

ASX: FYI

QUARTERLY REPORT FOR THE PERIOD ENDING 30th September 2017

HIGHLIGHTS

- ✓ **HPA preliminary metallurgical testwork achieved 99.99% (Al₂O₃) (HPA)**
- ✓ **HPA process flowsheet demonstrated**
- ✓ **53% Cadoux kaolin resource tonnage up-grade to 16.1Mt @ 11.76% Al**
- ✓ **Positive Cadoux / HPA due diligence findings**
- ✓ **Kokardine Kaolin Pty Ltd purchase proceeds**
- ✓ **Potash opportunities progressing**

REVIEW OF OPERATIONS

Summary

The September quarter was an active period for the Company on both the high purity alumina and the potash strategies.

High Purity Alumina

Background

FYI made the decision to enter the high purity alumina sector (*see ASX announcement 8th May 2017*) based on the positive fundamentals of the industry and the securing of a high quality, premium characteristic kaolin deposit – ideally suited to HPA production.

The Company's long-term strategy for HPA is to develop, construct and operate a high purity alumina processing facility that will deliver a high quality 99.99% (or higher) alumina product (HPA) consistently and reliably at lowest quintile cost, maximising shareholders' value.

Due diligence on HPA strategy

In assessing the commercial potential of the HPA strategy and the suitability of the Cadoux kaolin deposit, FYI have been performing a due diligence review of the project. This includes reviewing the technical aspects in achieving the stated HPA product (99.99% Al₂O₃), as well as investigating the market and the overall project economics, the potential investment returns and commercial feasibility of the HPA strategy.

Since announcing the Company's involvement with HPA and due diligence studies, considerable progress has been achieved with positive results for all key criteria. These include the completion of a drilling program, outstanding metallurgical test results of the Cadoux kaolin clay and a substantial mineral resource upgrade of the kaolin deposit together with a substantive marketing exercise.

Resource upgrade

Following a successful campaign of in-fill and extension drilling on the Cadoux kaolin project, the review of the mineral resources resulted in a 53% increase in tonnes from 10.5Mt to 16.1Mt and an increase in grade from 11.25%Al to 11.76%Al (see FYI ASX announcement 26th July 2017).

Of particular note is the high quality of the Cadoux resource as a desirable feedstock for the processing of HPA, being of elevated Al grade and low in deleterious elements (specifically Fe and TiO₂). The feedstock characteristics are critical in achieving consistent and reliable production of 99.99% HPA.

The increase in the mineral resource provides a robust project tonnage to support reliable, long term high quality feedstock supply for FYI's HPA strategy.

The current Cadoux mineral resource outline is open in all directions allowing the potential for the resource to be expanded via further drilling.

Mineral Resources

Table 1: Cadoux Mineral Resource estimate July 2017

Classification	Tonnage (Mt)	%Al -45 microns	Al%	Fe%	TiO ₂ %
Indicated	13.0	84.4	11.58	0.47	0.34
Inferred	3.1	84.4	12.50	0.69	0.49
Total	16.1	84.4	11.76	0.51	0.37

Notes:

% minus 45 micron was measured by wet screening based on previous test work and assays were determined by ALS using ICP

Metallurgical test work – achieving of 99.99% (Al₂O₃)

Fundamental to the HPA strategy is the achieving of 99.99% Al₂O₃ from the feedstock source. The Cadoux resource has proven to have excellent metallurgical response characteristics demonstrated by the achieving of 99.99% alumina from a series of metallurgical test programs.

The testwork was undertaken and managed by Independent Metallurgical Operations Pty Ltd (IMO) in Perth. The program comprised of pre-beneficiation, activation, acid leaching, selective precipitation of aluminium chloride and calcination to produce HPA from a composite generated from the Cadoux resource.

Initial testing produced in excess of 82% recoverable alumina through conventional leaching. The second stage of the testing was of the precipitation and calcination which successfully achieved the targeted **99.99%** grade alumina (see ASX announcements 5th September and 23rd October 2017).



FYI's HPA (99.99%) final product at metallurgical laboratory

Not only is the outcome extremely encouraging in terms of technical achievement, the result also supports the Company's strategy to commercially produce HPA from feedstock sourced from the Cadoux resource.

