# **ASX and Media Release**

## Quarterly activities report September quarter 2017

#### HIGHLIGHTS

#### Results

- July and August production deliberately reduced by processing of low grade stockpiles during contractor changeover and repair of underground infrastructure
- 11,718 oz gold recovered at AISC of \$1,641/oz for quarter (subject to reduction following dispute resolution with PYBAR)
- 5,339 oz gold at AISC of \$1,350/oz recovered in September alone as new contractor performs above expectations
- Guidance for combined Challenger and Tarcoola mining operations for year to 30 June 2018 remains 70,000 – 80,000 oz
- December quarter forecast to be 17,000 18,000 oz at an AISC of \$1,500 \$1,550/oz
- AISC forecast to reduce to c. \$1,200 oz by June 2018 quarter

#### Production

- Turn-around underway with Challenger mine and mill optimisation commenced
- Increase in Challenger mill throughput up to 700,000 tpa
- Pushback at Tarcoola undertaken and to be completed in October
- Termination of mining contract with Pybar in July, departed site in August
- Completion of tender and mobilisation of Byrnecut in August

#### Exploration

- Tarcoola and Challenger 30 June 2017 Mineral Resource and Ore Reserve Estimates released
- Tarcoola pit extension in-fill drilling commenced
- Phase 2 drilling of Challenger Deeps commenced

#### Corporate

- One for eight non-renounceable Entitlement Issue to raise \$5.4 million at \$0.048 per share announced on 19 June 2017 withdrawn
- Annual financial statements released
- Dispute resolution process invoked by Pybar however costs claimed by Pybar are fully subject to off-setting claim

## 20 October 2017



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## **RESULTS AT A GLANCE**

Sales and Processing (Challenger Processing Hub)	Units	September Quarter 2017	Year To Date	June Quarter 2017
Total Ore Processed	Tonnes	167,455	167,455	145,627
Grade Processed	g/t Au	2.30	2.30	3.12
Recovery	%	94.7	94.7	95.2
Gold Recovered	Ounces	11,718	11,718	13,909
All-in Sustaining Cost*	\$/Ounce	1,641	1,641	1,431
Gold Sold	Ounces	10,370	10,370	13,625
Average Gold Price Received	\$/Ounce	1,625	1,625	1,674
Sales Revenue Realised**	A\$000's	16,891	16,891	22,805

Challenger Gold Mine Operations Summary	Units	September Quarter 2017	Year To Date	June Quarter 2017
Underground Capital Development	m	199	199	258
Total Underground Development	m	914	914	1,328
Underground Ore Mined	Tonnes	123,562	123,562	128,753
Underground Ore Grade**	g/t Au	2.27	2.27	2.93

Tarcoola Gold Mine Operations Summary	Units	September Quarter 2017	Year To Date	June Quarter 2017
Open Pit Waste Mined	bcm	615,859	615,859	473,712
Open Pit Ore Mined	Tonnes	62,138	62,138	74,030
Mined Grade	g/t Au	2.03	2.03	2.49
Ore Hauled to Processing Facility	Tonnes	36,743	36,743	44,735
ROM Stockpile	Tonnes	54,102	54,102	50,333

Notes: \* AISC in relation to underground mining costs include all lateral development and fixed asset additions other than those associated with permanent infrastructure. AISC in relation to open cut mining activities excludes capitalised waste mining costs. AISC includes an appropriate allocation of head office costs.

\*\* Includes stoping ore, development ore and low grade development ore



## SUMMARY

#### Turn-around strategy underway

In May 2017 WPG completed a mine and mill optimisation study the purpose of which was to maximise the value of the Challenger processing hub through the processing of ore from both Challenger and Tarcoola. This strategy is expected to result in a reduction in AISC to approximately **\$1,200 per ounce** in the June 2018 quarter.

This strategy required the completion of a pushback at Tarcoola, the re-investment in underground development at Challenger, the increase in the throughput at the Challenger mill, and the systematic drilling at Challenger to bring deeper areas of the main M1 and M2 lodes into the mine plan. Additional exploration upside at both Tarcoola and Challenger was to be funded by free cashflow. Successful execution of this strategy was dependent upon the increase in the performance of the mining contractor at Challenger. The June 2017 placement and entitlement issue was designed to fund this turn-around strategy.

The implementation of this strategy was commenced in the September quarter with the following key initiative undertaken:

- Pushback at Tarcoola largely completed
- Commencement of development into the Challenger Deeps lodes and establishment of a new drilling cuddy.
- Commencement of the Phase 2 Challenger Deeps drilling program
- Termination of the Pybar Mining Services Pty Ltd (Pybar) underground mining contract and awarding of the new contract to Byrnecut Australia Pty Ltd (Byrnecut)
- Completion of the June \$7.2 million placement however the \$5.4 million entitlement issue was withdrawn in August

## TARCOOLA PUSHBACK

The Tarcoola pushback will be completed by late October 2017 however sufficient waste removal occurred in the quarter to allow modest ore mining in September and with significant ore contribution scheduled in the December quarter and beyond.



## CHANGE IN MINING CONTRACTOR

#### Byrnecut awarded Challenger underground mining contract

At Challenger, despite the introduction of an additional jumbo in January to address failures to achieve the required development metres the performance of Pybar continued to be unacceptable and well below industry standard. This underperformance was in respect of all key physicals including development, production drilling and haulage and also included safety. In particular the failure to achieve the required development metres has continued to hamper the ability to mine new virgin areas resulting in remnant mining undertaken of lower grade material which has impacted on production and driven up unit costs. This resulted in the termination of the mining contract effective 3 August 2017.

A number of mining contractors were invited to tender for a new mining contract at Challenger in a competitive process and in July a Letter of Intent was issued to Byrnecut. Byrnecut commenced mobilisation activities and assumed responsibility for all underground mining at Challenger on 5 August 2017.

Byrnecut were the prior underground mining contractor at Challenger, are very familiar with site and have a demonstrable ability to perform. The new mining contract is an alliance style contract with a higher variable weighting than that the Pybar contract. This means that the contractor has a higher financial incentive to perform and allows performance metrics to be adapted to suit changes in the mine planning as stoping operations shift to Challenger Deeps in the new year.

Byrnecut mobilised on short notice and underground activities in August were focussed on the road and drainage repairs in the Jumbuck decline, along with repairs to the underground water reticulation system, both of which were left in a poor state by Pybar. Excessive waste rock was also required to be moved to surface by Byrnecut which had previously been stockpiled underground and was impeding mining operations.

In September stoping operations increased significantly which included stoping on M3 on the 1025 level, immediately below the highly successful 1050 stope mined in June. In addition, rehabilitation of the main Jumbuck decline at the bottom of the mine was completed, allowing the pushing of the decline into Challenger Deeps. This is in anticipation of development on the 115 level which will be the next production level in Challenger Deeps and it has also enabled the development of a new drill cuddy on the 125 level from which the Phase 2 Challenger Deeps drilling program has commenced targeting the next four production levels. This drilling is to supplement the very encouraging results obtained in the Phase 1 program

On 28 September 2017 WPG's wholly owned subsidiary, Challenger Gold Operations Pty Ltd (CGO), received formal notices of dispute from Pybar under the



surviving dispute resolution provisions of the Mining Contract with respect to \$8.7 million (net of GST) of unpaid claims. These claims include costs which are disputed by CGO as they are not in accordance with the mining contract or any agreed variations thereto. Further CGO has advised Pybar that these claims are also subject to a right of set-off, as set out in the Mining Contract, in an amount that exceeds the claims as a result of failure by Pybar to properly perform the Mining Services to an acceptable industry standard. CGO has commenced preparation of detailed evidence in support of this right of set-off which is proceeding well.

