

Metakaolin Test Work Underway

HIGHLIGHTS

- Pinnacle has engaged boutique consultancies Fremantle Metallurgy and Real Material Solutions to undertake kaolin upgrade test work to produce “green” metakaolin from Bobalong Project kaolin
- Metakaolin research forms a strategic part of Pinnacles “Technology / IP” and kaolin “value add” business model
- Metakaolin is a highly reactive pozzolanic material, which can be added as a Supplementary Cementitious Material (SCM) to Portland cement to improve its properties and the subsequently produced concrete. Benefits of the concrete produced include:
 - Improved durability, strength, and workability
 - Reduction in CO₂ footprint
 - Reduced curing time
 - Less prone to concrete cancer
- Cement production is one of the highest-emitting industrial sectors, responsible for approximately 8% of global CO₂ emissions¹. Metakaolin can be utilised in “green cement” which can reduce CO₂ emissions relative to traditional cement / concrete mixtures
- Quartz oversize material to be evaluated for suitability as a high purity quartz (HPQ) feedstock potentially adding value to the project

Pinnacle Minerals Ltd (ASX: **PIM**) (**Pinnacle**, the **Company**) is pleased to announce that the Company has engaged boutique consultancies Fremantle Metallurgy and Real Material Solutions to undertake and manage kaolin upgrade bench scale test work to produce “green” metakaolin from the Bobalong Project (“**Project**”) kaolin ore, with the quartz component of the material also being tested for suitability as a high purity quartz (HPQ) feedstock.

Fremantle Metallurgy has been provided a 27.3 kg composite sample of raw kaolin material from the Project for bench scale testing. The scope of the project will enable Pinnacle to determine the suitability of the material to be upgraded into a higher value and “greener” metakaolin product and to subsequently test the structural performance of the additive in construction materials.

SCM demand is forecast to grow at a CAGR of 7.46% or by US\$ 8.1 billion over 2020-2025² driven by demand from the Asia/Pacific region. Critically, the supply of traditional pozzolans is dwindling due to supply chain issues, for example, the shutting down of power stations which are a major supplier of Silica Flume.

Pinnacle Minerals Managing Director, Nic Matich, commented:

“Undertaking this body of work exemplifies how Pinnacle Minerals is investing in a green future and expanding the Company’s IP base. Metakaolin has the potential to radically alter the concrete industry by reducing its carbon footprint. With the global push for greener technologies there will potentially be a time where the use of metakaolin is mandated by governments worldwide, resulting in a potentially lucrative market for Pinnacle”.

¹ Pinnacle Metakaolin Desktop Study, Michael Beebe

² Supplementary Cementitious Materials Market by Type and Geography – Forecast and Analysis 2021 – 2025, Technavio