Project purchase

Under the Sale and Purchase Agreement (**SPA**) FYI acquired Kokardine Kaolin Pty Ltd (**Kokardine**) and its wholly owned Cadoux kaolin project in Western Australia. This transaction (*see ASX announcement 26th September 2017*) was subject to a successful due diligence review as well as satisfying certain conditions precedent. The FYI Board resolved to proceed with the SPA following satisfactory outcomes from the due diligence review and associated studies.

Scoping / Feasibility studies

On the strength of the due diligence, outstanding metallurgical results and excellent progress to date, FYI will progress to scoping and feasibility studies.

The key economic study parameters will include:

- investment and economic metrics
- project capex and opex studies
- production options and scenarios
- product studies / revenue optimising

The economic studies will include project considerations such as:

- process control
- overheads, duplication e.g. corporate office location
- transfer pricing issues
- most efficient location for refinery
- freight / shipping costs for volume i.e. HPA vs kaolin
- proximity to infrastructure, reagents, raw materials and a resource industry cluster of investors, operators, contractors and consultants
- energy pricing and reliability
- sovereign risk comparisons
- approvals process regimes
- potential for major project status
- access to technology and availability
- research and development grants / rebates

High Purity Alumina

HPA (Al_2O_3) is a high purity non-metallurgical alumina product with a higher finished aluminium grade greater than 99.9% (3N). HPA has particular beneficial characteristics especially suited to rapidly developing high tech consumer and scientific markets. This specialised form of alumina is sought after for its superior hardness, low density, inertness (non-conductive), superior corrosion resistance and its ability to withstand high temperatures.

HPA serves as a base material in the manufacture of sapphire substrates which are in turn critical in the production of various product applications such as LED lighting, scratch-resistant artificial sapphire glass, and single crystal materials for the use in electronic screens such as those found in smart phones, televisions and watches. In addition, important growing markets are to be found in battery technologies, and as anode/cathode separators for the electric-powered vehicle (EV) and battery / power storage markets. These sectors are all high-end markets that demonstrate strong year on year growth in the mid to long term.

The HPA demand is forecast to increase at a compound annual growth rate of 20% out to 2024*. The product pricing is commensurate to its commercial application and its escalation of purity level i.e. 99.99% (4N – US\$23,000t), 99.999% (5N – US\$35,000).

**Allied Market Research - High Purity Alumina Report (May 2016)*

Potash

Project development

FYI continued with its potash strategy in Southeast Asia with the focus on Laos and the ongoing review of targeted potash projects. Over the last quarter, the in-country team has successfully completed the first level of these initiatives, included a study of the logistics and energy options in-country and is now focused on further development options.

A number of key meetings are scheduled for the current quarter with the Company remaining focused on meeting FYI's development ambitions.

Current Quarter Activities and Objectives

Objectives for the December 2017 quarter include:

- refining metallurgical studies and product
- selection of engineering study group
- commence HPA economic and investment studies
- continue HPA product marketing review
- progress Laos potash development

Further Information:

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About FYI

FYI is an ASX listed natural resources focused public company. The Company's principal objective is in the identification, exploration and development of high quality resource projects in strategic mineral sectors.

The Company's current focus is on the development of a HPA project in Western Australia in parallel with the assembling a portfolio of quality potash projects in Southeast Asia. Both project strategies have forecast long mine life and high strategic value.

The Board, management team and partner groups have a successful track record of project generation and delivery.

Competent person statement – Cadoux Resource

The information in this announcement that relates to Mineral Resources is based on information from the Company’s announcement dated 26 July 2017 and is available on the Company’s website at www.fyiresources.com.au. The information was compiled by Mr Andrew Kohler, Principal Resource Geologist and a Member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Kohler is an employee of Strategic Resource Management, and consultant to the Company. Mr Kohler has sufficient experience that is relevant to the style of mineralisation 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 Mineral Resources and Ore Reserves. The Mineral Resource estimate complies with recommendations in the Australian Code for Reporting of Mineral Resources and Ore Reserves (2012) by the Joint Ore Reserves Committee (JORC). Mr Kohler consents to the inclusion of the report in the form and context in which it appears. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Competent person statement - Metallurgy

The information in this announcement 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 (The JORC Code). 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 announcements. Mr Evans consents to the inclusion of the information in the form and context in which it appears.

Interest in Mineral Tenements at 30 September 2017

Tenement	Location	Interest	Change in Interest During Quarter
WMM SPLs (6)	Thailand	100% (under application)	-
ESM SPLs (6)	Thailand	100% (under application)	-
E70/4673	Western Australia	100%	100%