

ASX RELEASE

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ASX: ARU



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NOLANS BENEFICIATION PILOTING COMPLETE

- **Beneficiation piloting successfully completed on schedule**
- **Planning well advanced for subsequent stage of pilot program**

Arafura Resources Limited (ASX: ARU, "Arafura" or the "Company") is pleased to announce the successful completion of beneficiation flowsheet piloting for its 100 per cent-owned Nolans Neodymium/Praseodymium Project in the Northern Territory.

The beneficiation pilot plant is the first stage of Arafura's final piloting of the Nolans process flow sheet (Figure 1) whose design leverages the resource's endowment in phosphate-rich material types that feature enhanced concentrations of the key magnet-feed rare earths Neodymium and Praseodymium ("NdPr").

The beneficiation piloting operation was completed during November-December at ALS Global's facilities in Perth cumulating with 4 days' continuous operation of three stages of rougher flotation fed at a rate of 150 kilograms of milled material (25% solids) per hour.

Arafura personnel managed the program under advice from equipment manufacturers and independent engineering organisations. The pilot plant's success, including materials handling and equipment performance data, will be utilised for detailed design and final feasibility.

The pilot is expected to confirm previous bench scale results and sighter tests and grab samples taken throughout pilot operations would indicate this has been achieved. Confirmatory data relating to grade and recovery, and iron and aluminium rejection, will be reported by the Company in the first quarter of 2017 calendar year on receipt of validated assays.

The program has resulted in the production of a high-phosphate concentrate ("HPC") from approximately 14 tonnes of phosphate-rich plant feed.

The Company is now directing its attention to preparing for piloting of the phosphoric acid pre-leach process, using the beneficiation pilot concentrate as feed. This work is scheduled to commence at SGS in Perth in early-2017 following the completion of final bench scale test work on 20 kilograms of HPC to confirm key parameters prior to their application in the PAPL pilot.

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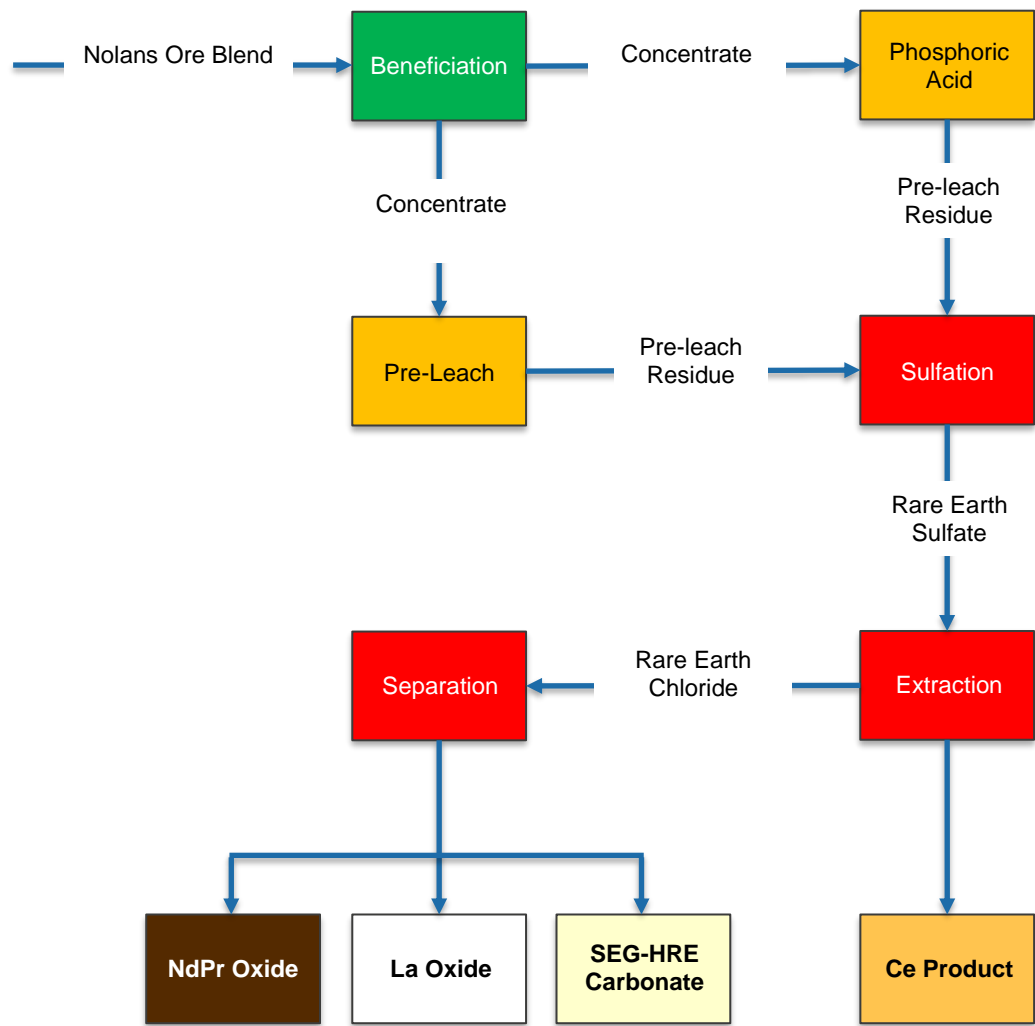
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Nolans pilot program



Preferred phosphate-rich rare earth-bearing material type



Tanks containing milled feed



Flotation pilot plant operation



Milled feed (at 25% solids) being heated to 40°C and conditioning tanks feeding rougher bank 1



Milled feed inside conditioning tank



Flotation bank (rougher 1 of 3)



Flotation concentrate



Final concentrate slurry



Tailings slurry



Flotation reagents pumping station



Wet concentrate collection beneath filter press (approximately 500 kilograms per bulk bag)



Wet concentrate cake