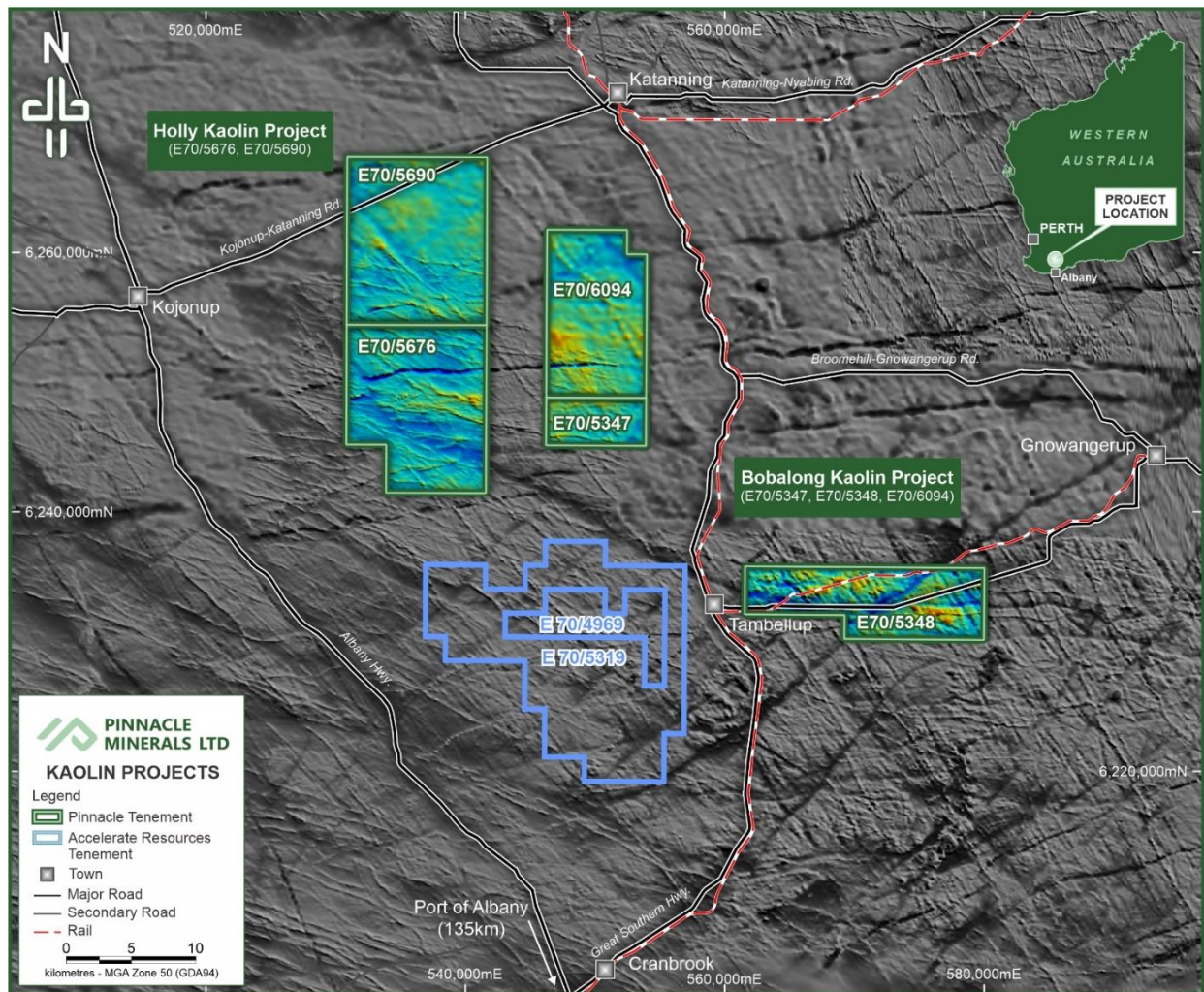


Figure 1: "Southwest" Project Map highlighting the proximity of the project to infrastructure

About Fremantle Metallurgy

Fremantle Metallurgy is a boutique metallurgical processing laboratory that specialises in flowsheet development and troubleshooting process problems. Fremantle Metallurgy have many years' experience in metallurgical test work and providing process and solutions from the laboratory to on site.

Fremantle Metallurgy designs mineral processing equipment and offers training in the areas of sample preparation, mineralogical assessment, thickening, filtration, and operation of mineral processing equipment. In addition, courses covering flowsheet development and equipment design and selection are also offered.

About Real Material Solutions

Real Material Solutions (RMS) is a materials development company headed by Mr. Blake Stacey. Mr. Stacey is a Ceramic Engineer with over 30 years' experience in mining, beneficiation and analysis of clay and related products.

RMS has been engaged to provide Pinnacle Minerals development opportunities for kaolin use in various markets.

This announcement has been authorised for release by the Board of Pinnacle Minerals Ltd.

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About Pinnacle Minerals

Pinnacle Minerals Ltd (ASX: PIM) is an ASX listed technology metals company focused on delivering shareholder value via the systematic exploration and development of its portfolio of kaolin, halloysite, magnetite and battery metals prospective projects in Western Australia and South Australia. The Company is focused on delineating resources at its advanced Bobalong and Holly Kaolin Projects in the Great Southern region of Western Australia whilst simultaneously expanding its' project portfolio through targeted acquisition of prospective ground. Drilling and a scoping study have been completed at Bobalong, with results indicating the potential for a high value direct shipping ore (DSO) product. The White Knight and Camel Lake Projects are strategically located adjacent to Andromeda Metals' (ASX: ADN) high-grade kaolin-halloysite discoveries in South Australia. The newly acquired Latham and Tammin projects are adjacent to Chalice Gold Mines (ASX: CHN) Mid-West Project and Anglo Americans' (Lon: AAL) Southwest Yilgarn Exploration Project respectively, which have multi-element exploration potential.