The dispute resolution process is a tiered process that requires a number of meetings between the parties which may culminate in a mediation process and is anticipated to be finalised by mid-November. In the event the parties cannot reach an agreement, the matter may result in litigation and Pybar has issued preliminary notices with respect to such an action as required by the rules of the South Australian Supreme Court. Such an action may take 2 years to prosecute and would be vigorously defended by CGO.

No writ of summons or other documentation relating to any legal proceedings has been served on CGO to date. Notwithstanding that WPG has fully provided for the amount claimed by Pybar in its consolidated financial statements released on 29 September 2017, CGO believes Pybar's claim has little merit and intends to vigorously defend any proceedings if litigation is commenced and will continue to keep the market informed of further developments in respect of this.

#### **OPERATIONS UPDATE**

Gold recovered in the quarter was 11,718 ounces at an AISC cost of \$1,641 per ounce. This AISC also includes a full accrual of all claims made by Pybar.

Disruptions to mining at Challenger due to transition of mining contractors was expected and plans were implemented to mitigate this whilst this change was undertaken. This mitigation plan, to reduce the impact, included the treatment of low grade surface stock material and adjustment of Tarcoola mining schedule to haul additional ounces to Challenger.

At Tarcoola the focus was on completing the major pushback. Upon completion of the pushback, the life-of-mine strip ratio will reduce to 1.8:1. In addition, the mining plan was re-sequenced to expedite ore delivery to Challenger during the contractor changeover period.

As a result of the Contractor changeover and mining plan at Tarcoola, September month production achieved an improved ounce output with 5,339 ounces recovered at an AISC of \$1,350 per ounce.

**Building production profile into 2018** 

Production guidance for the combined Challenger and Tarcoola mining operations for the December quarter is 17,000 – 18,000 ounces at an AISC of \$1,500 – \$1,550



per ounce whilst lower grade Challenger West ore is mined prior to stoping on M1/M2 in Challenger Deeps. First ore development in Challenger Deeps is anticipated in December with first stoping expected in the new year.

Guidance for the combined Challenger and Tarcoola mining operations announced on 20 July 2017 for the 2018 financial year remains 70,000 to 80,000 ounces.

Based on our guidance of 70,000 to 80,000 ounces for the 2018 year revenue should be in the order of \$115 million.

## CHALLENGER PROCESSING HUB

## **OVERVIEW**

Successful processing of Tarcoola ore and higher throughput

Processing at Challenger in July and August was dominated by the processing of lower grade ore, including low grade stockpiles, during the contractor changeover period. During September new stoping operations accelerated at Challenger delivering higher grade mill feed.

Total throughput in the quarter was 167,455 dry tonnes up 15% from the previous quarter despite the loss of four days of milling (three of which were in September) due to essential repairs and maintenance activities.

The Challenger processing plant achieved a steady increase in throughput performance during the quarter with the highest tonnes per utilised hour rate (85 tonnes per utilised hour) since WPG ownership occurring in September. This higher throughput was achieved with no material loss of gold recovery. Blending ratios of up to 1:1 Challenger Tarcoola ore were also successfully processed during the quarter.

Some modest capital remains to be spent in the next quarter to sustain this throughput rate. Water availability is no longer a restraining factor following the refurbishment of existing water bores in the previous quarter.

A scheduled tailing dam lift was commenced in the quarter with Exact Mining Services Pty Ltd contracted for completion of the major earthworks. This lift is expected to be completed before the end of October.

## Production and Costs

## **Re-building production with 5,339 oz recovered in September**

Milled tonnes for the quarter were 167,455 @ 2.3 g/t Au with average recovery of 95.2%. This low grade was driven by the processing of low grade ore stockpiles in addition to fresh ore during the contractor changeover period with the grade



contribution from Challenger increasing significantly in September upon stabilisation of underground mining activities at Challenger.

All-In-Sustaining Cost (AISC) in the quarter was \$1,641 per ounce recovered which includes all dispute claims made by Pybar. The AISC decreased to \$1,350 in the month of September upon resumption or normalised mining activities at Challenger. Total revenue from bullion sales was \$16.9 million at an average gold price of \$1,625 per ounce.

## CHALLENGER GOLD MINE

## PRODUCTION

The Challenger mine operated at lower mining rates than the prior quarter as a result of the impact of the contractor changeover in July and August. Total ore mined from underground for the quarter was 83,208 @ 2.95g/t Au (4,056 ore tonnes from development and 79,152 ore tonnes from stoping), down 13% from the prior quarter. In addition, a further 40,354 tonnes of low grade development ore was mined which provided supplementary mill feed.

Underground development in the quarter continued to be well below budget which has continued to hamper the ability to mine new virgin areas resulting in remnant mining undertaken of lower grade material which has impacted on production and driven up unit costs. Stoping grade in the quarter was 2.95 g/t compared to the previous quarter of 3.60 g/t Au. Production was primarily from the Challenger West lode with additional material sourced from the Aminus, M2 and M3 lodes.

Byrnecut are actively working on rebuilding underground development and are focussing on key areas of operator skill level, cycle time improvements and building increased efficiency as multiple development faces are established in close proximity to ensure this issue is addressed. In addition, a third development Jumbo is expected to arrive on site in December in accordance with mining schedule requirements.

In addition, rehabilitation of the main Jumbuck decline at the bottom of the mine was completed, allowing the pushing of the decline into Challenger Deeps. This is in anticipation of development on the 115 level which will be the next production level in Challenger Deeps and it has also enabled the development of a new drill cuddy on the 125 level from which the Phase 2 Challenger Deeps drilling program has commenced targeting the next four production levels. This development into Challenger Deeps will continue as a priority in the coming quarter.

## Systematically drilling to grow the resource base

On 29 September 2017, WPG released the 30 June 2017 Challenger Mineral Resource and Ore Reserve estimate. This estimate took into account mining depletion and drilling and sampling results since the previous estimate as at 31 March 2017 and 30 June 2016 as well as a change in the underground cut-off grade



from 5.0g/t Au to 3.0g/t Au, resulting in the inclusion of the M1 generic in the resource.

The 30 June 2017 Mineral Resource estimate was a total of 1.6 million tonnes at an average grade of 7 g/t Au containing 364,000 ounces of gold. The contained gold in the updated mineral resource estimate of 364,000 ounces is 6% higher than that shown in WPG's 31 March 2017 resource estimate announced by the Company on 1 June 2017 and 38% higher than the 30 June 2016 Mineral Resource estimate announced on 25 October 2016.

The 30 June 2017 Ore Reserves estimate was 537,200 tonnes at an average grade of 5.60 g/t Au containing 96,700 ounces of gold. The contained gold of 96,700 ounces is a 7,307 (7.5%) ounce net increase to the June 2016 Ore Reserve estimate of 89,448 contained ounces of gold.

