

# ASX RELEASE



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EXPLORATION

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## MAJOR EXPLORATION TARGET ESTABLISHED FOR POOCHERA KAOLIN PROJECT SOUTH AUSTRALIA

### HIGHLIGHTS

- An Exploration Target\* has been determined, for the first time, for the entire Poochera Kaolin Project near Streaky Bay, South Australia.
- The Exploration Target is based on 220 historical drill holes and 224 new air core drill holes at five separate deposits.
- The Exploration Target is estimated at 570 to 810 million tonnes of white kaolinised granite containing 40% to 60% minus 45 micron kaolin (kaolinite ± halloysite) with high ISO Brightness ( $R_{457} \geq 80$ ).
- The Exploration Target is in addition to the recently announced Carey's Well Measured Resource of 16.3 million tonnes of "bright white" kaolinised granite.

Minotaur Exploration Limited ("Minotaur", ASX Code: MEP) is pleased to announce an Exploration Target for its Poochera Kaolin Project on tenement EL 4575 (*Figure 1*). The tenement is held 100% by Minotaur's wholly-owned subsidiary Great Southern Kaolin Pty Ltd. It is located near Poochera, about 50 kilometres inland from the coastal town of Streaky Bay on the west coast of South Australia's Eyre Peninsula and just 150km from the bulk handling port at Ceduna.

Five kaolin deposits have been defined from 220 historical drill holes and a further 224 new drillholes on the tenement (*Figure 2*). The five deposits: Condooringie Well; Carey's Well; Tootla; Karcultaby South and Tomney, have a total Exploration Target estimate of 570 to 810 million tonnes of white kaolinised granite containing 40% to 60% minus 45 micron kaolin (kaolinite ± halloysite) with high ISO Brightness ( $R_{457} \geq 80$ ) (*Table 1*).

Kaolin Deposit	Exploration Target	-45 $\mu$ kaolin Range	ISO Brightness Estimate
Condooringie Well	40 to 48 million tonnes	40% - 60%	$R_{457} \geq 80$
Carey's Well	50 to 60 million tonnes	40% - 60%	$R_{457} \geq 80$
Tootla	47 to 57 million tonnes	40% - 60%	$R_{457} \geq 80$
Karcultaby South	23 to 27 million tonnes	40% - 60%	$R_{457} \geq 80$
Tomney	410 to 620 million tonnes	40% - 60%	$R_{457} \geq 80$
Total	570 to 810 million tonnes	40% - 60%	$R_{457} \geq 80$

Table 1: Poochera Kaolin Deposits: Exploration Target\* Parameters.

\* The term "Exploration Target" should not be misconstrued as an estimate of Mineral Resources and Reserves as defined in the JORC Code (2004), and the term has not been used in that context. The term is conceptual in nature and it is uncertain if further exploration will result in the determination of a Mineral Resource. Refer Clause 18 of the JORC Code (2004).

