

11 June 2024

TOONDOON KAOLIN PROJECT TEST PIT COMPLETED TO SCALE UP HIGH REACTIVITY METAKOLIN PRODUCTION

HIGHLIGHTS

- Test pit at the Company's approved mining lease (ML 80126) within the Toondoon kaolin project is successfully completed
- 35 tonnes of kaolin mined at Toondoon and transported to a facility in Brisbane, Queensland, to undergo mill processing and bagging
- High-grade kaolin product will then be transferred to a separate facility where it will undergo calcination to produce the targeted high reactivity metakaolin ("HRM" or "metakaolin") products for use in low carbon cement and concrete, and feedstock for scaled-up zeolite production
- Metakaolin stockpile allows ZEO to advance discussions with cement and concrete industry participants
- Analysis completed on the target kaolin ore demonstrates the quality of the near-surface resource and high alumina content, that provides an important indication of pozzolanic strength and suitability for HRM

Emerging mineral processing technology company, Zeotech Limited (ASX: ZEO, "Zeotech" or "the Company") advises that it has completed its planned test pit at the Company's 100%-owned high grade Toondoon kaolin project, located near Mundubbera, Queensland.



Pictures showing activities at the test pit for the Toondoon Kaolin Project

The test pit was initiated on the fully permitted ML 80126 and has produced 35 tonnes of high-grade raw kaolin. It was commissioned to provide additional feedstock to produce larger quantities of high reactivity metakaolin. In turn, enabling the Company to progress its discussions with cement and concrete industry participants, as well as to allow for scaling-up of manufactured zeolite production.

www.zeotech.com.au

Zeotech Limited | ASX: ZEO
ACN 137 984 297
Level 27, Santos Place, 32 Turbot Street, Brisbane QLD 4000
P: +61 7 3181 5523 | E: info@zeotech.com.au

Test pit mining follows completion of a research program at Central Queensland University announced in April 2024¹. The program highlighted that HRM, which exceeds Australian Standard² and ASTM International standard³ for manufactured pozzolan, can be produced from Toondoon's kaolin.

Metakaolin is in demand as a supplementary cementitious material ("SCM") to partially substitute clinker in Portland cement, along with potential to partially or fully replace conventional SCMs such as fly ash and blast furnace slag that are increasing in cost and are forecasted to decrease in availability⁴.

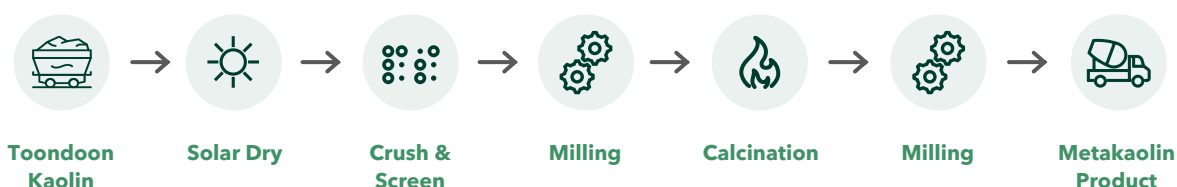
The Company's increased quantities of high reactivity metakaolin are expected to lead to pilot trials with the cement and concrete industry, together with expanded business development activities.

The 35 tonnes of kaolin has been transported to a processing facility located in Brisbane, Queensland. The remaining product has been stockpiled at the test pit site and can be accessed for further development as required.

The kaolin will undergo simple processing (milling and classifying) before being bagged for easier handling. The bagged product will then be transferred to a separate facility where it will undergo calcination to produce the targeted high reactivity metakaolin products.

Analysis completed on the high-grade raw kaolin ore demonstrates the quality of the near-surface resource and high alumina content, that provides an important indication of pozzolanic strength and suitability for HRM.

The high kaolinite content of Toondoon's raw ore of up to 90%, extends a potential competitive advantage due to the limited beneficiation required to produce a high reactivity metakaolin.



Indicative flowsheet to produce high reactivity metakaolin from Toondoon kaolin.

Zeotech, Chief Executive Officer, Scott Burkhart commented:

"We are pleased to be advancing development of a high reactivity metakaolin (HRM) with the successful completion of the test pit at the Company's Toondoon kaolin project. The latest operational update follows the outcomes of recent research from Central Queensland University which highlighted the potential use-case for HRM in the manufacturing process for low-carbon cement and concrete products."

¹ ASX Announcement 22/04/2024 - High Reactivity Metakaolin to Advance Low Carbon Cement

² Australian Standard AS 3582.4

³ ASTM International Standard C1897

⁴ "Investigation into the suitability of natural clays from Central South Queensland, Australia, deposits as supplementary cementitious material". Central Queensland University (2024)

The simple processing of the raw ore underscores the potential competitive advantage of the Toondoon kaolin. With the calcination process imminent, we look forward to extending our engagement with industry in the coming months, and pursuing commercial pathways that could catalyse high reactivity metakaolin production in Australia"

This announcement has been approved by the Board.

- End -

For further information please contact:

Scott Burkhart - Chief Executive Officer
scott@zeotech.com.au
Tel: (+61) 7 3181 5523

Neville Bassett - Company Secretary
info@zeotech.com.au
Tel: (+61) 7 3181 5523

Media and Investor Relations:

Henry Jordan
henry.jordan@sdir.com.au
Tel: (+61) 431 271 538

About Zeotech

Zeotech Limited (ASX: ZEO) is a team of dedicated people, working together to build a future focused company, leveraging proprietary technology for the low-cost production of advanced materials to deliver solutions aimed at addressing sustainability challenges.

About Toondoon Kaolin Project

Toondoon comprises an approved Mining Lease (ML80126) and two Exploration Permits for Minerals (EPM 27395 & 27866), located approximately 20 kilometres south of Mundubbera, Queensland and spans over 28,000 hectares. The high kaolinite content of Toondoon's raw ore of between 80-90% underpins a potential competitive cost advantage, due to the limited beneficiation required to produce a high reactivity metakaolin.

Toondoon high reactivity metakaolin exceeds the Australian Standard and ASTM International Standard for a manufactured pozzolan for cement and concrete, and is an optimal feedstock for manufactured zeolite production.

Zeotech Limited - Social Media Policy

Zeotech Limited is committed to communicating with the investment community through all available channels. Whilst ASX remains the prime channel for market-sensitive news, investors and other interested parties are encouraged to follow Zeotech on Twitter ([@zeotech10](#)) and [LinkedIn](#).

Subscribe to ZEOTECH NEWS ALERTS - visit <https://zeotech.com.au/contact/>

www.zeotech.com.au

Forward-looking Statements

This release may contain certain forward-looking statements with respect to matters including but not limited to the financial condition, results of research and development, operations, and business of Zeotech and certainty of the plans and objectives of Zeotech with respect to these items.

These forward-looking statements are not historical facts but rather are based on Zeotech current expectations, estimates and projections about the industry in which Zeotech operates, and its beliefs and assumptions.

Words such as "anticipates," "expects," "intends," "potential," "plans," "believes," "seeks," "estimates", "guidance" and similar expressions are intended to identify forward looking statements and should be considered an at-risk statement.

Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the process of developing technology and in the endeavour of building a business around such products and services.

These statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties, and other factors, some of which are beyond the control of Zeotech, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements.

Zeotech cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of Zeotech only as of the date of this release.

The forward-looking statements made in this announcement relate only to events as of the date on which the statements are made. Zeotech will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this announcement except as required by law or by any appropriate regulatory authority.