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The Company Announcements Office

**Australian Stock Exchange Limited**

## **Minotaur to Fast Track Kaolin Development Study**

Following a positive consultant's review of the Poochera Kaolin Project, Minotaur Exploration has decided to accelerate feasibility studies into potential development options.

The Poochera Kaolin Project is located within Minotaur's Exploration licence EL 3366, on western Eyre Peninsula, 50 kilometres east of Streaky Bay.

Four separate deposits of kaolin in this tenement (Tomney, Carey's Well, Condoringie and Karcultaby) were extensively drilled and tested in the 1990's, largely by Normandy Industrial Minerals Ltd (NIML). Very large deposits of shallow kaolinised granite, developed by deep weathering of bedrock were outlined.

Testing of the deposits by NIML for their suitability for the global high value, processed kaolin market confirmed that the Tomney deposit has potential as high quality ceramic kaolin comparable in quality to premium clays from New Zealand and England. At Tomney, an inferred resource of 150 million tonnes of kaolinised granite is estimated (Barnes, 2008). At the Carey's Well deposit, an inferred resource of 75 million tonnes of fully kaolinised granite is estimated (see resource statement). Within this body lies an inferred resource of 19.6 million tonnes of white kaolinised granite, including 9 million tonnes of "Bright White" kaolinised granite defined by specific physical and chemical characteristics.

Past testing of bulk samples of Bright White Kaolin from the Carey's Well deposit confirmed its amenability to calcining, producing a product that compares favourably with the highest grade calcined kaolin currently available commercially and is suitable for glossy paper coating and pigment extender in paint and plastic as summarized below.

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PROPERTY	CAREY'S WELL CALCINED KAOLIN	PREMIUM CALCINED KAOLIN
ISO Brightness R <sub>457nm</sub>	96.5	90 - 92
Yellowness CIE b* value	+0.85	+3.04
Particle sizing <5µm <2µm <1µm	89% 67% 52%	80 – 100%
Cumulative residue %	<0.01	0.06
Einlehner Abrasion mg	25.9	~20
Refractive index	1.56	1.56
Oil absorption	80	100
Specific Gravity	2.68	2.74
Bulk density	0.38	0.38
pH	6.6	6 – 7.5
Residue on 335 mesh	<0.001%	Max 0.04%

Since the extensive work undertaken by NIML in the 1990's, demand for high quality calcined kaolin has grown significantly. In addition, quantity and quality water that were limiting factors at Poochera in the past may no longer be constraints given technological advances in desalination and renewable energy.

Minotaur is reviewing the market for high quality kaolin, and processing and development options, as well as the impact of new water and energy technologies. A drilling program is planned to obtain bulk samples for further product evaluation and marketing.

### Carey's Well Resource Statement

Resource estimates for the Carey's Well deposit are based on all available geological, drill logging and chemical properties data as of April 29<sup>th</sup> 2008. The data are contained within Open File Envelope 6695 held by Primary Industries and Resources SA, and were converted into digital form by Minotaur employees. A total of 69 drill holes were used for the resource estimation. Mainly qualitative data was used in the determination of the spatial extent of the fully kaolinised granite and white kaolinised granite bodies. The qualitative data is in the form of detailed drill hole logs that include depth, interval, extent and colour of kaolinisation. No internal dilution exists within the kaolin bodies. Tonnage estimates use a density of 1.4 for kaolinised granite.

Inferred resources for the Carey's Well Deposit are tabulated below:

Location	Description	Tonnes (Mt)	Resource Category
Carey's Well	Fully Kaolinised Granite	75.0	Inferred
Carey's Well	White Kaolinised Granite	19.6	Inferred
Carey's Well	Bright White Kaolinised Granite	9.0	Inferred

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The body of **fully kaolinised** granite has a length in the north-south direction of 4.1 kilometres and a width that varies from 1 to 2.5 kilometres. The thickness of the kaolinised granite varies from 1 to 28 metres and averages approximately 11 metres. In general, the transition from fully kaolinised granite to fresh granite is extremely sharp. Colour of the kaolin was not a criteria used in the resource estimation of fully kaolinised granite.