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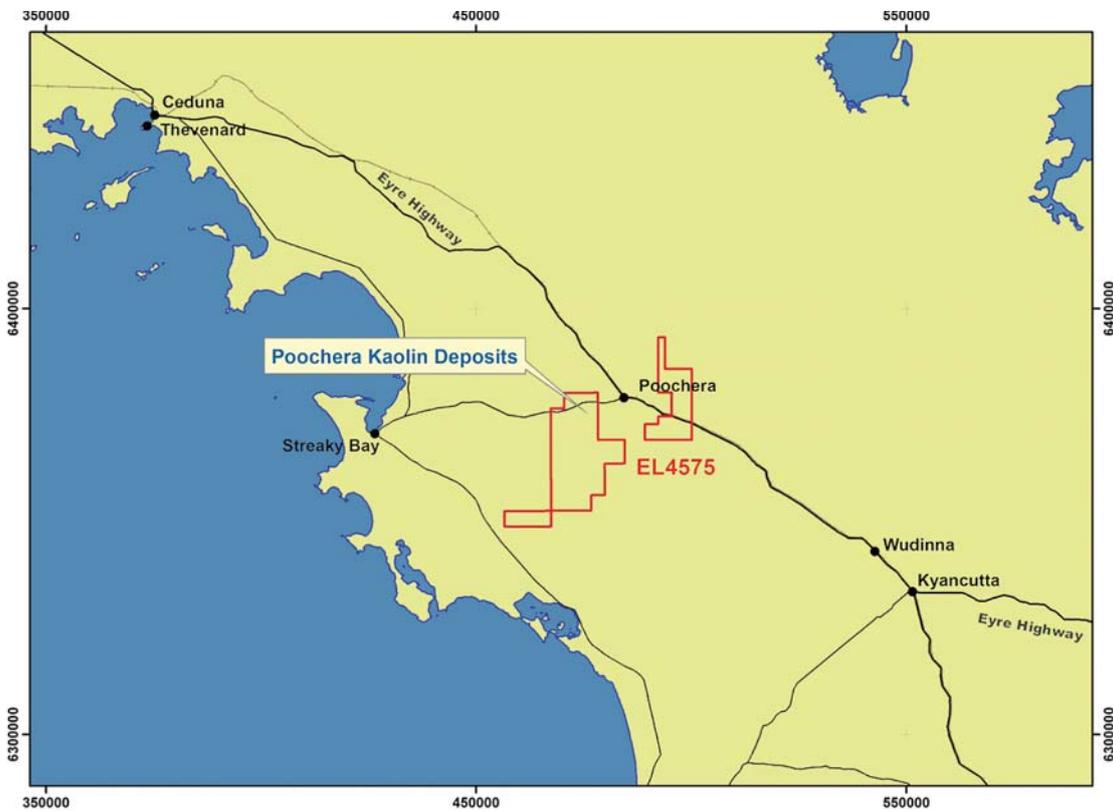


Figure 1: Location of EL4575 Tootla and the Poochera Kaolin Deposits.

The Exploration Target for the Carey's Well deposit is additional to the recently announced Carey's Well Measured Resource of 16.3 million tonnes of "bright white" kaolinised granite (refer to Minotaur ASX release dated 8 February 2012). The Carey's Well Exploration Target is immediately adjacent to and contiguous with the Carey's Well Measured Resource (*Figure 3*), and the other deposits are within 10 kilometres (*Figures 2 and 3*).

### **ESTIMATION METHODOLOGY**

The Exploration Target is estimated from a review of all available data from 220 historical drill holes and a further 224 air core drill holes completed in 2011 by Minotaur at Carey's Well, Condooringie Well, Tomney East and Tootla (*Figure 2*). Data used included:

- Drill data and geological drill logs
- Sample preparation and physical testing data (kaolin content and brightness determinations)
- Chip tray photographs (for Minotaur drill holes).

Historical drill data are of lesser quality than the 2011 drill data because:

- Drill hole intervals are quite large and hole distribution is generally erratic
- Some uncertainty on drill collar locations
- Not all kaolin intervals were tested for kaolin content and brightness
- Various preparation, testing methods and instruments were used so that results are not necessarily comparable hole to hole.

For each historic drill hole, intervals of white kaolinised granite were estimated from the drill logs supported, where possible, by the results of any testing of physical parameters undertaken on drill samples. Where more than one interval of white kaolinised granite occurred within a drill hole, a total intercept of white kaolinised granite was calculated provided that the intervals were no more than 5m apart. For intervals greater than 5m apart, only the upper interval of white kaolinised granite was used.

The analysis of historic data was supported by test results from Minotaur's 2011 air core drilling program at Carey's Well, Condooringie Well, Tootla and Tomney. The 2011 drilling program was undertaken by Johannsen Drilling using an Edson 2000 drilling rig. Air core hole diameter was 75mm. Some holes were precollared using a RAB open hole hammer down to the top of the kaolinised granite interval in order to allow penetration of hard bands of calcrete close to the surface and, where present, a silcrete horizon at the top of the kaolinised granite.

Complete one-metre intervals for each hole were retained in plastic bags. Geological logging was undertaken by Minotaur geologists and a visual colour estimate was recorded for each kaolinised granite sample. These colour estimates were used as the principal basis for selection of composite samples (maximum 5 metres) for further testing. All holes were located and levelled by differential GPS.

