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ASX:FYI | OTCQX:FYIRF

## QUALITY RESULTS CONTINUE FROM JOINT EXTENDED HPA PILOT PLANT TRIAL

- Outstanding FYI and Alcoa joint HPA trial production results continue to demonstrate process efficiency and product quality
- Average HPA purity achieved for pilot plant trial Week Two samples is 99.9978% Al<sub>2</sub>O<sub>3</sub>
- Progressive refinement of FYI's innovative HPA flowsheet continues
- The robust test results support the HPA project development objectives between FYI and Alcoa

FYI Resources Ltd (“FYI” or “the Company”) (ASX:FYI; OTCQX:FYIRF; FSE:SDL), is pleased to announce the results of the second week of extended HPA pilot plant operations. An average purity of 99.9978% was achieved during the week-long campaign undertaken in collaboration with Alcoa of Australia (Alcoa).

Operating from the 7<sup>th</sup> to the 14<sup>th</sup> December 2021, the joint development HPA pilot plant trial generated product from which selected samples across all stages of the process were sent to EAG Laboratories in New York, USA for analysis using high level Glow Discharge Mass Spectrometry (GDMS) to provide independent, high accuracy confirmation of the HPA grades.

Consistent with the previous HPA trial outcomes, the Week Two results demonstrated continued high-quality grades being achieved across the suite of samples and ranged in purity from 99.9983% to 99.9973% Al<sub>2</sub>O<sub>3</sub>. The high-quality results further support the progressive development of FYI's project utilizing the effective and innovative HPA flowsheet design.

		Sample 1	Sample 2	Sample 3	Sample 4
HPA (Al <sub>2</sub> O <sub>3</sub> ) Grade	%	99.9983%	99.9973%	99.9980%	99.9977%
Total Impurities	ppm	17.1	27.4	20.3	23.1

**Results from week Two of the extended pilot plant trail conducted from 7<sup>th</sup> to 14<sup>th</sup> December 2021 in joint development with Alcoa.**



**Images of the pilot plant in operation – Week Two of joint extended production trial**

The pilot plant program supports the joint HPA development project between FYI and Alcoa for the commercialisation of FYI's innovative process for refining high quality HPA. The piloting program continues the optimizing of the process flowsheet. Whilst feedstocks variations and blends continue to be assessed, this trial run feedstock was supplied by Alcoa.

**FYI Managing Director, Roland Hill**, commenting on the results said "In the context of FYI and Alcoa's joint HPA development objectives, the latest results are very pleasing as we trial different variations of operating conditions. It is a joint objective for the continual improvement and optimizing of the HPA flowsheet by incorporating learnings from previous pilot plant trials and integrating them into the process design. The latest test results demonstrate the progressive advances in the process flowsheet that the joint development is achieving as well as incremental improvement in the overall project value".

#### **Next Pilot Plant Trial**

In progressing the joint HPA development program, the third extended pilot plant trial is scheduled to commence operation on 17<sup>th</sup> January 2022. This trial will be a continuation of the previous trial objectives, focusing on flowsheet refinement as well on HPA product generation for customer assessment purposes.

This announcement is authorised for release by Roland Hill, Managing Director

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### **About FYI Resources Limited**

FYI's is positioning itself to be a significant producer of 4N and 5N HPA in the rapidly developing high-tech product markets.

FYI applies both an ESG and economic overlay of the Company and its operations to ensure long-term sustainable and shareholder value is created via the development of the Company's innovative, high quality, ultra-pure HPA project.

HPA is increasingly becoming the primary sought-after input material for certain high-tech products principally for its unique properties, characteristics and chemical properties that address those applications high specification requirements such as LED's and other sapphire glass products.

The longer-term driver for HPA, with forecasts of >17% CAGR\*, is the outlook for the burgeoning electric vehicle and static energy storage markets where the primary function is in the use as a separator material between the anode and cathode in batteries to increase power, functionality and safety of the battery cells.

The foundation of the HPA strategy the Company's moderate temperature, atmospheric pressure innovative process flowsheet. The strategy's quality attributes combine resulting in world class HPA project potential.

\* CRU HPA Industry Report 2021