

ASX RELEASE

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ASX: ARU



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NOLANS BULK PRE-LEACH PILOTING COMPLETE

- **Bulk pre-leach pilot successfully completed on schedule**
- **Planning underway for next phase of pilot program**

Arafura Resources Limited (ASX: ARU, “Arafura” or the “Company”) is pleased to announce the successful completion of bulk pre-leach piloting for its 100 per cent-owned Nolans Neodymium-Praseodymium (NdPr) Project in the Northern Territory.

The bulk pre-leach pilot plant was the third phase of Arafura’s final piloting of the Nolans process flow sheet (Figure 1). It follows from the successful operation of the beneficiation pilot plant (Phase 1) which delivered a high-phosphate concentrate (HPC) as feed to the bulk pre-leach. This HPC is characterised by enhanced recoveries of phosphate (>90%) and the key magnet-feed rare earths NdPr (>82%), and efficient rejection of impurities.

Phase 2 of the piloting program (phosphate extraction) was successful in validating the metallurgical process, including the initial pre-leach stage, that forms the basis of the Phase 3 bulk pre-leach pilot plant. The Company could therefore approach the operation of the Phase 3 pilot, the main aim of which is to produce sufficient NdPr-rich pre-leach residue (PLR) for subsequent phases of the piloting program, with a high degree of confidence.

The bulk pre-leach pilot plant was run over a five-day period during July at SGS Australia’s facilities in Perth. The plant processed around 4.3 tonnes of HPC, generated about 2 tonnes of PLR, and operated with online thickening and filtration to replicate the full scope of the pre-leach process. The performance of the thickeners and filters met with expectations as did the extraction of phosphate from the HPC.

Arafura personnel managed the program with independent advice from engineering firm SNC-Lavalin. Outcomes from the pilot plant, including materials handling and equipment performance data, will be used for detailed design and the project’s definitive feasibility study (DFS).

Planning is now underway for Phase 4 of the Nolans Pilot Program: acid bake of PLR produced from the Phase 3 bulk pre-leach pilot. Construction and operation of the Phase 4 pilot is scheduled for the September quarter of 2017.

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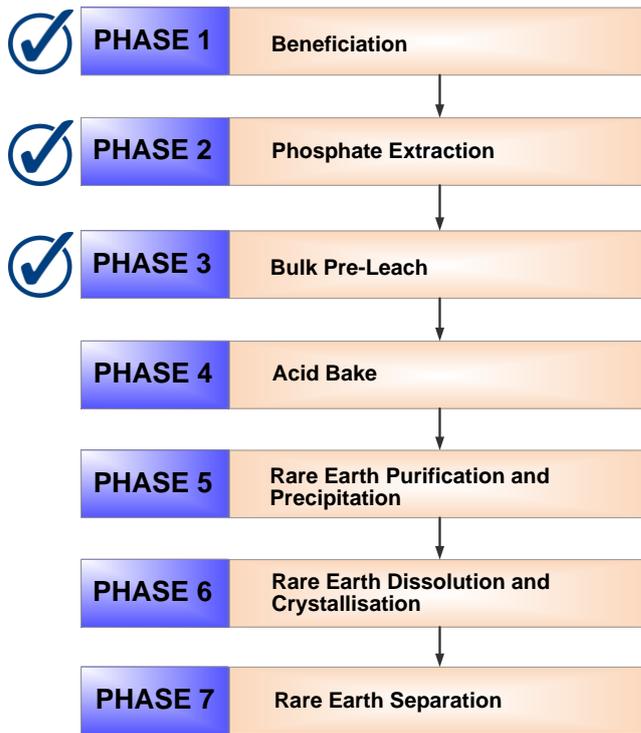


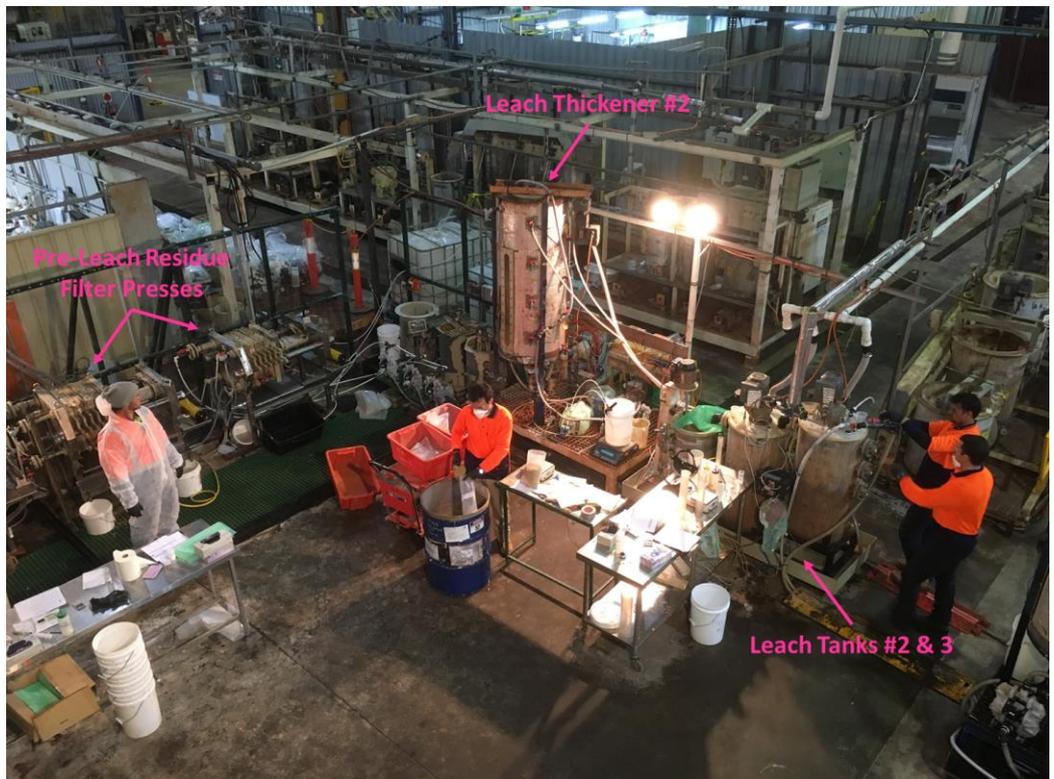
Figure 1: Nolans Pilot Program
 Each phase is operated on a continuous basis



NdPr-rich Pre-Leach Residue product from the Phase 3 Bulk Pre-Leach Pilot Plant



Bulk Pre-Leach Pilot Overview



Bulk Pre-Leach Pilot Overview



Removing Pre-Leach Residue from Filter Press