

Fyl Resources Limited

FYI RESOURCES TO DEVELOP HPA PILOT PLANT TO HIGHLIGHT PROJECT POTENTIAL AND DE-RISK INVESTMENT

Highlights:

- FYI is to develop a pilot plant as a part of the BFS to de-risk the Cadoux Kaolin Project
- The pilot plant will increase confidence and certainty for the Company's flowsheet design and operational performance of the circuit before committing to full scale commercial production
- The pilot plant will allow FYI to deliver suitable quantities of HPA product to potential endusers for:
 - product application testing to assist negotiating off-take agreements; and
 - to support project financing
- Costs of the pilot plant are to be funded through an advance of the R&D tax rebate
- Completion of the pilot plant expected late in the June Quarter 2019

FYI Resources Limited (the "**Company**" or "**FYI**") is pleased to announce that the Company has committed to develop and construct a pilot plant and undertake an associated test-work program to further optimise the Company's high purity alumina (HPA) process flowsheet engineered for kaolin feedstock from FYI's Cadoux Kaolin Project in Western Australia.

Following the positive outcome of the Prefeasibility Study (PFS) (ASX release 25th September 2018) and achieving independently verified 99.997% (4N) grade HPA (ASX release 3rd September 2018), the Company has commenced a Bankable Feasibility Study (BFS) for the Cadoux Project. To add further support to the BFS and to further de-risk the process flowsheet, the Company will now develop and construct a pilot plant.

The pilot plant will provide FYI with increased confidence and certainty on the engineered flowsheet design and operational performance of the process circuit before committing to full scale commercial production. The decision to proceed with the pilot plant is based on the belief that a well designed and constructed pilot plant is an important decision point in determining project success and economics.

The pilot plant operations and associated data modelling should:

- Support the findings and data generated throughout the PFS laboratory test work
- Finalise mass and energy balances
- Further optimise system design and capacity
- Confirm equipment and process circuit requirements
- Determine system limitations and optimise process design for continuous production and repeatability of targeted product
- Assist to verify future production Capex and Opex
- Lower overall project risk by verifying process efficiency, yields and target grades
- Assist in financing by reducing risk prior to investing in the technology
- Provide valuable operational training
- Produce HPA for test product applications and verification
- Produce additional HPA product for further testwork



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purity requirements of current markets for high grade alumina. As outlined in the PFS, the metallurgical response to the characteristics of the Cadoux kaolin is excellent in achieving a purity of 99.997% HPA. The designed flow sheet is straightforward and effective and the Company anticipates that the results from the pilot plant will provide increased confidence in the capital and operating costs of the HPA project. The pilot plant test program will help confirm and support the theoretical economic cases in the PFS and BFS and provide a gualified and guantified level of process assurance for future development and financing activities. The pilot plant should also demonstrate the efficiency of the proposed refining process and proficiency of the process design by producing the very high-grade material on a continuous, but low scale, basis. **Pilot Plant Financing** Although the pilot plant was not budgeted for under FYI's current BFS schedule, the Company has arranged funding of the total capital costs through the forward payment of the R&D tax rebate through Innovative Technology Funding Pty Ltd. This funding is an advance on the expected R&D expenditure rebate that is provided by the Federal Government's Research and Development Tax Incentive Scheme whereby eligible companies are entitled to a cash rebate of 45 cents in the dollar for all eligible R&D expenditure incurred in Australia. FYI will receive an advance of up to \$1.1 million being 80% of its expected tax rebate resulting from eligible R&D expenditure for the current financial year. The principal and accrued interest for the facility is repayable

Pilot Plant Timing

FYI undertook scoping of the pilot plant following the completion of the PFS based on the receipt of positive economic results.

out of the actual tax refunded, expected to be received during November 2019. The facility is for a maximum

of 12 months and is secured against the Company's R&D offset rebate.

FYI's HPA flowsheet circuit design is based on a standard hydrochloric acid leach and precipitation technology originally developed in the 1940s which has been modified to suit the Cadoux feedstock and application and

As the results from the pilot plant will be utilised in the inputs to the BFS to strengthen the validity of the study, the completion of the BFS is now expected late in the September guarter of 2019.

The Company believes the addition of the pilot plant into the BFS schedule is a critical requirement to help deliver its product to potential end use customers, to validate the Company's HPA product and in turn potentially provide strong binding off-take agreements which will greatly assist with project financing.

FYI's Managing Director, Mr Roland Hill, said: "The decision to proceed with the pilot plant is a critical step in the development of FYI's Cadoux HPA Project. The results of the pilot plant will contribute greatly to the robustness and confidence in the project and its ability for the overall project capital to be financed. The fact that we have also arranged the pilot plant to be financed by an advance on our expected R&D rebate benefits shareholders as there is no shareholder dilution or impact to our capital structure while funding a crucial segment of the Project."

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FYI's HPA project advantages include:

- Western Australian based and fully integrated strategy proactive and supportive project development jurisdiction
- Reliably and cheaply sourced inputs (ie power, water, hydrochloric acid etc)
- High quality mineral resource and reserves excellent chemistry, mineralogy and characteristics
- Long life mine plan (>50 years reserve)
- Straightforward and highly efficient flowsheet
- Low forecast industry capex
- Forecast lowest quartile operating costs
- First class project development team
- Strategy based on success of having achieved 99.997% HPA

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About FYI Resources Limited

FYI is positioning itself to be a significant producer of high purity alumina (4N or HPA) in a rapidly developing LED, electric vehicle, smartphone and television screen as well as other associated high-tech product markets.