WPG confirms that it is not aware of any new information or data that materially affects the information included in the 29 September 2017 market announcement and above in relation to the mineral resource estimate, and confirms that to the best of its knowledge and belief all material assumptions and technical parameters underpinning the mineral resource and ore reserve estimates in the 29 September 2017 market announcement continue to apply and have not materially changed except to the extent of production.

## **NEAR MINE EXPLORATION**

Resource definition and near mine exploration opportunities were pursued during the quarter by a program of underground diamond drilling. This ongoing program of near mine exploration drilling activity is to identify new minable resources that can be accessed from existing underground development.

#### Bringing new lodes below the shear into geological models

#### **Challenger Deeps**

On 22 September 2017, the Company announced that Phase 2 of Challenger Deeps diamond drilling had commenced. The target of the drilling from the 125 Diamond drill cuddy is the M1 and M2 lodes that could not be drilled from the first drill site used for the Phase 1 drill program.

Two drillholes for 240 metres were completed during the quarter with results for the first fan of drilling expected within the next two weeks. This drilling will be used to assist in the planning of development on the 115 level which will be undertaken during the December quarter in anticipation of first stoping in Challenger Deeps in the new year.

Potential high grade near structures in the upper mine areas



#### M3/SEZ

Drilling of the M3 and SEZ ore shoots continued during the quarter and were the main focus of exploration activities at Challenger. Eighty three holes for 10,329 metres were completed during the September quarter targeting M3 and SEZ ore shoots on the 700, 845 and 900 levels.

700 Level significant intercepts included:

- 17CUD2110 1.00m @ 8.75g/t from 56.00m
- 17CUD2118 0.95m @ 11.49g/t from 44.20m
- 17CUD2120 1.00m @ 6.41g/t from 27.00m
- 17CUD2121 1.00m @ 32.05g/t from 26.00m
- 17CUD2122 1.00m @ 7.79g/t from 37.00m
- 17CUD2147 4.00m @ 11.04g/t from 139.00m

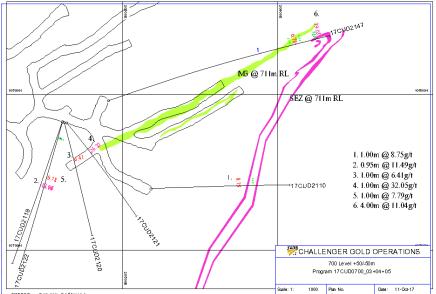


Figure 1. Plan view of M3/SEZ significant intercepts from 700 level drilling.

The results of the 700 level drilling targeting M3 and SEZ lodes have confirmed the location of the lodes and strike extent similar to these lodes that have been both historically and recently mined in upper levels of Challenger.

845 Level significant intercepts include:

- 17CUD2128 0.30m @ 18.49g/t from 149.40m
- 17CUD2129 1.00m @ 11.60g/t from 162.00m
- 17CUD2131 0.50m @ 7.66g/t from 209.23m
- 17CUD2133 1.30m @ 6.02g/t from 145.70m
- 17CUD2134 1.11m @ 6.10g/t from188.26m
- 17CUD2161 0.35m @ 22.80g/t from 83.31m



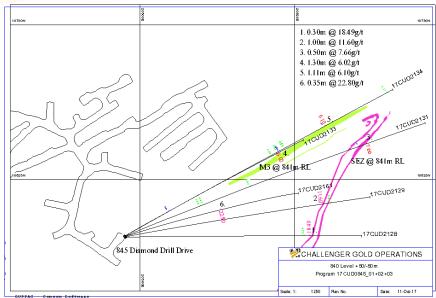


Figure 2. Plan view of M3/SEZ significant intercepts from 845 level drilling.

The drill results received to date from the 845 level drilling have been able to confirm the location of the SEZ lode at this level, however the low angle orientation of drillholes targeting the M3 lode intersected large zones of quartz veining but did not return any significant assay results.

Only one drillhole from the 900 level drill program returned a significant intercept near the expected location of the SEZ lode.

A full description of drilling details, including table of significant intercepts is included in Appendix 1 of this report.

## M2

The M2 lode was intersected during the drill targeting for M3 and SEZ from the 900 level. All of the intersections are located close to the drill hole collar and historical mine workings.

Significant intercepts for the quarter:

- 17CUD2092 0.40m @ 44.90g/ from 6.90m
- 17CUD2097 0.30m @ 148.99g/t from 10.30m
- 17CUD2097 0.82m @ 9.84g/t from 24.18m
- 17CUD2097 0.37m @ 109.01g/t from 56.86m
- 17CUD2100 0.30m @ 38.57g/t from 6.34m
- 17CUD2103 1.00m @ 16.14g/t from 7.00m
- 17CUD2104 0.90m @ 46.52g/t from 9.00m
- 17CUD2105 0.30m @ 35.81g/t from 29.24m



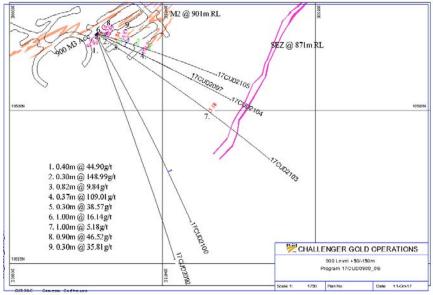


Figure 3. Plan view of M2, M3 and SEZ significant intercepts drilled from the 900 level.

A full description of drilling details, including table of significant intercepts is included in Appendix 1 of this report.

#### **Challenger West**

During the quarter, a total of eighteen drill holes for 2,258 metres were drilled to infill the Challenger West orebody at the 370mRL. The purpose of the drilling was to test the continuity down plunge of the OD4 shoot that have been previously mined on the 470, 450 and 410 levels within Challenger West. Assay results for these drill holes were pending completion at the end of the quarter.

## Future exploration activities

The focus of future exploration activities at Challenger for the remainder of the December quarter will focus on Challenger Deeps, M3/SEZ, lower levels of Challenger West and conceptual near mine exploration targets.

## TARCOOLA GOLD MINE

## PRODUCTION

## LOM strip ratio to fall to 1.8:1

The September quarter was focussed on completing the major pushback at Tarcoola. In addition the mining plan was re-sequenced to expedite ore delivery by to assist in the mitigation plan for the change in contractors at Challenger. Gold production for the quarter from the Tarcoola Mine totalled 2,906 ounces.

The high waste movement served to expose new ore blocks that will be mined during the next quarter, and to establish the commencement of sustainable production from the pit till the end of mine life at significantly reduced strip ratios to



that experienced to date which will be 1.8:1 over the remaining life of the pit upon completion of the pushback.

During the June quarter a total of 642,493 bcm was mined from the pit, including 62,138 tonnes of ore at a grade of 2.03 g/t containing an estimated 4,057 ounces of gold. During the quarter, 36,743 tonnes of ore at a grade of 2.28 g/t was hauled to Challenger, and 2,906 ounces of Tarcoola gold was poured at Challenger. ROM stockpiles at 30 September 2017 totalled 43,865 tonnes.

#### **Updated Mineral Resource and Ore Reserve Estimates**

On 21 September 2017, WPG released the 30 June 2017 Tarcoola Mineral Resource and Ore Reserve estimate.

