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# **EXCEPTIONAL TESTING RESULTS SURE-UP POS/PBT PARTNERSHIP**

# **FOR IMMEDIATE RELEASE**

### **HIGHLIGHTS**

- Successful preliminary leach testing demonstrates Poseidon Nickel (ASX:POS) Black Swan concentrate would be suitable feed material for Pure Battery Technologies' (PBT) pCAM hub project
- >90% extraction of nickel and >95% extraction of cobalt was achieved
- PBT's European operation also showing favourable results from testing and production of commercial quantities

Australian tech company Pure Battery Technologies (PBT) has achieved extremely favourable results from its preliminary nickel leach testing completed this month with development partner, Poseidon Nickel Limited (ASX:POS).

The Pressure Oxidation Leach Tests were carried out on three nickel sulphide concentrate blends provided by Poseidon. The tests achieved PBT's targeted >90% extraction of nickel and >95% extraction of cobalt.

PBT's Chief Technology Officer Dr William Hawker said that historic test work had shown these would be tough to leach, however working with the ALS and Poseidon teams they were able to exceed their expectations.

"These successful results demonstrate the Black Swan concentrate would be suitable feed material for PBT's pCAM hub project.

"Our next steps are to widen the design feed envelope by testing further blends that align with Poseidon's mine production plans, along with some other nickel sulphide concentrates, and demonstrate the production of Mixed Hydroxide Precipitate (MHP) from these nickel concentrates for subsequent conversion from MHP to precursor Cathode Active Material (pCAM) through our proprietary PBT processing technologies," he said.

Managing Director and CEO of Poseidon Nickel (ASX: POS), Peter Harold, said "We are currently advancing the bankable feasibility study for Black Swan, which includes evaluating a number of offtake options to deliver long term value for the project. These options include traditional nickel smelters, existing leaching plants and proposed plants (ie. PBT's Kalgoorlie pCAM hub).

"We are delighted that PBT's preliminary leach testwork has returned excellent extraction results for a range of concentrate specifications that could be produced from various feed scenarios (open pit and underground) through the Black Swan concentrator. If PBT are successful in the financing and construction of the proposed pCAM plant this could unlock the additional value for Poseidon from our large mineral resource base. We look forward to continuing to work with PBT as studies progress," he said.



PBT's Managing Director and CEO, Mr Bjorn Zikarsky noted the positive developments in PBT's Australian operations were being mirrored in their European holdings.

"We are charging ahead in Europe too with recent campaigns at our plant in Germany producing commercial quantities of multiple, on-spec, NMC pCAM products from primary Mixed Hydroxide Precipitate and recycled lithium-ion battery Black Mass materials.

"We are extremely pleased that third party testing in Germany has verified earlier electrochemical testing results. These results show our demonstration plant products meet and beat the battery performance of other commercially available pCAM products," he said.

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## **About Pure Battery Technologies**

Pure Battery Technologies (PBT) was established in 2017 in response to global demand for more environmentally friendly processes for minerals refining to create the world's cleanest Electric Vehicle batteries. PBT uses a simple, environmentally superior processing technology which is commercially proven to produce high-quality, more affordable nickel and cobalt battery materials. PBT's patented Selective Acid Leaching (SAL) process can refine intermediate nickel and cobalt products more flexibly with a lower environmental footprint than other processing methods.

PBT <u>announced</u> its \$460M flagship pCAM refinery hub to be built in the Kalgoorlie region of WA, Australia in late 2021. The company's European facility, located in Hagen Germany has been operating since 2020 and produces nickel and cobalt products from intermediate materials and black mass feeds. PBT is replicating this business globally, utilising its repeatable plant design to capture the growth in the pCAM and LIB markets.

PBT's ability to refine raw materials and recycle from existing battery stocks is a game changer for the drive towards a truly circular economy. https://purebatterytech.com/

### **About Poseidon Nickel Limited**

Poseidon Nickel Limited (ASX Code: POS) is a nickel sulphide exploration and development company with three projects located within a radius of 300km from Kalgoorlie in the Goldfields region of Western Australia and a resource base of around 400,000 tonnes of nickel and 180,000 ounces of gold. Poseidon's strategy is focused on the exploration and eventual resumption of its established nickel operations in Western Australia where project risk capital and operating costs are low. A critical element of this strategy has been to acquire projects and operations with high levels of geological prospectivity likely to lead to potential substantial extension of the operation's life through the application of modern exploration techniques. Poseidon owns the Windarra, Black Swan and the Lake Johnston Nickel Projects. In addition to the mines and infrastructure including concentrators at Black Swan and Lake Johnston, these projects have significant exploration opportunities demonstrated by the discovery of the Abi Rose deposit at Lake Johnston and the Golden Swan high grade mineralisation at Black Swan. The Company has recently completed a Definitive Feasibility Study on retreating the gold tailings at Windarra and Lancefield given the strength of the A\$ gold price.

Background information ALS https://www.alsglobal.com/en-au