the quarter which includes the installation of a Steinert Multi-Sensor ore sorter into the mill feed circuit. The project includes the upgrade of the crushing circuit to replace the current mobile crusher with a fixed unit, and installation of several ore conveyors to accommodate the ore sorter. It is expected that the upgraded circuit including the ore sorter will be fully operational in April 2018.

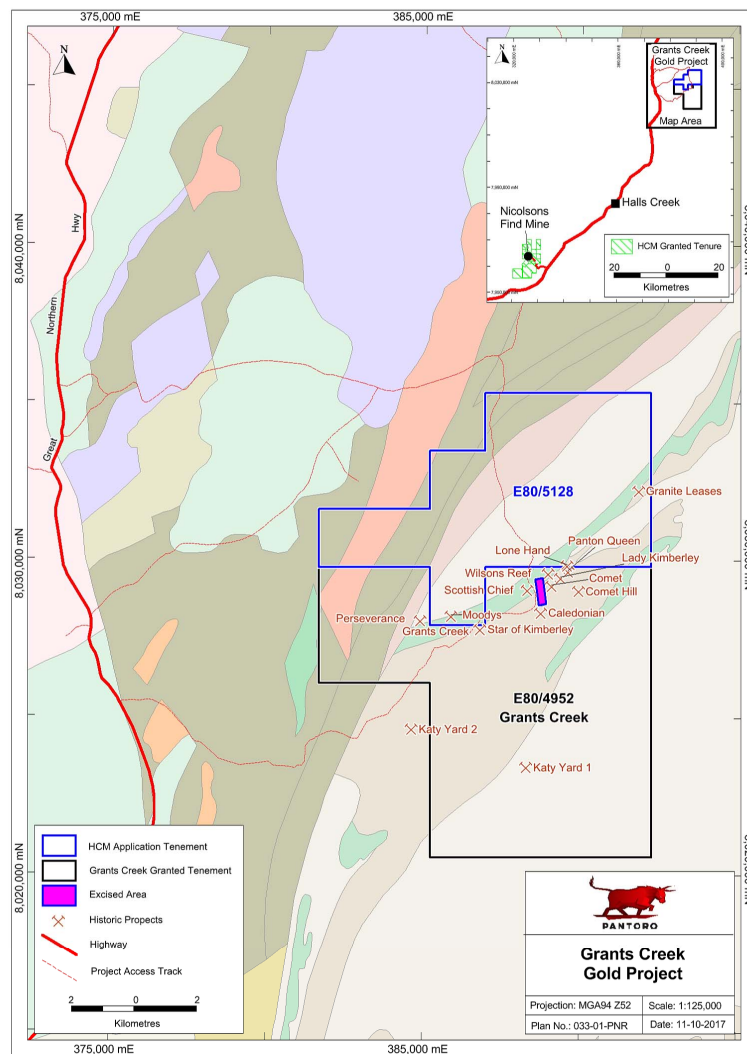
The ore sorter was delivered to Pantoro in December 2017 and is on site ready for installation. Footings for the new conveyors and tertiary crusher are to be poured during January 2018, and works are currently on schedule and budget. The total budget for the project is \$2.2 million, and it will be funded from project cashflow.

Pantoro remains focused on further increasing production output from the operation with both surface stockpiles and underground developed stocks continuing to grow. The crusher and ore sorting plant upgrade works are designed to increase production to between 80,00 and 100,000 ounces per annum by the end of 2018, with some minor upgrade works in the gravity recovery and elution circuits planned to be completed following installation of the ore sorter.

## Grants Creek Project

Pantoro advised that it has entered into a binding agreement to acquire the Grants Creek Gold Project (E80/4952) near Halls Creek in Western Australia through its wholly owned subsidiary, Halls Creek Mining (HCM) on 16 October 2017. In addition, HCM has applied for a new exploration lease for the area to the north of E80/4952 which will consolidate the remainder of the historical Grants Patch goldfield.

Grants Creek, located approximately 60 km north of Halls Creek includes a number of advanced prospects with first mining recorded during the 1880's. Review of open file data on the Department of Mines WAMEX database dating back to 1984 confirms that at least three of the prospects – Perseverance, Star of the Kimberley, and Wilsons Reef had high grade, but non-JORC compliant resources stated during the 1990's. Precious Metals Australia also lodged a Notice of Intent to mine in 1996, however their operations in the region ceased prior to mining commencing.



Pantoro has commenced planning for a drill program following the current wet season. The initial drilling program will be focused on the Perseverance and Star of Kimberley deposits, with a focus on defining open pit mining opportunities for commencement in the near term.