## ESTIMATION METHODOLOGY continued

The Minotaur drill holes provided accurate test data but the holes only cover a limited portion of the Exploration Target areas. Relevant work on Minotaur drill samples included preparation of a minus 45 micron kaolin fraction for each sample via a standardised processing technique through Minotaur's pilot plant at Streaky Bay. ISO Brightness ( $R_{457}$ ) and Colour ( $L^*a^*b^*$ ) measurements were undertaken in accordance with TAPPI Standard **T 534 om-03** using an Industry standard TechniBrite TB 1-C instrument at Minotaur's Streaky Bay laboratory.

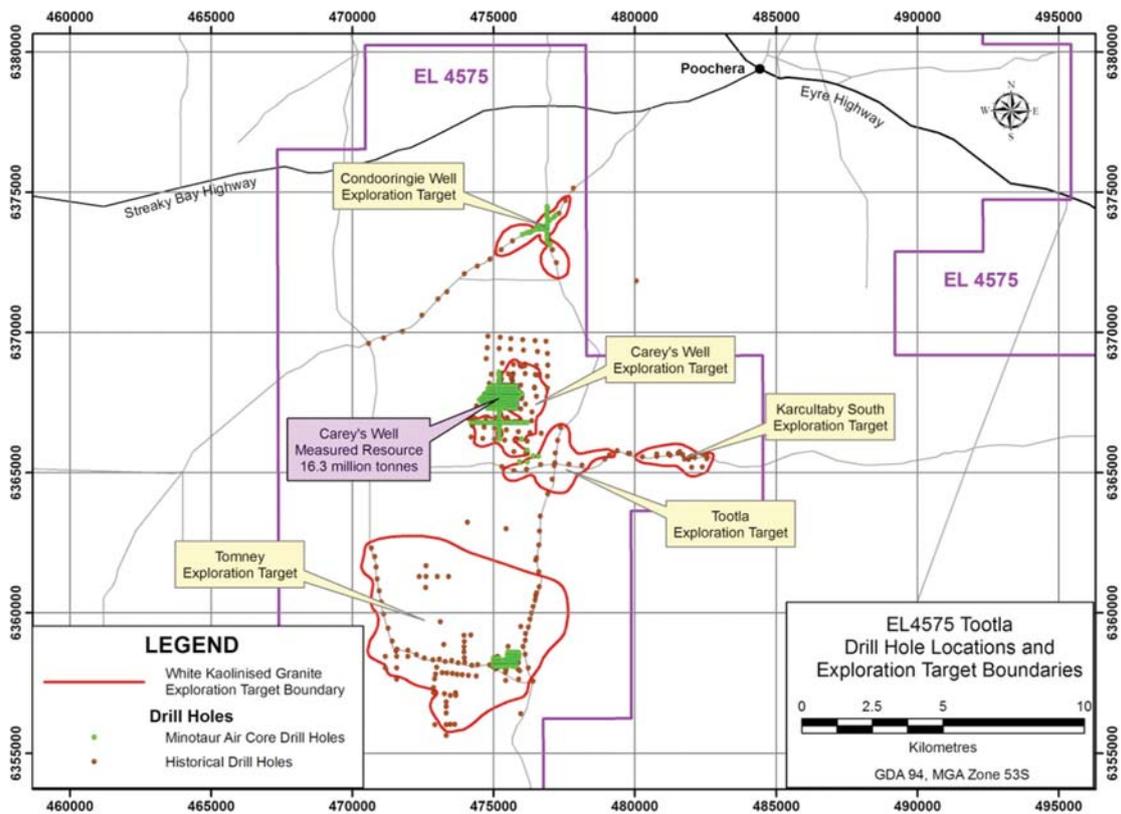


Figure 2: Poochera Kaolin Project: Drill hole locations and boundaries of the kaolin deposits incorporated in the Exploration Target.

Drill hole intercepts of white kaolinised granite were contoured and thickness estimates calculated. To estimate tonnages, a Specific Gravity (SG) of dry, in-situ, kaolinised granite of 1.7 was used (in accordance with SG determinations from Carey's Well dry kaolinised granite bulk samples).

