



AUSTPAC RESOURCES N.L.  
ACN 002 264 057

Level 3  
62 Pitt Street  
SYDNEY NSW 2000  
GPO Box 5297  
SYDNEY NSW 2001  
Telephone: (+61 2) 9252 2599  
Facsimile: (+61 2) 9252 8299  
Email: [apgtio2@ozemail.com.au](mailto:apgtio2@ozemail.com.au)

30 January 2018

The Manager  
Company Announcements  
Australian Stock Exchange Limited  
Exchange Centre  
Level 6  
20 Bridge Street  
SYDNEY NSW 2000

Dear Sir/Madam

**RE: AUSTPAC RESOURCES N.L.**  
**QUARTERLY REPORT FOR PERIOD ENDED 31 DECEMBER 2017**

We are pleased to provide Quarterly Report for the period ended 31 December 2017 for immediate release.

Yours faithfully

N.J. Gaston  
Company Secretary

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## QUARTERLY REPORT TO 31 DECEMBER 2017

### HIGHLIGHTS

- Negotiations conducted throughout the December 2017 quarter culminated on 10<sup>th</sup> January 2018, when Austpac Resources NL signed a \$1 million investment agreement with Bergen Global Opportunity Fund II, LLC, a New York-based institutional investor managed by Bergen Asset Management, LLC.
- Under the agreement, Bergen made an initial investment of A\$500,000 immediately and will invest a further A\$500,000 in 90 days, each by way of an interest-free unsecured converting security with a 24-month maturity.
- The funds will be used to complete the testwork program which commenced in 2017 at Austpac's Newcastle facilities. The program will demonstrate that the Company's unique, four-stage Zinc Iron Recovery Process (ZIRP), which combines iron and zinc oxide-rich furnace dusts with spent pickle liquor (SPL) from the steel industry, can commercially produce pig iron, zinc oxide and strong hydrochloric acid. Australian steelmakers are interested in the success of the program and are supplying sufficient quantities of feedstock for the testwork.
- At the conclusion of the program, Austpac plans to convert the plant to a facility capable of processing up to 15,000 tpa of steel furnace dusts on a commercial basis and to progress the development and licencing of its proprietary technology.
- Once the testwork program has been completed, Bergen may also consider more significant project finance.
- In January 2018, Austpac Resources NL also completed a placement of 30,000,000 fully paid ordinary Austpac Resources NL shares to professional investors at 1 cent each to raise \$300,000 for working capital and to progress the process testwork program at Newcastle Zinc Iron Recovery Plant.
- Negotiations continue with Australian steel producers regarding the application of the ZIRP, including the exchange of technical data and ongoing discussions regarding the use of the technology. The potential use of the technology in the worldwide steel industry is immense and Austpac is focused on its commercialization with both local and offshore industry participants.
- Drill hole GG-01 at Nhill obtained 75.6m of diamond core containing strongly to intensely hydrothermally-altered basaltic volcanics before terminating 324.5m. Alteration is accompanied by sulphide mineralisation deposited along fractures and breccias boundaries and in voids, with significant amounts of sphalerite and minor finely disseminated chalcopyrite and gold. Analyses of the core are highly encouraging, and include 0.5m of 3.6% Zn and 0.44g/t Au, and 0.5m of 1.2% Zn and 0.20g/t Au.
- Follow-up drilling of the mineralisation encountered at Nhill in GG-01 is warranted, and discussions that were initiated in 2017 with possible joint venture partners are continuing.

## **NEWCASTLE ZINC & IRON RECOVERY PLANT (NZIRP)**

The testwork program at Newcastle which commenced in 2017, is designed to commercially demonstrate that pig iron, zinc oxide and strong hydrochloric acid (HCl) can be produced from steel industry by-products using ZIRP technology. The program entails processing at least 20 tonnes of iron oxide/zinc oxide-rich furnace dusts and SPL through the four process steps; Evaporation (EVAP), Pyrohydrolysis (PYRO), Fluid Bed Pre-Reduction (FBPR) and an Electric Induction Furnace (EIF). The recent investment agreement with Bergen ensures the testwork program will be undertaken during the first half of 2018.



Each stage of the testwork program will process all the furnace dusts and SPL supplied by local steel makers in a simulated continuous campaign. The first three process steps are being undertaken at the Newcastle plant using both modified existing equipment and new purpose-designed equipment.

The EVAP unit was extensively modified and commissioned during the second half of 2017, and a further commissioning run is planned during the first quarter of 2018 to test further refinements that were made to the unit.

The PYRO and FBPR stages will use the same fluid bed roaster operated sequentially. An existing roaster is being modified for these dual duties and fabrication of the long lead time item, the refractory-lined lower body and plenum, is underway and it will be delivered to the Newcastle plant in April 2018. Other shorter lead time items, such as the refractory-lined roaster cap and off-gas ductwork for the roaster, are either in the final design stage or are being ordered.

Installation and commissioning of the roaster is expected to take 4 weeks, following which temporary staff will be hired for the continuous production run for each process stage. Products from each stage will be stored until required for the next stage's production run. The FBPR production run, the third process stage, is scheduled to be completed by June 2018 and the aim is to produce at least 5 tonnes of pre-reduced iron oxide/zinc oxide pellets for testing in an EIF.

A commercial foundry with a number of EIFs will conduct a series of melt tests using the FBPR pellets. Molten iron will be cast into pigs (molds) and the zinc oxide evolved from the furnace will be captured using a baghouse. This will establish the quality of both the iron and zinc oxide, as well as any slag produced during melting.

