

ASX RELEASE



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MINOTAUR EXPLORATION LIMITED ACN 108 483 601 **ASX: MEP**

247 GREENHILL ROAD, DULWICH, SOUTH AUSTRALIA 5065 T (61 8) 8366 6000 F (61 8) 8366 6001 E admin@minotaurexploration.com.au
www.minotaurexploration.com.au

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MAIDEN MEASURED RESOURCE FOR SA KAOLIN PROJECT

HIGHLIGHTS

- Maiden Measured resource for Minotaur's 100% owned kaolin resource at Carey's Well in South Australia.
- Carey's Well is one of several co-located kaolin deposits in EL 4575, near Poochera.
- Infill drilling and processing has allowed most of the Carey's Well "bright white" kaolin resource to be upgraded from *Inferred* to *Measured* status.
- A Measured Resource of 16.3 million tonnes of "bright white" kaolinised granite is estimated using an ISO Brightness R_{457} cut-off of 75 for minus 45 micron kaolin product.
- The 16.3 million tonnes of in situ "bright white" kaolinised granite will yield 8.0 million tonnes of minus 45 micron quality kaolin product.

Minotaur Exploration Limited ('Minotaur', ASX Code: MEP) is pleased to report a significant resource upgrade to deliver the Company's maiden JORC Measured kaolin resource at the Carey's Well project near Poochera on the west coast of SA's Eyre Peninsula.

The upgrade and Measured resource milestone is a result of infill drilling at the Carey's Well kaolin deposit and sample processing through Minotaur's own purpose built pilot plant installed nearby.

The Carey's Well kaolin deposit is one of a number of kaolin deposits in the Poochera district on EL 4575 held by the Company's wholly owned subsidiary Great Southern Kaolin Pty Ltd.

A summary of the JORC statement is given below and the detailed JORC report is contained in the Appendix to this release.

JORC category	ISO BRIGHTNESS R_{457}	TONNES Kaolinised Granite (million)	AVERAGE -45 μ m kaolin content %	TONNES -45 μ m kaolin (million)
Measured	>75	16.3	49	8.0
Inferred	>80	3.7	40	1.5
Total	>75	20	48	8.0

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For further information contact:

Andrew Woskett
(Managing Director)

or

Tony Belperio
(Exploration Director)
Minotaur Exploration Ltd
T +61 8 8366-6000

APPENDIX JORC RESOURCE UPGRADE

CAREY'S WELL KAOLIN DEPOSIT

Previous estimates¹ of Carey's Well kaolin defined an Inferred resource of 20 million tonnes of "bright white" kaolinised granite with raw ISO brightness (R_{457}) >80 (Figure 1). This material lies within a larger Inferred resource of 47.2 million tonnes of white to off-white kaolinised granite approximately 4km long and 2km wide with average thickness of about 20 metres².

Infill drilling during 2011 over an area of about 96 hectares within the Inferred resource (Figure 2) has allowed a Measured resource of 16.3 million tonnes of "bright white" kaolinised granite to be estimated based on a range of raw ISO brightness values and iron and titanium content. The 16.3 million tonnes of "bright white" kaolinised granite will yield 8.0 million tonnes of -45 micron kaolin (Table 1).

The Measured kaolin resource is subdivided into a number of bodies of differing brightness categories based on ISO brightness values (Table 1):

- Ultra high brightness kaolin with ISO Brightness >84 and very low iron and titanium content.
- High brightness kaolin with ISO Brightness >80 but <84 with low iron and titanium content.
- Moderate brightness kaolin with ISO Brightness >75 but <80 with low iron and titanium content.

Table 1 – Carey's Well Kaolin Deposit Resource Estimate

Brightness Category	ISO BRIGHTNESS R_{457}	JORC Resource Category	TONNES Kaolinised Granite* (million)	AVERAGE -45 μ m kaolin content (%)	TONNES -45 μ m kaolin (million)	AVE# Fe %	AVE# Ti %
Ultra High	>84	Measured	6.9	59	4.1	0.28	0.21
High	>80 <84	Measured	4.9	54	2.6	0.33	0.23
Moderate	>75 <80	Measured	4.5	29	1.3	0.42	0.19
Total Bright White	>75	Measured	16.3	49	8.0	0.32	0.21

* Tonnage estimate based on Specific Gravity of dry kaolinised granite of 1.7 (as determined from 7 samples of Carey's Well kaolinised granite).

Average Fe% and Ti% determined from ALS Minerals Laboratories ICP-MS data.