The 30 June 2017 Mineral Resource estimate was a total of 1.6 million tonnes at an average grade of 1.70 g/t Au containing 87,600 ounces of gold.

The 30 June 2017 Ore Reserves estimate was 567,200 tonnes at an average grade of 3.0 g/t Au containing 54,300 ounces of gold.

WPG confirms that it is not aware of any new information or data that materially affects the information included in the 21 September 2017 market announcement and above in relation to the mineral resource estimate, and confirms that to the best of its knowledge and belief all material assumptions and technical parameters underpinning the mineral resource and ore reserve estimates in the 21 September 2017 market announcement continue to apply and have not materially changed except to the extent of production.

## **NEAR MINE EXPLORATION**

## **Completion of pushback in November 2017**

The RC drill program testing the Warrigal IP chargeability target was completed with 7 holes for 1,256m drilled. All assays have been returned with a peak intersection of **2m @ 14.84g/t from 88m** in 17WARC005. Whilst there were significant quantities of sulphides (mainly pyrite), including in lithologies other than black shale, the gold association was overall minimal. The gold intersections were generally related to NW narrow structures and veins (similar to the historical surface workings).

No further exploration is recommended on the IP anomaly; however, it is proposed to follow up the Conglomerate-Granite contact further to the north where it is shallower as this looks to be a dominant control on mineralisation based on the observations from mining in the Perseverance Pit. An intersection of **1m @ 26.26g/t from 147m** was returned in 17WARC007 on this contact.



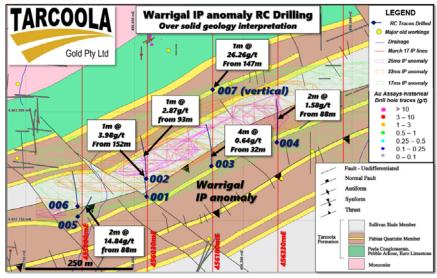


Figure 4 – Warrigal IP anomaly (3D chargeability shells) showing RC traces completed

WPG was able to include an additional 2,000 ounces into indicated resource at Wondergraph, as a result of the RC drilling completed in the March Quarter (see ASX announcement of Tarcoola Mineral Resource and Ore Reserve Estimate on 21 September 2017).

## Pit expansion drilling at Tarcoola

The Tarcoola Gold Mine commenced pit expansion drilling on the Tarcoola Mining Lease in September. Drilling is targeting the continuation of in-pit mineralising controls along strike. These include:

- 1. The east and west extensions of the unconformity controlled Peela Conglomerate High Sulphidation mineralising system at *Morning Star*
- 2. The north and south extensions of the Perseverance Shear at *Forgotten Prince* and *SW Eclipse*
- 3. Diorite contact mineralisation where historic workings have targeted high grade mineralisation at *White Hope*
- 4. The Southern extension of vein hosted mineralisation in granite at Wondergraph.

The geological understanding of these prospects has been greatly enhanced by the pit exposure and will be invaluable for this drill program, which is designed to improve the definition of historic drilling intercepts with the intent of increasing current gold resources.

Due to the proximity of the drill targets to the current pit, the conversion of any increased resources to reserves would be at relatively low strip ratios and potential pit cut backs can be made.



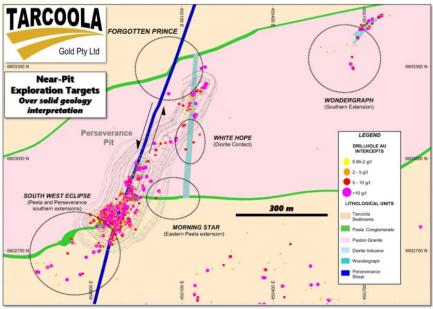


Figure 5: Tarcoola Near Pit Exploration Targets

WPG has 100% of all minerals over an area of 1,201km<sup>2</sup> on EL 5355 and 5254 surrounding the Tarcoola mine and is reviewing exploration targets with potential for further discoveries.

## WESTERN GAWLER CRATON JV (WGCJV)

The current interests of the parties to the WGCJV are approximately WPG 26%, Tyranna Resources Ltd (Tyranna) 74%, with Tyranna the manager of the WGCJV. Tyranna's strategy is to target the more advanced gold prospects which are situated within 50kms of the Challenger gold processing operations and increase the economic scale of these prospects via focused and extensive exploration drilling.

Tyranna commenced a program of Reverse Circulation drilling at the Typhoon and Prospect, 35km SSW of Challenger Gold Mine, during the Quarter with results to be announced.

WPG encourage Tyranna to continue exploring in the WGCJV project area for potential eventual treatment of ore through the Challenger mill.

## TUNKILLIA

## **EXPLORATION**

WPG has 100% of all minerals over an area of 1,362km<sup>2</sup> on EL 5670, 5901 and 5790 and is reviewing exploration targets with potential for further discoveries.

## MUCKANIPPIE, ROBINS RISE, LAKE WOORONG AND PERFECTION WELL

With WPG's current focus on its gold projects, the Company's efforts were diverted for the Quarter from its other South Australian project assets.



There was no substantive work undertaken on these tenements during the Quarter, but potential exploration programs have been prepared.

## CORPORATE

## **CAPITAL RAISING**

## **Entitlement Issue**

On 19 June 2017 WPG launched a \$5.4 million 1 for 8 pro rata non-renounceable Entitlement Issue to eligible shareholders. Due to unfavourable market conditions, the offer was withdrawn on 15 August 2017 and all application moneys refunded.

## Placement

On 13 June 2017 WPG announced it had raised \$7.2 million in a Placement of shares to sophisticated and professional investors. The Placement was oversubscribed and after scale-back, 150,000,000 shares were issued. A free \$0.08 option (expiring on 20 June 2019) will be issued for every 2 shares placed, subject to shareholder approval. A General Meeting will be held on 26 October 2017 to approve the issue of the options to sophisticated and professional investors and to the corporate adviser to the Placement.

## **HEDGING**

During the quarter the company settled its outstanding forward sales in the normal course of business whilst renegotiating a new hedging facility which was approved at the end of the quarter. New forward sales positions will be taken in accordance with the Companies hedging policy.

During the quarter the company closed forward sales positions of 9,250 ounces with forward prices averaging \$1,652 per ounce.

At the end of the quarter the Company had no open forward positions. The Company intends to enter into further hedging arrangements in the current quarter.

## **FINANCIAL POSITION**

On 29 September 2017, the Group's 30 June 2017 financial statements were released.

As at 30 September 2017 the Group had cash at bank of \$4.3 million.

## **Further Information**

For further information please contact WPG's Chief Executive Officer, Wayne Rossiter on (02) 9251 1044.

## **Forward-Looking Statements**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to statements concerning WPG's planned activities, including but not limited to mining and exploration programs, and other statements that are not historical facts. When used in this document, the words



such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. In addition, summaries of Exploration Results and estimates of Mineral Resources and Ore Reserves could also be forward looking statements. Although WPG believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

## **Competent Person Statements**

## CHALLENGER

#### Exploration activities

The Challenger exploration activities and results contained in this report are based on information compiled by Mr Kurt Crameri and Paul Wittwer.