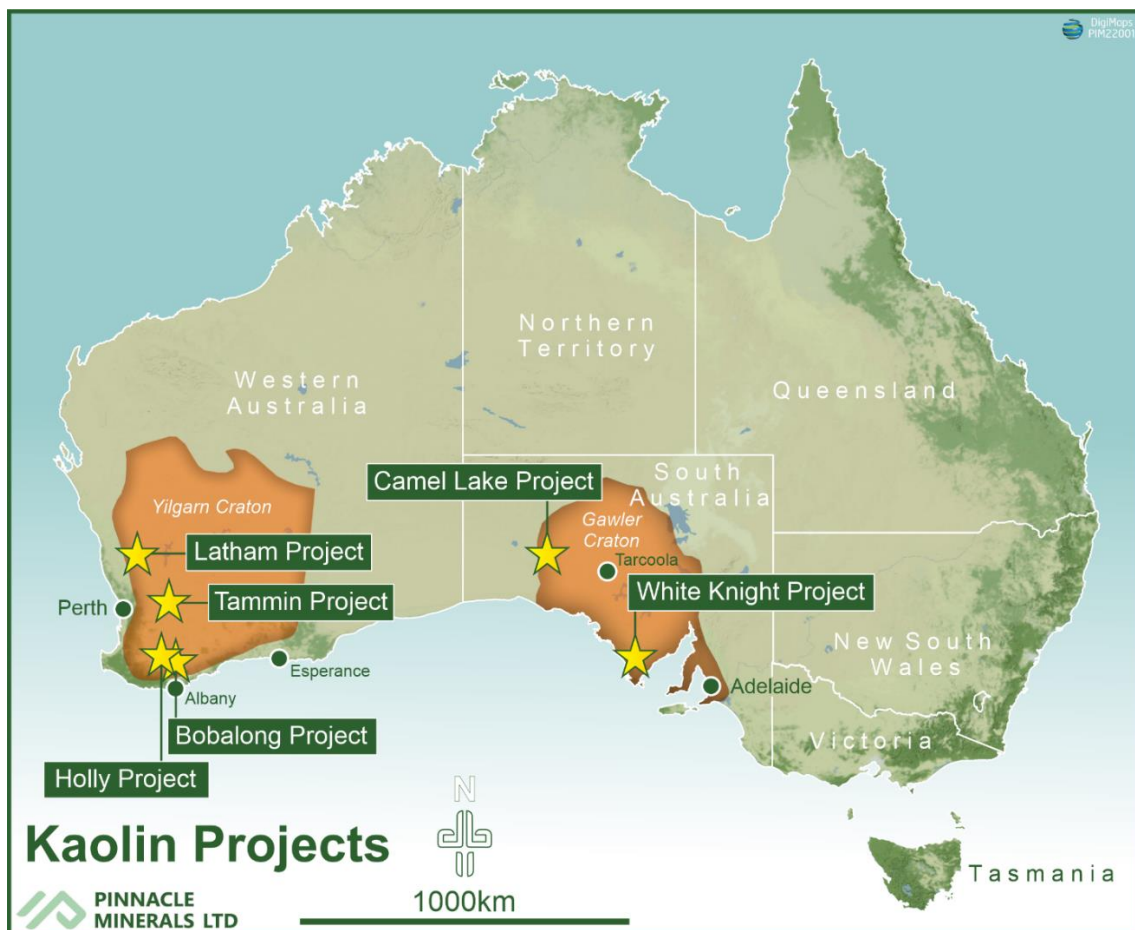


Figure 2: Pinnacle Minerals Projects' Location Map