



QUARTERLY REPORT TO 31 DECEMBER 2017

HIGHLIGHTS

- Negotiations conducted throughout the December 2017 quarter culminated on 10th 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. Details of activities and timing of the program are described below. Australian steelmakers are committed to the success of the program and are supplying sufficient quantities of feedstock for the testwork.
- At the conclusion of the program, Austpac will 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.

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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.