Kurt Crameri is a Member of the Australasian Institute of Mining and Metallurgy. He is a Senior Project Geologist and Mining Engineer and a full time employee of WPG Resources Ltd. He has sufficient experience that 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 December 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code & Guidelines). Kurt Crameri has consented in writing to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Paul Wittwer is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. He is a Senior Project Geologist and a full time employee of WPG Resources Ltd. He has sufficient experience that 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 December 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code & Guidelines). Paul Wittwer has consented in writing to the inclusion in this report of the matters based on his information in the form and context in which it appears.

## TARCOOLA

#### **Exploration activities**

The Tarcoola exploration activities and results contained in this report are based on information compiled by Mr Paul Wittwer.

Paul Wittwer is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. He is a Senior Project Geologist and a full time employee of WPG Resources Ltd. He has sufficient experience that 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 December 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code & Guidelines). Paul Wittwer has consented in writing to the inclusion in this report of the matters based on his information in the form and context in which it appears.

## Appendix 1

## Drill Data - Significant Intercepts Challenger

	Exploration Diamond Drill hole Details (Local Grid)						Int	tercept Details			
Hole ID	Collar mN	Collar mE	Collar mAHD	Dip	Grid Azi	Hole Length	From (m)	To (m)	Interval (m)	Au (g/t)	Shoot
17CUD2092	10586.43	20398.92	906.646	-5	159	272.76	6.90	7.30	0.40	44.90	M2
							10.30	10.60	0.30	148.99	M2
17CUD2097	10587.53	20400.44	906.614	-4	114	119.55	24.18	25.00	0.82	9.84	M2
							56.86	57.23	0.37	109.01	M2
17CUD2100	10586.68	20399.15	906.462	-13	149	244.95	6.34	6.64	0.30	38.57	M2
17CUD2103	10587.28	20400.09	906.392	-13	122	250	7.00	8.00	1.00	16.14	M2
17C0D2105	10567.28	20400.09	900.392	-15	122	250	161.00	162.00	1.00	5.18	SEZ
17CUD2104	10587.5	20400.46	906.355	-12	114	173.47	9.00	9.90	0.90	46.52	M2
17CUD2105	10587.7	20400.76	906.378	-11	107	146.44	29.24	29.54	0.30	35.81	M2
17CUD2110	10739.37	20818.22	708.061	0	89	89.56	56.00	57.00	1.00	8.75	SEZ
17CUD2118	10782.63	20761.01	708.153	16	198	99.98	44.20	45.15	0.95	11.49	M3
17CUD2120	10782.12	20762.32	708.758	23	166	80.4	27.00	28.00	1.00	6.41	M3
17CUD2121	10781.81	20763.99	709.014	20	140	80	26.00	27.00	1.00	32.05	M3
17CUD2122	10782.6	20761.13	707.43	0	195	98.61	37.00	38.00	1.00	7.79	M3
17CUD2128	10578.38	20488.12	848.273	-1	88	191.38	149.40	149.70	0.30	18.49	SEZ
17CUD2129	10578.78	20488.14	848.269	-1	79	200.61	162.00	163.00	1.00	11.60	SEZ
17CUD2131	10579.22	20487.75	848.32	0	66	259.58	209.23	209.73	0.50	7.66	SEZ
17CUD2133	10579.4	20487.51	847.919	-16	61	170.7	145.70	147.00	1.30	6.02	M3
17CUD2134	10579.39	20487.51	848.037	-11	61	251.6	188.26	189.37	1.11	6.10	M3
17CUD2147	10796.19	20790.89	707.779	0	71	148.64	139.00	143.00	4.00	11.04	M3
17CUD2161	10578.99	20487.85	849.131	15	73	149.33	83.31	83.66	0.35	22.80	M3

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## Significant Intercepts Tarcoola

## Drill collar detail

Warri	Warrigal Prospect Exploration Reverse Circulation Drill hole Details (GDA94 Zone 53)						
Hole_ID	Collar mN	Collar mE	Collar mAHD	Dip	True Azi	Hole Length (m)	
17WARC001	6602807	456028	151	-80	0	199	
17WARC002	6602847	456178	156	-60	0	180	
17WARC003	6602875	456178	148	-65	0	199	
17WARC004	6602929	456327	140	-60	0	180	
17WARC005	6602759	455870	148	-75	45	187	
17WARC006	6602783	455869	151	-60	0	151	
17WARC007	6603051	456180	165	-90	0	160	

## Drill assay results

Hole ID	m From	m To	Interval (m)	True Width (m)	Au (g/t)	Au (g/txm)
17WARC001	84	85	1	1	1.69	1.69
17WARC001	151	154	3	3	1.60	4.80
including	152	153	1	1	3.98	3.98
17WARC002	93	94	1	1	2.87	2.87
17WARC003	32	36	4	4	0.64	2.56
17WARC004	88	90	2	2	1.58	3.16
17WARC005	87	90	3	3	10.11	30.33
including	88	90	2	2	14.84	29.68
17WARC005	93	94	1	1	1.50	1.50
17WARC007	147	151	4	4	6.96	27.84
including	147	148	1	1	26.26	26.26

Warrigal significant intersections (>1 g/t x m are reported only), using a 0.25g/t cut off

## Challenger JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Underground BQ drill core is whole core sampled, ranging from 0.3m to 1.3m sample intervals.</li> <li>Each sample is crushed to 4mm and pulverised to 75 microns through the PAL (pulverizing aggressive leach) process. In the PAL process, each sample is pulverised in an aqueous solution with cyanide bearing assay tabs and a collection of assorted ball bearings. Each sample is processed in the PAL for one hour, resulting in an Au_CN complex bearing liquor and remnant pulverised sample.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Underground diamond drilling is undertaken by Challenger Gold Operations. Challenger Gold operates three LM75 underground drill rigs with separate power pack running BQ triple tube wireline gear.</li> <li>No diamond core was oriented.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>All drill core is presented as whole core in core trays by Challenger Gold drillers. Core blocks are inserted at the end of every run. Any core loss is noted by the diamond driller on an additional core block if required.</li> <li>Any core loss is discussed with the drillers in a process of constant improvement to maximize returns. In the case of core loss, generally only fine material is lost through grinding. Any discrepancies between the measured length of the core and that of the core blocks are</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul><li>identified and recorded in logging as gaps in the lithology and also in the geotechnical logging.</li><li>Unless a mineralised leucosome is ground away, there is no sample bias due to fines loss.</li></ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All drill core is geologically logged (lithology, mineralisation, structure) and geotechnically logged (Q value – rock quality) down to cm-scale. (Any leucosome greater than 0.20m in length is recorded as a separate lithology.</li> <li>The logging is quantitative in nature as lithology percentages and compositions are recorded and all geotechnical logging relies on measurements for the calculation of Q values.</li> <li>All core is digitally photographed, one core tray per photo, with photos stored on site server for reference.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Samples taken from BQ underground core are full core sampled.</li> <li>The sample is submitted to the site laboratory for analysis. All samples are dried at a maximum temperature of 90 degrees Celsius to drive off moisture that would interfere with splitting the sample. After drying, samples are crushed using a Boyd Crusher to approximately 4mm in size and then split through a rotary sample splitter to produce a sub-sample. The crusher is cleaned regularly, with barren material (bricks) crushed through it to ensure no smearing prior to the sample run being crushed. Each reject sample is retained for resampling if required.</li> <li>Each sample can be tracked by its sample number through the entire laboratory process and results for the original samples and all QAQC samples are presented in digital form to the site geologists.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks,</li> </ul>	<ul> <li>Assaying at Challenger is completed using the PAL process (pulverizing aggressive leach). This process effectively replicates the process in the Challenger mill. Each sample is pulverised in aqueous solution with cyanide bearing assay tabs and a collection of assorted ball bearings. Each sample is processed in the PAL for one hour, resulting in an Au_CN complex bearing liquor and remnant pulverised sample. The pulverised material is 95% passing 75 microns, the ideal liberation size for gold at Challenger.</li> </ul>