Full details were reported in an ASX release on 16 October 2017 titled "Pantoro Acquires Grants Creek Project Near Halls Creek".



## Papua New Guinea Projects

### **Garaina Project (EL1614 and EL 2013), Morobe Province, Papua New Guinea (100%)**

The Garaina Project is Pantoro's main exploration target in PNG, located 100 km southeast of the Hidden Valley Mine and Wau Town, in the Morobe province, covering an area of approximately 380 km<sup>2</sup>. The tenement area covers the suture zone between the Owen Stanley Metamorphic thrust to the west and the Papuan Ultramafic to the east. Most of the EL is underlain by the Owen Stanley metamorphic complex, which is common to the majority of the known major mineral deposits in PNG.

PNR discovered significant surface mineralisation at the Kusi Prospect in January 2011 and since that time has completed extensive exploration programs with exciting surface exploration and drilling results.

Field campaigns have identified mineralisation and alteration signatures similar to those seen at the Kusi Prospect as far north as the Sim Prospect, and as far west as the Kasuma Prospect.

Pantoro did not complete additional field work for the quarter and is assessing its forward work programs.

### **Widubosh Project, ML 457 – Morobe Province**

The company held ML457 in 50-50 joint venture with PNG Forest products (PNGFP), (the dominant landowner and employer in the region) which sees PNR holding 50% ownership of the fully permitted Widubosh Project (ML 457). Pantoro divested its interest in the project to PNG Forest Products during the quarter. Under the terms of the transaction, Pantoro holds no further interest or liabilities in relation to the project.

# Corporate Information

## Company Structure

The company structure as at 31 December 2017 is provided in the table below.

<b>Cash &amp; Gold</b>	\$15.2 million <sup>^</sup>
<b>Debt</b>	2,000 ounces of gold and normal trade creditors
<b>Ordinary Shares (PNR)</b>	784,066,810
<b>Unlisted Options</b>	3,333,334 (exercisable at \$0.06, various expiry dates)
<b>Employee Options</b>	17,610,000 (various exercise prices and expiry dates)
<b>Performance Rights</b>	3,750,000 (various expiry dates)

<sup>^</sup> Cash and gold includes \$12.58 million cash, 165.5 ounces gold at mint, 1,011.2 ounces gold in bars, and 393.8 ounces GIC @ closing gold price \$1,662/oz.

## Compliance Statements

### Halls Creek Project – Exploration Targets, Exploration Results

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Scott Huffadine (B.Sc. (Hons)), a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Huffadine is a Director and full time employee of the company. Mr Huffadine is eligible to participate in short and long term incentive plans of and holds shares, options and performance rights in the Company as has been previously disclosed. Mr Huffadine has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Huffadine consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### Halls Creek Project - Mineral Resources & Ore Reserves

The information relating to Mineral Resources and Ore Reserves is extracted from a report entitled 'Nicolsons Project Mineral Resource and Ore Reserve Update' created on 1 June 2017 and is available to view on Pantoro's website ([www.pantoro.com.au](http://www.pantoro.com.au)). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

### Wagtail Drilling Results

The information relating to drilling results at Nicolsons is extracted from reports entitled "Highgrade Results Underwrite Wagtail Underground" created on 8 November 2017 and available to view on Pantoro's website ([www.pantoro.com.au](http://www.pantoro.com.au)). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

### Forward Looking Statements

Certain statements in this report relate to the future, including forward looking statements relating to Pantoro's financial position and strategy. These forward looking statements involve known and unknown risks, uncertainties, assumptions and other important factors that could cause the actual results, performance or achievements of Pantoro to be materially different from future results, performance or achievements expressed or implied by such statements. Actual events or results may differ materially from the events or results expressed or implied in any forward looking statement and deviations are both normal and to be expected. Other than required by law, neither Pantoro, their officers nor any other person gives any representation, assurance or guarantee that the occurrence of the events expressed or implied in any forward looking statements will actually occur. You are cautioned not to place undue reliance on those statements.