The foundation of FYI's HPA strategy is the superior quality aluminous clay (kaolin) deposit at Cadoux and the exceptional positive metallurgical response that the feedstock has to the Company's moderate temperature, atmospheric pressure and straightforward HCl flowsheet. The strategy's superior quality attributes combine resulting in world class HPA project potential.

In September 2018, FYI announced results of its Preliminary Feasibility Study ("PFS") for its Cadoux kaolin project in Western Australia. The PFS confirmed the Company's intention to become a predominant vertically-integrated, long life producer of high quality, sought after high purity alumina ("HPA").

Reflective of Cadoux's quality as a feedstock and the efficiency of the Company's innovative flowsheet, the PFS resulted in an leading industry economic outcomes that indicate the Project could produce up to 8,000 tonnes per annum of HPA with both low capital (US\$180m) and operating costs (US%6,467/t), delivering an NPV_(10%) of US\$506 million for a 25-year project mine life from >50-year kaolin supply at an attractive IRR of 46%.





Pre-Feasibility Study highlights from September 2018

Competent Persons Statements

Ore Reserves

The information in this report that relates to Ore Reserves is based on information compiled by Mr. Steve Craig, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Steve Craig is a full-time employee of Orelogy Consulting Pty Ltd and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". The information is extracted from the Ore Reserve announcement released 29 October 2018 and is available to view on the Company's website at www.fyiresources.com.au.

Mineral Resources

The information in this report that relates to Mineral Resources is based on information compiled by Mr Grant Louw, under the direction and supervision of Dr Andrew Scogings, who are both full-time employees of CSA Global. Dr Scogings is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. He is a Registered Professional Geologist in Industrial Minerals. Dr Scogings has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves". The information is extracted from the PFS announcement dated 25 September 2018 and is available to view on the Company's website at <u>www.fyiresources.com.au</u>.



Metallurgy

The information in this report that relates to metallurgy and metallurgical test work is based on information reviewed and compiled by Mr Daryl Evans, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Evans is an employee of Independent Metallurgical Operations Pty Ltd, and is a contractor to FYI. Mr Evans has sufficient experience that is relevant to this style of processing and type of deposit under consideration, and to the activity that he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves". Announcements in respect to metallurgical results are available to view on the Company's website at www.fyiresources.com.au.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the findings in the relevant market announcements continue to apply and have not materially changed and that all material assumptions and technical parameters underpinning the estimate in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement.

Cautionary Statement

Substance of PFS

The PFS referred to in this announcement is a study of the potential viability of the Cadoux Project. It has been undertaken to understand the technical and economic viability of the Project.

The PFS is based on the material assumptions outlined in the PFS announcement released to ASX on 25 September 2018 and summarised in the Summary of Material Assumptions and Modifying Factors description and tables (appendix 2 and 3) attached to the PFS document. These include assumptions about the availability of funding. While the Company considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by this PFS will be achieved.

To achieve the range of outcomes indicated in the PFS funding in the order of US\$197 million will likely be required. Investors should note that there is no certainty that the Company will be able to raise the amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares.

It is also possible that the Company could pursue other "*value realisation*" strategies such as a sale, partial sale or joint venture of the Project. If it does, this could materially reduce the Company's proportionate ownership of the Project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the PFS.



General and forward-looking statements

The contents of this announcement reflect various technical and economic conditions, assumptions and contingencies which are based on interpretations of current market conditions at the time of writing. Given the nature of the resources industry, these conditions can change significantly and without notice over relatively short periods of time. Consequently, actual results may vary from those detailed in this announcement.

Some statements in this announcement regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Such forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. When used in this announcement, words such as, but are not limited to, "could", "planned", "estimated", "expect", "intend", "may", "potential", "should", "projected", "scheduled", "anticipates", "believes", "predict", "foresee", "proposed", "aim", "target", "opportunity", "nominal", "conceptual" and similar expressions are forward-looking statements. Although the Company believes that the expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements.

The contents of this release are also subject to significant risks and uncertainties that include but are not limited those inherent in mine development and production, geological, mining, metallurgical and processing technical problems, the inability to obtain and maintain mine licences, permits and other regulatory approvals required in connection with mining and processing operations, competition for among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of projects and acquisitions, changes in commodity prices and exchange rates, currency and interest rate fluctuations and other adverse economic conditions, the potential inability to market and sell products, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, environmental, native title, heritage, taxation and other legal problems, the potential inability to secure adequate financing and management's potential inability to anticipate and manage the foregoing factors and risks.

All persons should consider seeking appropriate professional legal, financial and taxation advice in reviewing this announcement and all other information with respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of this announcement nor any information contained in this announcement or subsequently communicated to any person in connection with this announcement is, or should be taken as, constituting the giving of investment or financial advice to any person. This announcement does not take into account the individual investment objective, financial or tax situation or particular needs of any person.