¹ Refer Minotaur ASX releases of 2 May 2008 and 10 February 2009

² Resource doubled for Kaolin Project, MEP ASX release dated 10 February 2009

CAREY'S WELL KAOLIN DEPOSIT continued

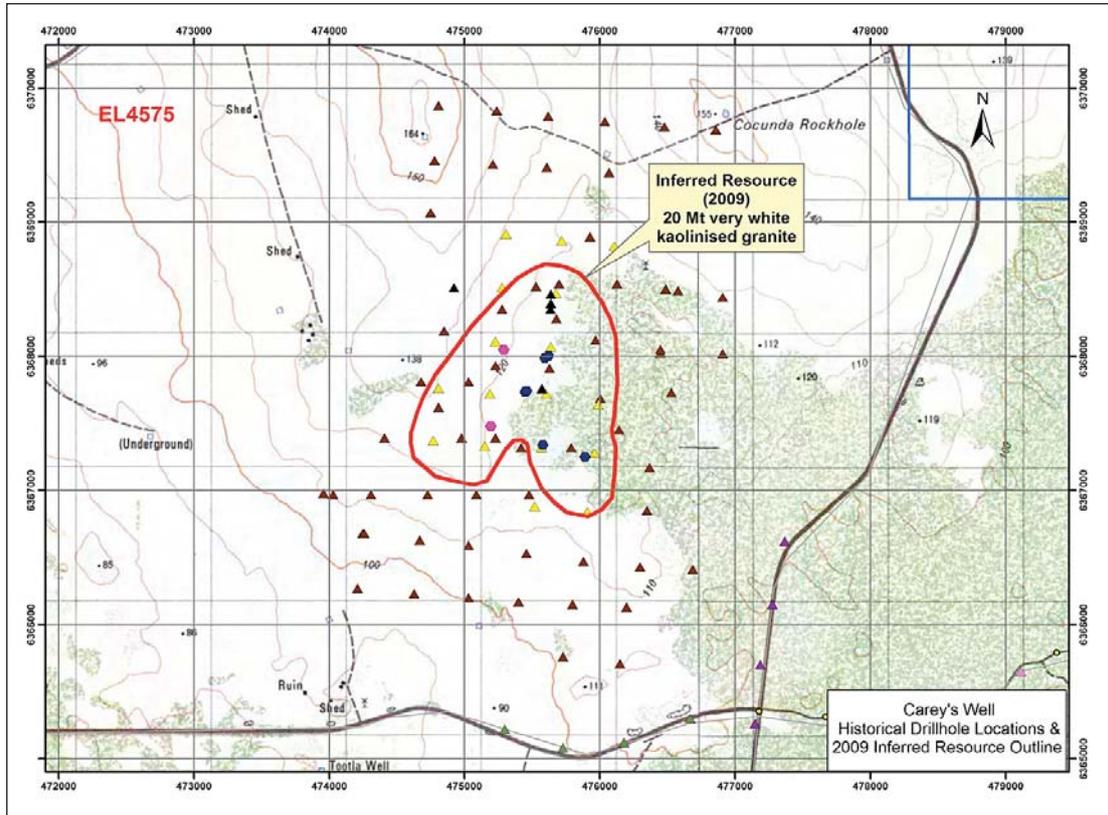


Figure 1: Carey's Well outline of 2009 Inferred resource and historical drillhole locations.