# Appendix 1 – JORC Code 2012 Edition – Table 1

## NICOLSONS UNDERGROUND FACE SAMPLING

### SECTION 1: SAMPLING TECHNIQUES AND DATA

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.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>This release relates to results from ongoing underground development and associated face chip sampling related to mineralisation in the Anderson Lode in the Nicolson's Underground mine.</li> <li>Face Sampling- each development face / round is mapped geologically and chip sampled perpendicular to mineralisation. The sampling intervals are dominated by geological constraints (e.g. rock type, veining and alteration / sulphidation etc.). The majority of exposures within the orebody are sampled.</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>Face samples recovered using standard hammer and sampling ring</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were taken by an experienced geologist. Recovery and sample quality are controlled as part of this process.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All Development faces are mapped by a geologist and routinely photographed</li> <li>Mapping/Logging is quantitative and qualitative with all faces photographed washed down</li> <li>100% of the relevant intersections are mapped</li> </ul>



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Face Chips samples are nominally chipped perpendicular to mineralisation across the face from left to right, and sub-set via geological features as appropriate</li> <li>• For face samples, the face was separated into sample intervals crushed and pulverized in the HCM laboratory and assayed by BLEAG, a 500g pulp is separately bagged in preparation for analysis at the off site independent certified laboratory.</li> <li>• All mineralised zones are sampled as well as material considered barren either side of the mineralised interval.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• All face samples for grade control are undertaken at the HCM on-site lab using a BLEAG (Bulk Leach Extractable Gold) methodology prior to sending offsite for the fire assay method detailed below. This process involves bottle rolling a 400g P90 75% micron sample for 2 hours and reading the solution generated on an AAS. The method used approaches recovered mineral content not a total gold as with fire assay</li> <li>• All assay greater than 2ppm Au are dispatched for check assay at a certified laboratory in Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice.</li> <li>• Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• All primary data is logged on paper and later entered into the SQL database. Data is visually checked for errors before being sent to an external database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.</li> <li>• Visual checks of the data re completed in Surpac mining software</li> <li>• No adjustments have been made to assay data unless in instances where standard tolerances are not met and reassay is ordered .</li> </ul>

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All underground development is routinely picked up by conventional survey methods and faces referenced to this by measuring from underground survey stations prior to entry into the database</li> <li>The project lies in MGA 94, zone 52. Local coordinates are derived by conversion:  <math>GDA94\_EAST = NIC\_EAST * 0.9983364 + NIC\_NORTH * 0.05607807 + 315269.176</math>  <math>GDA94\_NORTH = NIC\_EAST * (-0.05607807) + NIC\_NORTH * 0.9983364 + 7944798.421</math>  <math>GDA94\_RL = NIC\_RL + 2101.799</math>.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Face samples are taken on the basis of the length of the development rounds being between 2m and 3m spacing along strike depending on the equipment being utilized.</li> <li>No compositing is applied to face sampling.</li> <li>Face samples are both sampled to geology of between 0.3 and 1.2m intervals.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>No bias of sampling is believed to exist through the sampling orientation</li> <li>Underground face and development sampling is nominally undertaken normal to the various orebodies.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>The chain of custody is managed by Pantoro employees and contractors at the onsite laboratory. Check Samples are stored on site and delivered in sealed boxes and bags to the lab in Perth.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audit or reviews of sampling techniques have been undertaken however the data is managed by an offsite database contractor who has internal checks/ protocols in place.</li> </ul>

## SECTION 2: REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Tenements containing Mineral Resources and Ore Reserves are 100% held by Pantoro subsidiary company Halls Creek Mining Pty Ltd. This is: M80/359. Tenement transfers to HCM are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements lie on a pastoral lease with access and mining agreements and predate native title claims.</li> <li>The tenements are in good standing and no known impediments exist.</li> </ul>

