

QUARTERLY REPORT TO 30 JUNE 2019

- **Agreement with Chinese steelmaker, Tangshan Yanshan Iron & Steel, provides funds for the NZIRP testwork program.**
- **EVAP equipment fabricated and installed and ready for commissioning in August 2019.**
- **The upgraded dual-duty fluid bed roaster and other ancillary equipment installed with minor additional work to be completed once the EVAP unit is commissioned.**
- **Executives from Tangshan Yanshan visited Australia in late July 2019 for discussions and visited the Newcastle plant to observe progress.**

Development of Austpac's ZIRP Process is funded by a Chinese Steelmaker

In March 2019, Austpac signed an agreement for YanGang (Hong Kong) Co Limited to provide \$803,000 to finalise the testwork for Austpac's proprietary Zinc Iron Recovery Process (ZIRP). YanGang is a wholly-owned subsidiary of Tangshan Yanshan Iron and Steel Co Ltd of China. Yanshan is a Chinese steelmaker with an annual production of 9 million tonnes of steel; more than the combined steel production of Australia and New Zealand.

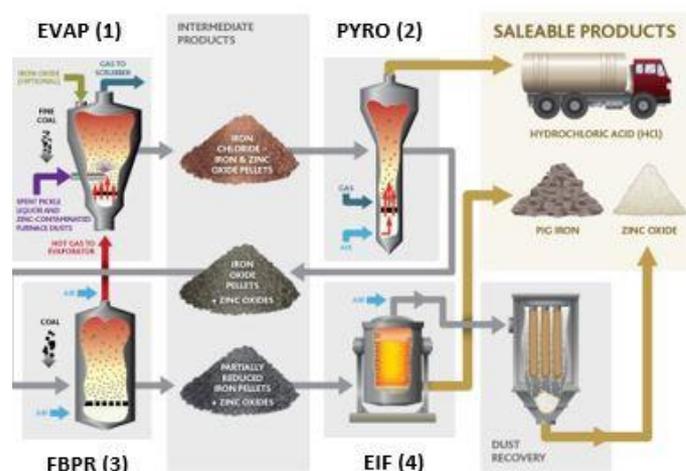
The \$803,000 was provided through a placement of 365 million Austpac shares at \$0.0022; a significant premium over the current share price of \$0.001. The placement was overwhelmingly supported by proxy and on a show of hands at an Extraordinary General Meeting of Shareholders held on 24th April 2019. YanGang is now Austpac's largest shareholder with 12.6% of the Company's issued capital.

Once the testwork program is successfully completed, Austpac will undertake a scoping study for 10-15,000 tonnes per year commercial ZIRP plant to be sited in NSW. The Agreement also contains a provision for YanGang to fund the construction of this plant.

This validation of Austpac's furnace dust recycling process by a large steelmaker will allow the Company to develop other opportunities to implement its technology worldwide.

Austpac's Zinc-Iron Recovery Process ("ZIRP")

Austpac's unique Zinc Iron Recovery Process (ZIRP) is a four-stage process. It was developed to recover zinc and iron and hydrochloric acid from zinc-contaminated furnace dusts and spent pickle liquor (SPL), both by-products generated by the steelmaking and coating process. The first three stages are proven, and the Company has embarked on a testwork program to prove the fourth process stage; melting FBPR pellets in an electric induction furnace (the EIF stage) to produce samples of pig iron and zinc oxide for market evaluation. To do so, it is necessary to process dust and SPL at Newcastle through first three stages to produce sufficient FBPR pellets for melting tests at a commercial foundry.



The ZIRP Process for Recycling Zinc-Contaminated Furnace Dust

ZIRP Testwork Program gets Underway at Newcastle

The program commenced in April 2019 when Compass Engineering Solutions, a plant design, fabrication and installation group, was commissioned to undertake modeling of a significant upgrade to the EVAP unit, the first process stage. The EVAP unit has been previously operated successfully, and the improvements will enable Austpac to complete the production run of the mixed oxide-chloride pellets.

Compass have also been involved in planning the refurbishment of an existing fluid bed roaster which will be used to undertake the second and third process stages; PYRO and FBPR. The EVAP production run will be undertaken while the fluid bed is being fabricated and installed, and the pellets will be campaigned through the PYRO stage to produce HCl as well as zinc-iron oxide pellets, and then through the FBPR stage to produce sufficient zinc-reduced iron oxide pellets for melt tests at a commercial foundry in an electric induction furnace (EIF).