Criteria	JORC Code explanation	Commentary
	duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	<ul> <li>Every twentieth sample is duplicated for the original sample bag (resplit) to produce a duplicate. Every sample run (53 samples) will contain at least two duplicates, a blank and a standard (prepared by Gannet Holdings Pty Ltd). These are to ensure that the sub-sampling is representative, that the PAL is correctly cleaned between sample runs and that the PAL is pulverising the samples correctly for full gold extraction.</li> <li>Following PAL processing, the samples are individually decanted, centrifuged and prepared for analysis in an AAS by solvent separation using DIBK (20 minutes). The sample is then aspirated through the AAS to produce a reading. The AAS is calibrated for each sample run using analytical reagent prepared standards (of 1.0, 5.0, 10.0 and 20.0 g/t Au) from Rowe Scientific. Each sample is adjusted for sample weight in Labman software to produce the gold grade in ppm. These grades are presented to site Geologists in MS Excel .csv spread sheets.</li> <li>For each sample job; blanks, standards and duplicates are examined to ensure that the blanks are below detection (0.01ppm), the standards are within 8% (experimental accuracy) and that the duplicates are 'reasonable' with respect to the nugget effect of the Challenger deposit. Any sample jobs that fail these checks will be reanalysed from re-splits of the original samples. In addition, all the blanks, standards and duplicates are examined quarterly to ensure that the laboratory is maintaining overall operating standards.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Significant intercepts were verified by Challenger Mine Geologists and the Senior Mine Geologist. Any significant intercepts in exploration drilling and selected significant intercepts from underground production diamond drilling are submitted to Genalysis at least annually for external analysis. This analysis is undertaken by SP-02 or SP-03 sample preparation followed by partial fire assay using a 50 gram charge (FA50). These results are compared to the original PAL results to ensure that the site analyses are repeatable. While the two analysis processes are different, a correlation 0.98 has been achieved for the last comparison completed in June 2017</li> <li>No twinned holes were drilled</li> <li>All core logging data is captured digitally on company laptop</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>computers and stored on the site server, which is backed up daily. All sample information is recorded both in the relevant logs/face sheets and in sample submission forms that are submitted to the laboratory (on and off site). This allows checking that all samples are present and accounted for by laboratory staff. Assay results are generated as MS Excel .csv files that are stored on the site server and are manually merged with the primary logging/face sheet information. This merged data (logs, collar information and assays) are all imported to the site Diamond Drilling Database in MS Access for use in Surpac. All information imported to the database is checked by the importer in MS Access and Surpac to ensure the correct location/display of data. Ongoing checks are carried out by the entire technical team as the data is used.</li> <li>The only modification of assay data, following creation by Labman software is altering of results below detection, &lt;0.01g/t Au, to 0.001g/t Au, averaging of duplicate results to produce an 'au_plot' grade for plotting and application of c80, c140 and c180 cut-offs to the primary data. All of these modifications are undertaken using the merged data in MS Excel (using standard forms), prior to importing to MS Access</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All surveys on site are carried out by qualified Surveyors using a Total Station Leica theodolite from known wall stations determined from surface stations located by GPS. Surveying in this manner provides three dimensional collar co-ordinates and development pickups to mm-scale accuracy. Drill hole collars are surveyed in the same way as the rest of the workings with collar dip and azimuth determined by surveying a rod that fits into the drill holes. The collar surveys are transmitted electronically to the site Geologists who merge this information into the MS Excel logs for each drill hole. Down hole surveying of underground diamond drill core is undertaken with a single-shot electric down hole compass/camera at a minimum of every 30m down hole.</li> <li>All survey data is stored as local Challenger Mine Grid.</li> <li>Challenger Mine Reduced Level (RL) = AHD + 1000m so AHD 193m level = 1193mRL.</li> </ul>
		Transformations between AMG and local grids: origin, azimuth

Criteria	JORC Code explanation	Commentary
		AMG origin and azimuth conversions are based on the following coinciding points.
		AMG84 Co-ordinatesStation NamemNmEmAHDCH10 $6693784.890$ $363338.265$ $194.97$ CH20 $6693917.900$ $363657.477$ $50.069$ Origin $6693379.301$ $363699.494$ $194.410$ Flat Battery $6693411.735$ $363510.463$ $194.314$ Challenger Mine Grid co-ordinatesStation NamemNmEmAHDCH10 $10524.890$ $19860.005$ $1194.977$ CH20 $10499.951$ $20204.989$ $1050.069$ Origin $10000.000$ $20000.000$ $1194.410$ Flat Battery $10114.083$ $19845.777$ $1194.314$ • Challenger Mine Grid North 0° = $329.0^{\circ}$ MAGNETIC•Challenger Mine Grid North 0° = $333^{\circ} 14'41"$ AMG (grid bearing + $26^{\circ}45'19"$ = AMG bearing)• Challenger Mine Grid $31^{\circ}$ = Magnetic North 0°•Topographic control is taken from the surface stations (above) and traversed to the operating areas through the use of wall stations.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Underground drilling is drilled at either 20m horizontal or from 20 to 100m vertically spaced fans. Holes are designed to intersect the lodes at 15 to 25m spacing along strike, as close to perpendicular to the strike of the lodes with fold closures specifically targeted. Underground and surface drilling is adequate to broadly define the lodes for the purposes of level planning.</li> <li>No sample compositing of underground diamond drilling has been applied</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a</li> </ul>	• The orientation of underground drill holes are designed to be as perpendicular to the lode system as possible. During any grade calculation (be it production or resource) these structure parallel drill holes are examined for their effect on the final grade result, and where appropriate, excluded from the grade calculations, thus

Criteria	J	ORC Code explanation	C	ommentary
		sampling bias, this should be assessed and reported if material.		reducing the effect of any sample bias.
Sample security	•	The measures taken to ensure sample security.	•	Samples are submitted to the site laboratory as soon as practical after sampling in individually numbered calico sample bags (labelled CUD for diamond drilling). Analysis is not undertaken until all descriptive paperwork is correctly submitted for the samples. From acceptance of the samples, each sample is tracked on site through Labman software to ensure that each assay is correctly matched with its sample. Any discrepancy between submitted samples and the paperwork is identified and may result in the entire sample job being resampled form original material prior to analysis. External laboratories utilise their own systems for sample tracking.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	Data reviews are undertaken on an ongoing basis by site Geologists while using the data. Any errors identified (either by staff, MS Access or Surpac) is queried and corrected as a part of a program of continual improvement. Lab audits are done annually, showing that operating procedures for sample management, QAQC and result consistency are being adhered to.