The kaolinised granite has developed as a simple, *in-situ*, weathered mantle, of varying thickness, over fresh, coarse-grained granite and older metamorphic rocks. Variation in source rocks may be a contributing factor to variation in kaolin form and quality. These variations may have positive implications for a range of potential niche kaolin markets.

Comprehensive testing of Carey's Well "bright white" kaolin has confirmed its suitability to produce a range of premium hydrous and calcined products for the paint, paper and polymer industries (refer to Minotaur ASX release dated 16 September 2010). Testing of kaolin from the Tomney deposit by Normandy Industrial Minerals Ltd concluded that the Tomney deposit has potential as high quality ceramic kaolin comparable in quality to the premium clays from New Zealand and England.

ESTIMATION METHODOLOGY continued

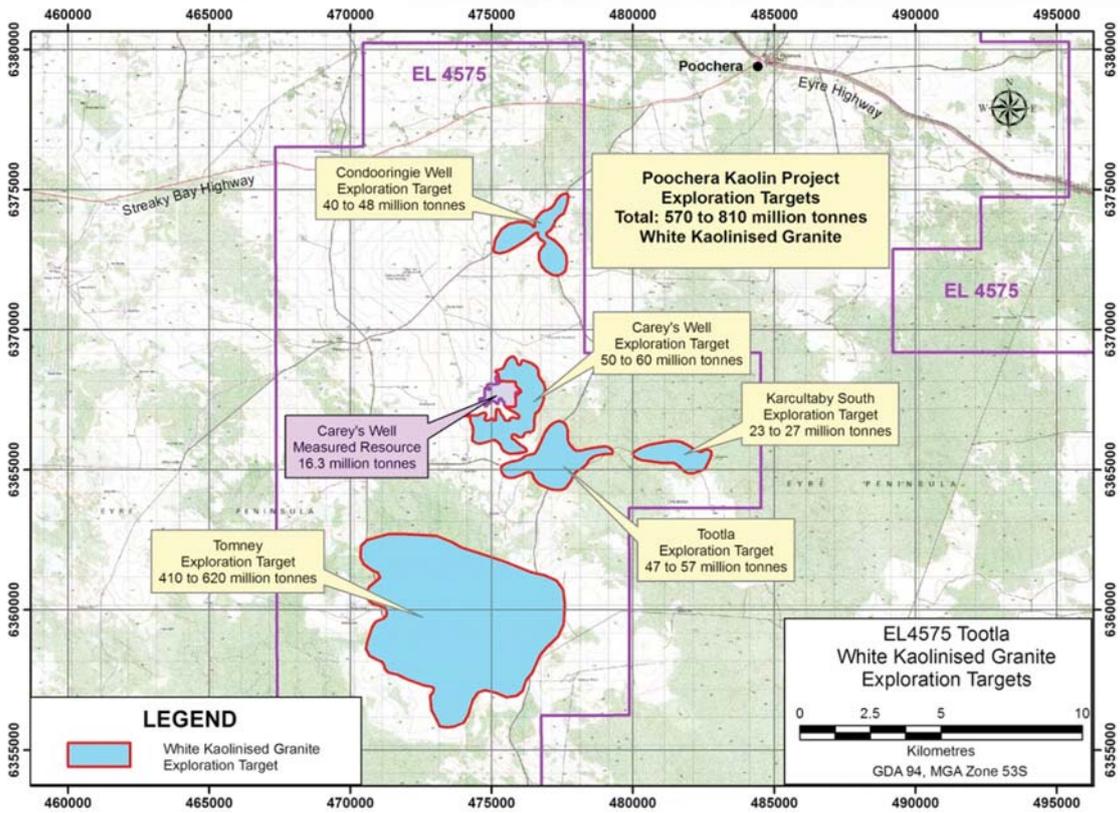


Figure 3: Poochera Kaolin Project: Exploration Target summary.

Data in this document that relates to the Exploration Target for the Poochera Kaolin Deposits are based on information evaluated by Mr Lewis Barnes who is a Member of the Australian Institute of Geoscientists and who 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 a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Barnes is a contract employee of Minotaur Exploration Ltd and he consents to the inclusion in the document of the Exploration Targets in the form and context in which they appear.

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