Technical personnel from Australian steelmakers have advised they wish to observe the process production runs at Newcastle to obtain a better understanding of the technology. This is encouraging as the anticipated success of the test program will lead to commercial opportunities with interested groups.

Electric arc furnaces that use galvanized scrap metal generate large volumes of zinc-contaminated furnace dusts, which create a costly disposal problem for the steel maker. ZIRP is the only technology able to address this problem by recycling furnace dusts and SPL to recover three valuable commodities, thus enhancing the profits of steel makers. The worldwide potential use of the technology in the steel industry is immense and Austpac is continues to pursue its commercialization with both local and offshore industry participants.

### **EL 5291 NHILL**

During 2017, Austpac completed a vertical drill hole within EL 5291 to test the basement rocks below a thick sequence of Murray Basin sediments. The hole was co-funded by the Victorian Government under the TARGET Minerals Exploration initiative to encourage exploration in western Victoria. DH GG-01 passed through 248.9m of overlying sediments before encountering competent basement. Diamond core drilling was then used to continue the hole for a further 75.6m before being terminated at 324.5m.

The basement consists primarily of basaltic volcanics which, apart from two very narrow sections, have been strongly to intensely altered and demagnetised by hydrothermal fluids. The alteration is accompanied by sulphide mineralisation, deposited primarily as pyrite (iron sulphide) in fractures, along breccia boundaries and in vughs/amygdales (voids). The pyrite is often accompanied by significant amounts of sphalerite (zinc sulphide) and minor amounts of finely disseminated chalcopyrite (copper sulphide) and anomalous gold.

Analyses of the core samples are very encouraging. Two intervals contain abundant visible sphalerite and pyrite mineralisation:

- 0.5m at 3.6% Zn with 0.44 g/t Au (intercept downhole from 308.0m to 308.5m).
- 0.5m at 1.2% Zn with 0.20 g/t Au (intercept downhole from 324.0m to 324.5m - EOH).

Technical details regarding the sampling and analytical procedures used are described in detail in Austpac's Quarterly Report to the ASX dated 30 July 2017.

The mineralisation encountered in GG-01 is highly encouraging considering it is the first core hole drilled into the basement demagnetised volcanics in this untested terrain. The basaltic volcanics encountered in this drill hole are considered analogous to parts of the Cambrian Mount Stavely Volcanic Complex, ~170km to the southeast, where porphyry-style copper-gold mineralisation has been discovered by Stavely Minerals, who recently announced very encouraging copper and gold intercepts.

The pervasive alteration and highly anomalous zinc mineralisation (up to 3.6% Zn and 0.44g/t Au) is the result of the introduction of metal-rich fluids into permeable fractures and breccia zones. The mineral assemblage observed is typical of the outer halo of a hydrothermal system, the source of which is offset from the drill hole. Follow-up drilling is required to locate the source in this mineralisation, which could be a porphyry copper-gold and/or volcanic-hosted massive sulphide system.

### **Mining Exploration Entities:**

EL 5291 (Nhill); Located between Nhill and Dimboola, Victoria; 100% Austpac Resources N.L.

For further information please contact:

Mike Turbott

Managing Director - Tel (+61 2) 9252 2599

*NOTE: This report is based on and accurately reflects information compiled by M.J. Turbott who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Fellow of the Australian Institute of Geoscientists and is a competent person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves.*

### **About Austpac Resources N.L. (ASX code: APG)**

Austpac Resources N.L. is a mineral technology company currently focused on recycling waste chloride solutions and iron- and zinc oxide dusts produced by steelmaking to recover strong hydrochloric acid, high purity pig iron and zinc oxide. Austpac's adjunct technologies also transform ilmenite into high-grade synthetic rutile, a preferred feedstock for titanium metal and titanium dioxide pigment production. The Company has been listed on the Australian Stock Exchange since 1986.

## 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

AUSTPAC RESOURCES N.L.

### ABN

87.002.264.057

### 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 – R+D Tax Concession Refund	-	430
1.2 Payments for		
(a) exploration	-	-
(b) NIRP Mineral Technology Development	(117)	(291)
© ERMS- other	-	-
(d) Murray Basin		
(e) Gold	(18)	(49)
(f) Administration	(162)	(502)
(g) Gold Funding	36	36
1.3 Dividends received (see note 3)		
1.4 Interest received		
1.5 Interest and other costs of finance paid		
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>(261)</b>	<b>(376)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment		
(b) tenements (see item 10)		

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
(c) investments		
(d) other non-current assets		
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)		
<b>2.6 Net cash from / (used in) investing activities</b>		

<b>3. 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		
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 Net cash from / (used in) financing activities</b>	-	-

<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>	(261)	(376)
4.1 Cash and cash equivalents at beginning of period	379	494
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(261)	(376)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4 Net cash from / (used in) financing activities (item 3.10 above)	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	<b>Cash and cash equivalents at end of period</b>	<b>118</b>	<b>118</b>

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	118	379
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>118</b>	<b>379</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
47.5

**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>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1 Loan facilities		
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.		

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9. <b>Estimated cash outflows for next quarter</b>	\$A'000
9.1 Exploration and evaluation	30
9.2 Development- N.I.R.P	150
9.3 N.I.R.P funding	-
9.4 Staff costs	
9.5 Administration and corporate costs	180
9.6 Other – Placement and Converting Note	(800)
<b>9.7 Total estimated cash outflows</b>	<b>(440)</b>

10. <b>Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2 Interests in mining tenements and petroleum tenements acquired or increased				



**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: ..... Date: .....31.12.2017.....  
(Director/Company secretary)

Print name: .....N.J. GASTON .....

**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.