ZIRP Testwork Program Progress to date:

Fluid Bed Evaporator (EVAP - Stage 1)

- Fabrication and installation of the improved plenum for the EVAP unit is now complete.
- Internal modifications to the EVAP unit are complete.
- The stirred mixing tank for the furnace dust slurry has been replaced with a bottom-fed fluidized tank to ensure a constant density slurry feed to the EVAP is maintained.
- Additional improvements to EVAP are being made and upgrades to the power supply are underway. Commissioning will commence in August once they are complete.

Pyrohydrolysis and Fluid Bed Pre-Reduction (PYRO & FBPR - Stages 2 and 3)

- The existing 250mm fluid bed roaster was repaired and modified at Compass Engineering's workshop.
- Support infrastructure for the roaster has been fabricated and the roaster has now been installed at the plant.
- An existing scrubber and pumps have been relocated to handle the roaster off-gases and capture HCl during the PYRO stage.
- Compass has fabricated two new screw conveyors to feed the pellets and coal into, as well as a third to remove the solid products from the roaster. Installation of these is about to get underway.
- Remaining items, such as roaster insulation and duct work for fluidizing air and removal of off gases, will be undertaken once the EVAP production run is underway.

In late July 2019, executives from the Tangshan Yanshan Iron & Steel Company (the sole owner of YanGang (Hong Kong) Co Ltd, Austpac's largest shareholder), visited Australia to discuss the ZIRP technology and review the testwork program, and a one-day visit was also made to Newcastle. The visitors were very satisfied with the program and the progress being made at the plant.

In summary, the testwork program has progressed well over the past four months and as illustrated below, equipment installation is on schedule.

Completion of the testwork program will lead to the commercialisation of ZIRP technology in Australia and the steel industry worldwide.



The upgraded EVAP plenum pre-installation



Installing the upper body of enhanced FB Roaster



The lower body of the upgraded FB Roaster with plenum installed



Installation of the hoppers for pellets and coal which is fed into the FB Roaster via double-dump valves

Nhill Drilling Program

On 5th May 2019, Austpac commenced a drilling program at Nhill in western Victoria to follow up intercepts of highly encouraging zinc-gold mineralisation in Cambrian basement volcanic rocks encountered in the discovery drillhole, GG-01. Interpretation of subsequent ground magnetic and gravity surveys indicates two north westerly-trending targets which could represent thick lenses of Volcanic-Hosted Massive Sulphide (VHMS) mineralisation, analogous to the narrow, well-mineralised intercepts in GG-01.

The new-hole, GG-02, was located 400m to the south-east of GG-01, and inclined at 55 degrees to test the central portion of the western target zone. The hole was designed to pass through the 250m thick sequence of unconsolidated Murray basin sediments before commencing diamond drilling to obtain core from the underlying basement.

Unlike GG-01, a vertical hole, GG-02 encountered unexpectedly difficult ground conditions deep in the overlying sediments, possible exacerbated by the angle of the hole. It was not possible to extend HQ casing beyond 188m, and while NQ rods were used to reach gravel directly above the basement at 270m, there was a high risk that the entire drill string could be lost as a result of soft sediment squeezing the 88m of uncased rods above the basement. It was therefore decided to stop drilling operations immediately, and re-drill the target at a later date using different equipment.

The discovery of VHMS massive sulphide mineralisation in GG-01 at the unexplored north-western end of the Stavelly Arc, a buried ancient volcanic island arc, is highly encouraging. The two targets delineated by geophysics within EL 5291 are as yet untested. The mineralisation in GG-01 is interpreted as being the distal end of one of the targets, and therefore follow up drilling is warranted.

As the opportunity for discovery of hitherto unknown VHMS deposits within EL 5291 far outweighs the challenge of drilling through the sediments, Austpac plans to restart drilling at Nhill after the winter crops have been harvested and during dry weather conditions.

Appointment of Director – Mr Geoff Hiller

In May 2019 Mr Geoff Hiller was appointed as a non-executive Director of Austpac Resources N.L. Mr Hiller is a mining engineer with over 20 years mining industry experience including feasibility, financing, development and construction of projects. He also has finance, metals trading and corporate management experience gained in the mining industry. His background and experience is now assisting the Company to advance its objective of commercializing Austpac's technologies.

T Cuthbertson

Chairman

Austpac Resources N.L.

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

Austpac Resources N.L. [www.austpacresources.com] is a minerals technology company currently focused on recycling waste chloride solutions and furnace dusts produced by steelmaking to recover hydrochloric acid, pig iron and zinc. Austpac's 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.