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NOLANS PILOT PROGRAM ADVANCES FOLLOWING POSITIVE PHOSPHATE EXTRACTION RESULTS

- **Prayon Technologies' review and analysis of results from Arafura's phosphate extraction pilot operation well advanced**
- **High-value merchant grade phosphoric acid produced**
- **Pilot information confirmed as suitable for inclusion in Nolans definitive feasibility study**
- **Next phase of flowsheet piloting underway**

Arafura Resources Limited (ASX: ARU) ("Arafura" or "the Company") is pleased to advise that the second phase of flowsheet piloting for its 100 per cent-owned Nolans Neodymium-Praseodymium ("NdPr") Project in the Northern Territory, which focused on the extraction of a saleable phosphoric acid by-product from NdPr-rich concentrate, has met with approval from independent phosphoric acid expert Prayon Technologies ("Prayon").

As part of its review, Prayon has verified the suitability of information gathered from the phosphate extraction pilot plant, which operated over a 10-day period during March 2017 at SGS Australia's facilities in Perth, for inclusion in the definitive feasibility study ("DFS") Arafura is preparing on Nolans.

Arafura personnel managed this (Phase 2) pilot program with advice and oversight from Prayon consultants who attended in person. Prayon is satisfied that Arafura demonstrated the metallurgical process in a satisfactory manner and has obtained the required process and mechanical engineering design data for incorporation into the DFS.

Final results from the successful operation of the Company's (Phase 1) beneficiation pilot plant were reported in February 2017. This operation produced approximately five tonnes of high-phosphate concentrate ("HPC"). Phase 2 of the pilot program consumed around 400 kilograms of HPC at 6.8% total rare earth oxide ("TREO") and resulted in the production of NdPr-rich pre-leach residue ("PLR") grading 11% TREO, a 34% TREO rare earth recovery precipitate, merchant grade phosphoric acid ("MGA"), and waste gypsum. Phosphate ("P₂O₅") and TREO losses to gypsum are around 12% and 4% respectively. PLR generated in this Phase 2 pilot will be used in a program of small scale acid bake tests to validate acid bake equipment in advance of (Phase 4) bulk acid bake piloting.

Arafura Managing Director Gavin Lockyer said that feedback from Prayon has supported the Company's decision to immediately proceed with Phase 3 of the pilot program. This phase, which involves the bulk preparation of NdPr-rich PLR from the balance of the HPC produced from the Phase 1 beneficiation pilot, will start at SGS Australia's Perth facilities today.

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“The two phases of pilot operations conducted to date for Nolans have been completed according to schedule with results meeting our expectations,” Mr Lockyer said. “We have every confidence that this trend will continue for the rest of the pilot program. Following our successful capital raising earlier this year, the Company is well funded to complete its pilot programs which will ultimately feed into the final feasibility. Combined with improved NdPr prices, the pilot results play a major role in determining the final costs and feasibility of the Nolans Project and when it can be developed into a long-term secure supply of high-value NdPr magnet-feed rare earths.”

Following Phase 3 piloting, an additional four phases of pilot testing are planned as part of the process of validating the performance of the process flowsheet for Nolans. Results from all phases will feed into the project’s DFS which is scheduled for completion in the second half of 2018.

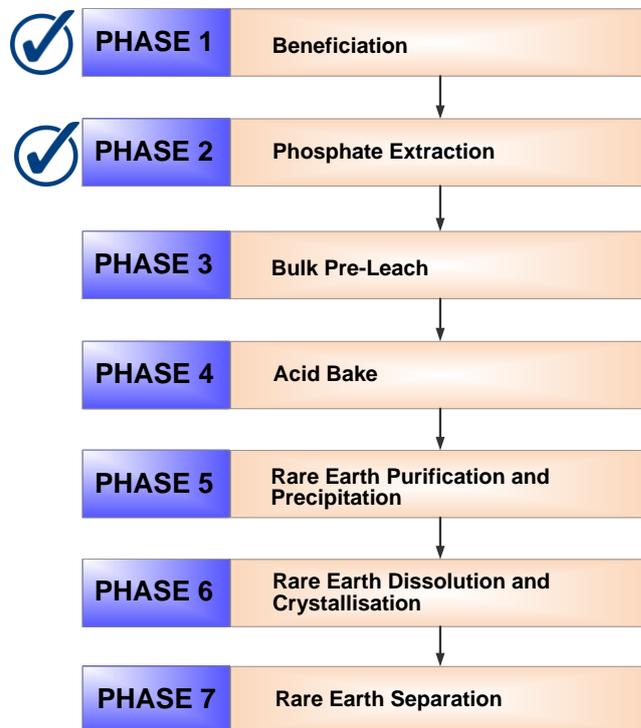


Figure 1: Nolans Pilot Program
Each phase is operated on a continuous basis

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