Lying within the kaolinised granite is a body of **white kaolinised** granite. The body of white kaolinised granite has a length in the north-south direction of 2.2 kilometres and an average width of 1.2 kilometres. The thickness of white kaolinised granite varies from 1 to 10 metres and averages approximately 5 metres.

Within the white kaolinised granite, NIML (Barnes, 2008; Open File Envelope No. 6695) used a range of physical and chemical parameters to define an inferred resource of 9 million tonnes of “**Bright White**” kaolin. This resource estimate used the following cut-offs:

- Minimum thickness of kaolinised granite – 8m.
- Minimum raw ISO Brightness ( $R_{457}$ ) of 80
- Overburden to ore ratio <2:1
- Halloysite content <5%.

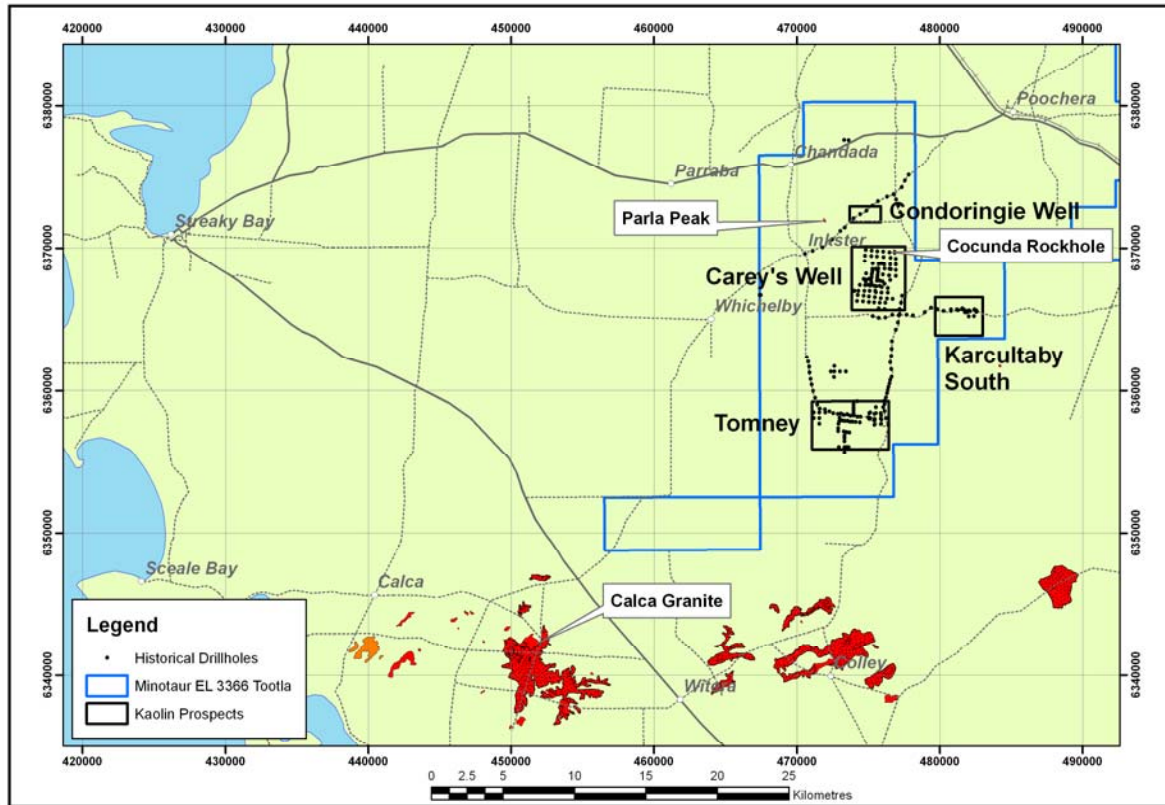
## References

Barnes, L. (2008). Report to Minotaur Exploration Ltd, Poochera Kaolin Project, Eyre Peninsula, South Australia

South Australian Paper Clays and Commercial Minerals Ltd (2001). Poochera Kaolin Project. Progress, Annual and Relinquishment reports for the period 12/5/86 to 28/3/2002. Open File Envelope NO. 6695. Primary Industries and Resources SA.

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr A. P. Belperio and Mr M. Burdett, each full-time employees of the Company.