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>All exploration was undertaken within the current Challenger Mine Lease ML6103. The underlying Exploration Licence EL5661 comprises 687 square kilometres within the Woomera Prohibited Area, straddling the Mobella and Commonwealth Hill pastoral leases.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Previous exploration and mining activities at Challenger Gold Mine have been conducted by Dominion Gold (1995-2010) and Kingsgate Consolidated (2010-2016)</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Challenger occurs within the Mulgathing Complex of the Gawler

Criteria JORC Code explanation

#### Commentary

Craton and the area is characterized by Archaean to mid-Proterozoic gneissic country rock. Original granulite facies metamorphism is overlaid by retrograde amphibolite facies recrystallization around 1650 - 1540 Ma (Tomkins, 2002). Saprolitic clays extended to 50 m depth within the ore zone, reflecting a deeper base of oxidation. High-grade gold mineralisation is associated with coarse-grained quartz veins with feldspar, cordierite and sulphides dominated by arsenopyrite, pyrrhotite and lesser telluride. These veins are interpreted as migmatites that have undergone partial melting, with this melting reflecting a precursor hydrothermal alteration event (McFarlane, Mavrogenes and Tomkins, 2007).

(McFarlane, Mavrogenes and Tomkins, 2007).
Three main types of leucosome/vein styles have been defined:
<ol> <li>quartz dominant veins, which may be remnant pre- metamorphic mineralised veins</li> <li>polysilicate veins, which are dominant in the main ore zones and host the majority of the mineralisation</li> <li>Pegmatitic veins, which are unmineralised, late stage, with cross-cutting relationships.</li> </ol>
The gold mineralisation is structurally controlled through emplacement of the partial melt into relatively low-strain positions. McFarlane, Mavrogenes and Tomkins (2007), using Monazite geochronology proposed a 40 Ma period between 2460 and 2420 Ma of repeated high-temperature events.
The Challenger Structure can be defined as a laterally extensive shear zone with shoots that plunge 30° to 029° (AMG). These ore shoots are defined by leucosome veins, which are characteristically ptygmatically folded. The small-scale folding is parasitic to the overall larger scale folding that can be interpreted from drill core. The folding is interpreted as pre peak metamorphism along with gold mineralisation. Post-folding, the Challenger shoots were subjected to extreme WNW-ESE shortening and extension directed shallowly to the NE.

Criteria	JORC Code explanation	Commentary
		Reference: Androvic, P, Bamford, P, Curtis, J, Derwent, K, Giles, A, Gobert, R, Hampton, S, Heydari, M, Kopeap, P and Sperring, P, 2013. Challenger Gold Mine, Australasian Mining and Metallurgical Operating Practices, AusIMM. 1097-1112.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <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>	See Appendix 1 to this report.
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used 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> <li>For all results at Challenger Gold Mine, a low cut-off of 0.01g/t Au is applied (limit of detection), these results are replaced with 0.001g/t Au in the drilling database to flag that they are below detection. The assay result is stored as au_plot in the database and variable top cuts of c80g/t, c140g/t and c180g/t are used where required. No upper grade truncation is used for significant intercepts.</li> <li>Reported mineralised intercepts are based on consistent zones of mineralisation greater than 5 g/t and intervals over 0.3 metres.</li> <li>No metal equivalent values have been used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	• All mineralisation widths are reported as depths down hole as all underground drilling is designed to be as perpendicular to the lodes as possible. As this exploration is entirely for resource development, any significant intercepts used in lode modelling are constrained by the resulting model, producing a de-facto true width for further calculations.
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being</li> </ul>	Diagrams have been included in the main body of the report.

Criteria	JC	DRC Code explanation	Сс	ommentary
		reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.		
Balanced reporting	•	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	•	The results recorded in Table 1 show significant intercepts greater than 5g/t. The assay results reported range between <0.01 and 148.99g/t gold.
Other substantive exploration data	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	•	No other meaningful or material exploration has been undertaken.
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	•	Planned underground drilling for the current financial year focuses on infilling the lower levels of the Challenger West resource, further definition drilling of M3 and SEZ lodes, lateral conceptual exploration targets and drilling of Challenger Deeps to extend the mine life.

## Tarcoola

## JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>RC drill holes are 132mm diameter and samples every metre are taken directly off the drill rig cyclone splitter at a 1/8 split</li> <li>Each sample is crushed to 4mm and pulverised to 75 microns through the PAL (pulverising aggressive leach) process. In the PAL process, each sample is pulverised in an aqueous solution with cyanide bearing assay tabs and a collection of assorted ball bearings. Each sample is processed in the PAL for one hour, resulting in an Au_CN complex bearing liquor and remnant pulverised sample.</li> </ul>
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	Reverse Circulation, 132mm diameter
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	Cyclone has a cutter to separate samples – drilling is paused at each metre when the sample is taken and recommenced when the new bag is put on