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The deposits were discovered by prospectors in the early 1990s. After an 8,500 m RC program, Precious Metals Australia mined 23 koz at an estimated 7.7g/t Au from Nicolson's Pit in 1995/96 before ceasing the operation. Rewah mined the Wagtail and Rowdy pits (5 koz at 2.7g/t Au) in 2002/3 before Terra Gold Mines (TGM) acquired the project, carried out 12,000 m of RC drilling and produced a 100 koz resource estimate. GBS Gold acquired TGM and drilled 4,000 m before being placed in administration. Bulletin Resources Ltd acquired the project from administrators and conducted exploration work focused on Nicolson's and the Wagtail Deposits and completed regional exploration drilling and evaluation and completed a Mining Study in 2012 prior to entering into a JV with PNR in 2014.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Gold mineralisation in the Nicolson's Find area is structurally controlled within the 400 m wide NNE trending dextral strike slip Nicolson's Find Shear Zone (NFSZ) and is hosted within folded and metamorphosed turbiditic greywackes, felsic volcanics, mafic volcanics and laminated siltstones and mudstones. This zone forms part of a regional NE-trending strike slip fault system developed across the Halls Creek Orogen (HCO).</li> <li>The NFSZ comprises a NNE-trending anastomosing system of brittle-ductile shears, characterised by a predominantly dextral sense of movement. The principal shear structures trend NNE to N-S and are linked by NW, and to a lesser extent, by NE shears. Individual shears extend up to 500m along strike and overprint the earlier folding and penetrative cleavage of the HCO.</li> <li>The overall geometry of the system is characterized by right step-overs and bends/jogs in the shear traces, reflecting refraction of the shears about the granite contact. Within this system, the NW-striking shears are interpreted as compressional structures and the NE-striking shears formed within extensional windows.</li> <li>Mineralisation is primarily focussed along NNE trending anastomosing systems of NNE-SSW, NW-SE and NE-SW oriented shears and splay. The NNE shears dip moderately to the east, while the NW set dips moderately to steeply to the NE. Both sets display variations in dip, with flattening and steepening which result in a complex pattern of shear intersections..</li> <li>Mineralisation is strongly correlated with discontinuous quartz veining and with Fe-Si-K alteration halos developed in the wall rocks to the veins. The NE shears are associated with broad zones of silicification and thicker quartz veining (typically white, massive quartz with less fracturing and brecciation); however, these are typically poorly mineralised. The NW-trending shears are mineralised, with the lodes most likely related to high fluid pressures with over-pressuring and failure leading to vein formation. Although the NE structures formed within the same shear system, the quartz veining is of a different generation to the mineralised veins.</li> <li>Individual shears within the system display an increase in strain towards their centres and comprise an anastomosing shear fabric reminiscent of the pattern on a larger scale.</li> </ul>



Criteria	JORC Code explanation	Commentary
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 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>	<ul style="list-style-type: none"> <li>The data presented is grade control results and is presented in appropriate diagrams showing scale and the spatial context of the faces samples in relation to the local grid with coordinates.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used 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>	<ul style="list-style-type: none"> <li>Grades in face presented diagrammatically are uncut</li> <li>No metal equivalents are reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Face samples are taken within geologically defined domains perpendicular to orebody so are true width.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate diagrams are included in the report.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Diagrams show the spatial location and tenor of both high and low grade samples.</li> </ul>

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>No other meaningful data to report.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Close spaced mapping and Face sampling is a routine aspect of the underground grade control and will continue</li> </ul>

## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

Pantoro Limited

### ABN

30 003 207 467

### Quarter ended ("current quarter")

31 December 2017

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	22,345	40,299
1.2 Payments for		
(a) exploration & evaluation	(2,217)	(3,907)
(b) development	(2,355)	(4,831)
(c) production	(10,393)	(18,877)
(d) staff costs	(3,813)	(7,389)
(e) administration and corporate costs	(325)	(620)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	22	35
1.5 Interest and other costs of finance paid	11	(7)
1.6 Income taxes paid	-	-
1.7 Research and development refunds	-	-
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>3,275</b>	<b>4,703</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	(1,334)	(3,124)
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-



<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	10	11
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(1,324)</b>	<b>(3,113)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	1,307
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>-</b>	<b>1,307</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	10,616	9,672
4.2	Net cash from / (used in) operating activities (item 1.9 above)	3,275	4,703
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,324)	(3,113)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	1,307
4.5	Effect of movement in exchange rates on cash held	(11)	(13)
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>12,556</b>	<b>12,556</b>

<b>5. Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1 Bank balances	9,556	7,616
5.2 Call deposits	3,000	3,000
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>12,556</b>	<b>10,616</b>

**6. Payments to directors of the entity and their associates**

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

**Current quarter  
\$A'000**

211

-

Total amounts paid to directors including salaries, directors fees, superannuation and consulting fees.

**7. Payments to related entities of the entity and their associates**

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

**Current quarter  
\$A'000**

-

-

8. <b>Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities	3,200	3,200
8.2 Credit standby arrangements		
8.3 Other (please specify)		
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		
8.1 – Gold prepayment facility with CBA		

9. <b>Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	1,500
9.2 Development	2,725
9.3 Production	7,500
9.4 Staff costs	3,800
9.5 Administration and corporate costs	325
9.6 Other (provide details if material)	-
<b>9.7 Total estimated cash outflows</b>	<b>15,850</b>

10. <b>Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	ML457 (PNG)	Disposal of Widobosh JV interest.	50%	0%
10.2 Interests in mining tenements and petroleum tenements acquired or increased	E80/4952 E80/4958	Acquisition of Grants Creek Project Tenements	0%	100%



**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here: .....  
(Company secretary)

Date: 24 January 2018

Print name: David Okeby

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.