Dr A. P. Belperio is a Fellow of the Australasian Institute of Mining and Metallurgy and has a minimum of 5 years experience which is relevant to the style of mineralization 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". Dr A. P. Belperio consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



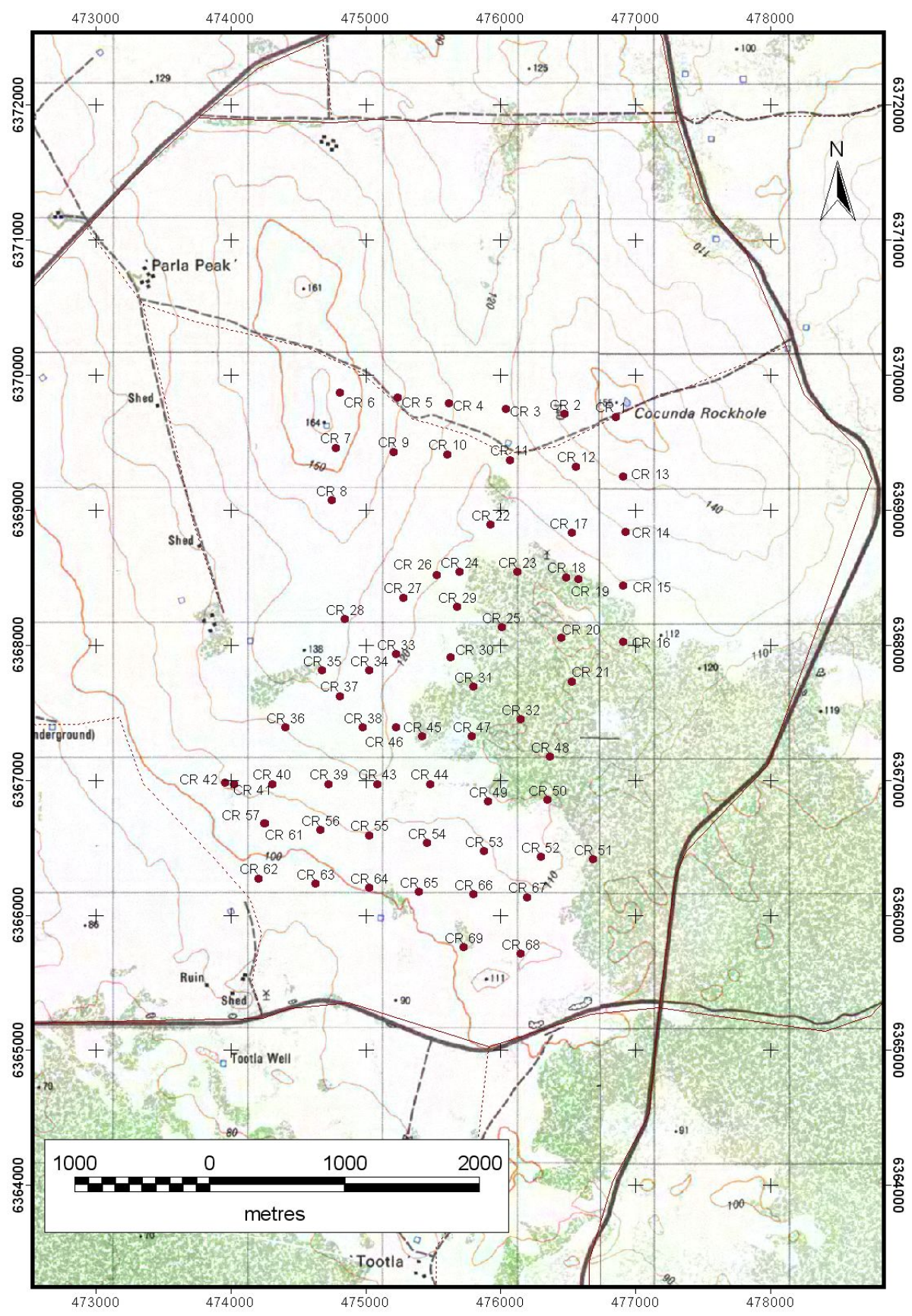
**Location Plan – Exploration Licence EL3366 and key kaolin prospects**

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Carey's Well Deposit – drillhole location plan