Criteria	JORC Code explanation	Commentary
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	No sample bias is expected.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Each metre in the programme is individually sieved and geologically logged (lithology, mineralisation, alteration) down to m-scale, not just mineralised intervals</li> <li>The logging is quantitative in nature as lithology percentages and compositions are recorded</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Samples taken from the cyclone splitter are mostly dry</li> <li>The sample is submitted to the Challenger Mine site laboratory for analysis. All samples are dried at a maximum temperature of 90 degrees Celsius to drive off moisture that would interfere with splitting the sample. After drying, samples are crushed using a Boyd Crusher to approximately 4mm in size and then split through a rotary sample splitter to produce a sub-sample. The crusher is cleaned regularly, with barren material (bricks) crushed through it to ensure no smearing prior to the sample run being crushed. Each reject sample is retained for resampling if required.</li> <li>Each sample can be tracked by its sample number through the entire laboratory process and results for the original samples and all QAQC samples are presented in digital form to the Tarcoola and Challenger site geologists.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors</li> </ul>	<ul> <li>Assaying at Challenger is completed using the PAL process (pulverising aggressive leach). This process effectively replicates the process in the Challenger mill. Each sample is pulverised in aqueous solution with cyanide bearing assay tabs and a collection of assorted ball bearings. Each sample is processed in the PAL for one hour, resulting in an Au_CN complex bearing liquor and remnant pulverised sample. The pulverised material is 95% passing</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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> <li>75 microns, the ideal liberation size for gold at Challenger.</li> <li>Every twentieth sample is duplicated for the original sample bag (re-split) to produce a duplicate. Every sample run (53 samples) will contain at least two duplicates, a blank and a standard (prepared by Gannet Holdings Pty Ltd). These are to ensure that the sub-sampling is representative, that the PAL is correctly cleaned between sample runs and that the PAL is pulverising the samples correctly for full gold extraction.</li> <li>Following PAL processing, the samples are individually decanted, centrifuged and prepared for analysis in an AAS by solvent separation using DIBK (20 minutes). The sample is then aspirated through the AAS to produce a reading. The AAS is calibrated for each sample run using analytical reagent prepared standards (of 1.0, 5.0, 10.0 and 20.0 g/t Au) from Rowe Scientific. Each sample is adjusted for sample weight in Labman software to produce the gold grade in ppm. These grades are presented to site Geologists in MS Excel .csv spread sheets.</li> <li>For each sample job; blanks, standards and duplicates are examined to ensure that the blanks are below detection (0.01ppm), the standards are within 8% (experimental accuracy) and that the duplicates are 'reasonable' with respect to the nugget effect of the Tarcoola deposit. Any sample jobs that fail these checks will be re-analysed from re-splits of the original samples. In addition, all the blanks, standards and duplicates are examined quarterly to ensure that the laboratory is maintaining overall operating standards.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Significant intercepts were verified by the Senior Mine Geologist and Senior Project Geologist. Significant intercepts in Tarcoola exploration drilling (greater than 0.5g/t) are submitted to Genalysis for external analysis. This analysis is undertaken by SP-02 or SP-03 sample preparation followed by partial fire assay using a 50 gram charge (FA50). These results are compared to the original PAL results to ensure that the site analyses are repeatable. While the two analysis processes are different, a reasonable correlation is expected.</li> <li>No twinned holes were drilled</li> <li>All logging data is captured digitally on company laptop computers and stored in a dropbox cloud. All sample information is recorded both in the relevant logs and in sample submission forms that are submitted to the laboratory (on and off site). This allows checking that all samples are present and accounted for by laboratory staff. Assay results are generated as MS Excel .csv files that are stored on the site server and are manually merged with the primary logging</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>information. This merged data (logs, collar information and assays) are all imported to the site Diamond Drilling Database in MS Access for use in Surpac. All information imported to the database is checked by the importer in MS Access and Surpac to ensure the correct location/display of data. Ongoing checks are carried out by the entire technical team as the data is used.</li> <li>The only modification of assay data, following creation by Labman software is altering of results below detection, &lt;0.01g/t Au, to 0.005g/t Au, undertaken using the merged data in MS Excel (using standard forms), prior to importing to MS Access</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All surveys on site are carried out by qualified personnel using the site Leica C515 DGPS, providing collar co-ordinates to cm-scale accuracy in the same datum (GDA94 zone 53) as the rest of the site. Collar dip and azimuth were surveyed with solid state north seeking ChampGyro tool. The collar surveys are transmitted electronically to the site Geologists who merge this information into the MS Excel logs for each drill hole.</li> <li>No local Reduced Level (RL) is used, just the Australian Height Datum (AHD)</li> <li>Topographic control is good with the survey system used</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill spacing at Warrigal is nominally approximately 50m spaced collars.</li> <li>No sample compositing of RC drilling has been applied</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>The orientation of RC drill holes are designed to be as perpendicular to the IP anomaly and stratigraphy as possible.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples are submitted to the site laboratory as soon as practical after sampling in individually numbered calico sample bags (labelled TRC for RC drilling). Analysis is not undertaken until all descriptive paperwork is correctly submitted</li> </ul>

Criteria	JORC Code explanation	Commentary
		for the samples. From acceptance of the samples, each sample is tracked on site through Labman software to ensure that each assay is correctly matched with its sample. Any discrepancy between submitted samples and the paperwork is identified and may result in the entire sample job being resampled form original material prior to analysis. External laboratories utilise their own systems for sample tracking.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>Data reviews are undertaken on an ongoing basis by site Geologists while using the data. Any errors identified (either by staff, MS Access or Surpac) is queried and corrected as a part of a program of continual improvement.</li> <li>Lab audits are done annually, showing that operating procedures for sample management, QAQC and result consistency are being adhered to.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>All exploration was undertaken within the current Tarcoola Mine Lease ML6455. The underlying Exploration Licence EL5355 comprises 1183 square kilometres, on the Wilgena pastoral lease, part of which is within the Woomera Prohibited Area,</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Abundant previous exploration and mining activities at Tarcoola have been conducted since discovery of the field in 1893, but more recent work (since 1995) by Mungana Goldmines, Stellar Resources, Anglo Gold and Grenfell Resources was used. Due diligence and resurveying of drill holes etc. was completed by Mungana and all information is considered accurate.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	• The Tarcoola Project covers a portion of the north-western Gawler Craton centred over the historic Tarcoola goldfield, where Archaean and Proterozoic rocks form the basement to an extensive cover of Phanerozoic sediments. The Archaean basement has been extensively deformed, whereas the Proterozoic

Criteria	JORC Code explanation	Commentary
		<ul> <li>rocks have been weakly to moderately deformed.</li> <li>At Perseverance (current Tarcoola open pit mine), gold mineralisation is hosted within sedimentary rocks of the Tarcoola Formation and granite, both of Proterozoic age. The granite is variably in fault contact with or unconformably overlain by the sediments, which consists of conglomerate, limestone, sandstone, siltstones, and shale. A suite of later intrusions (Lady Jane Diorite) cut both the sedimentary rocks and the granite.</li> <li>Mafic high level intrusives associated with the 1590Ma Hiltaba Magmatic Event are considered to control the spatial setting of both gold and base metal mineralisation.</li> </ul>
		<ul> <li>Three deformation events have been recognised in the area. D1 is characterised by open folding and NNW-directed thrusting, responsibly for the southerly dip of the sedimentary package at Perseverance. Steeply dipping NW and NE trending brittle faults developed during D2. These structures host and control the gold mineralisation in the Tarcoola Ridge area. The third deformation event (D3) is represented by the late E-W trending barren quartz veins.</li> <li>Gold has locally been remobilised and enriched in the weathering profile. The base of complete oxidation occurs typically 10-40m below surface, and the base of partial oxidation occurs at a depth of ~20-60m.</li> <li>Within the primary zone, sericite-quartz-pyrite alteration zones are spatially associated with the mineralisation, and overprint earlier hematite-magnetite alteration. An outer halo of chlorite (+/-leucoxene and pyrite) is developed. Pyrite, galena and sphalerite are the main associated sulphide minerals, with subordinate amounts of chalcopyrite bornite and/or arsenopyrite noted.</li> <li>Veins can be discrete or form wider stockwork zones, and are surrounded by broader quartz-sericite alteration. Dispersed supergene mineralisation in the oxide zone can be largely detached from veining.</li> <li>For more detail see: Budd, A &amp; Skirrow, R, 2007. The Nature and Origin of Gold Deposits of the Tarcoola Goldfield and Implications for the Central Gawler Gold Province, South Australia. Economic Geology, 2007.</li> </ul>
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following	See Appendix 1 to this report.

Criteria	JORC Code explanation	Commentary
	<ul> <li>information for all Material drill holes: <ul> <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>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used 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> <li>For all results from the Challenger Gold Mine laboratory, a low cut-off of 0.01g/t Au is applied (limit of detection), these results are replaced with 0.005g/t Au in the drilling database to flag that they are below detection. No upper grade truncation is used for significant intercepts.</li> <li>Reported mineralised intercepts are based on consistent zones of mineralisation greater than 1 g/t x m using 0.25g/t cut off and intervals over 1 metre.</li> <li>No metal equivalent values have been used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	All mineralisation widths are reported as true widths
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Diagrams have been included in the main body of the report.</li> </ul>
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	• The assay results received for this drilling range from <0.01 to 26.26ppm gold.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	• Nil
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>No further drilling is planned at the Warrigal Prospect</li> </ul>