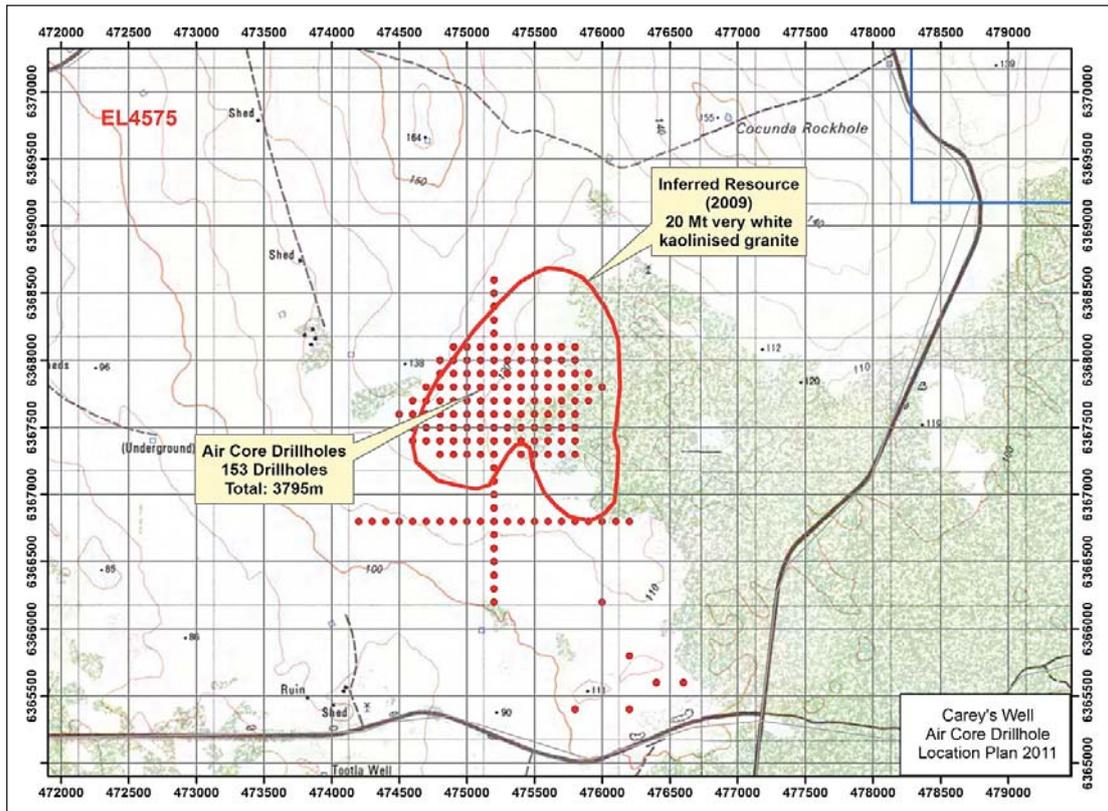


Figure 2: Carey's Well air core drillhole location plan 2011.

The Measured resource is open to both the southeast and the northeast; further close spaced drilling will be required to fully define northern, southern and eastern limits of the resource. The limits of the Measured resource as defined by the 2011 air core drilling program, compared to the Inferred resource as defined in 2009, are shown in *Figure 3*.

Within the resource boundary, drilling was carried out at 100 metre centres. Differential GPS surveys accurately located and levelled all drillholes. Within the kaolinised granite zone samples were taken at 1 metre intervals. Based on drill logs and visual determination of colour, samples were composited, with a maximum composite interval of 5 metres. A total of 270 composite samples were prepared from drill holes within the area. Twenty-four composite samples were duplicated, and processed as separate samples to verify sample preparation and test procedures. Sample preparation and initial testing was carried out at Minotaur's pilot kaolin processing facility at Streaky Bay, South Australia.

Samples were processed by blunging at high solids content in a high shear blunger with sodium polyacrylate dispersant to ensure kaolin was fully dispersed and then screened and decanted to remove quartz and mica, to produce a minus 45 micron kaolin sample. Particle sizing was confirmed (>99% minus 45 micron) on site using a Sedigraph 5100 particle size analyser. Based on the measured solids content of the blunged kaolinised granite slurry, the minus 45 micron kaolin percentage was determined by difference, after the plus 45 micron percentage was determined by wet screening and weighing.

ISO Brightness (R_{457}) and $L^*a^*b^*$ colour of the dried minus 45 micron kaolin powder were determined according to TAPPI standard T 534 om-03 using a Technibrite 1B spectrophotometer. The measured parameters of R_{457} brightness, L, a^* and b^* are internationally accepted spectral criteria for determinations of brightness, whiteness, redness and yellowness, respectively.

Subsamples of minus 45 micron kaolin were forwarded to:

- ALS Minerals laboratories in Adelaide for determination of 60 elements using method ME-MS61r (four acid digestion, ICP-MS),
- CSIRO, Division of Land and Water, Urbrae for XRF analysis of 11 major elements plus Cl and determination of mineralogy by XRD.

The CSIRO data confirm that the minus 45 micron fraction is dominantly kaolin (kaolinite with halloysite in varying abundance) with traces of quartz, mica and microcline feldspar.

All drilling and testing data has been validated within the Minotaur Exploration GBIS samples database. The kaolin resource block model and grade estimation were completed by Minotaur Exploration using Vulcan software. The resource model is based on geological interpretations on north-south and east-west sections at 100m centres through the resource definition area. *Figures 4 and 5* demonstrate typical N-S and E-W sections through the defined resource.

CAREY'S WELL KAOLIN DEPOSIT continued

ISO Brightness (R_{457}) data were used to define the modelled limits of the Carey's Well kaolin deposit i.e. Ultra High Brightness $>84 R_{457}$, High Brightness $>80 <84 R_{457}$ and Moderate Brightness $>75 <80 R_{457}$ (Table 1). Modelled surfaces for the base of overburden and the base of kaolinised granite were used to constrain $<75 R_{457}$ kaolinised granite. Downhole data were composited to 4 metre intervals within the four R_{457} limited domains and used to estimate variables throughout the block model using the Inverse Distance Squared method. Variables modelled include minus 45 micron percentage (kaolin percentage), Fe% ICP-MS data and Ti% ICP-MS data.

Four estimation runs were undertaken with a minimum search ellipse of 150m by 150m by 8m (minimum 3 samples for estimate) and a maximum search ellipse of 300m by 300m by 24m (minimum 2 samples for estimate). A block size of 50m by 50m by 5m was used to define the flat broad kaolinised zone. Sub-blocks of 10m by 10m by 1m were used to define the margins of both the kaolinised material and the R_{457} domains.

The resource estimates are reported for $>75 R_{457}$ within the defined ISO brightness domains to 50m beyond the extent of drilling along north-south and east-west sections. The resource estimates are classified as Measured, based on criteria specified in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code").

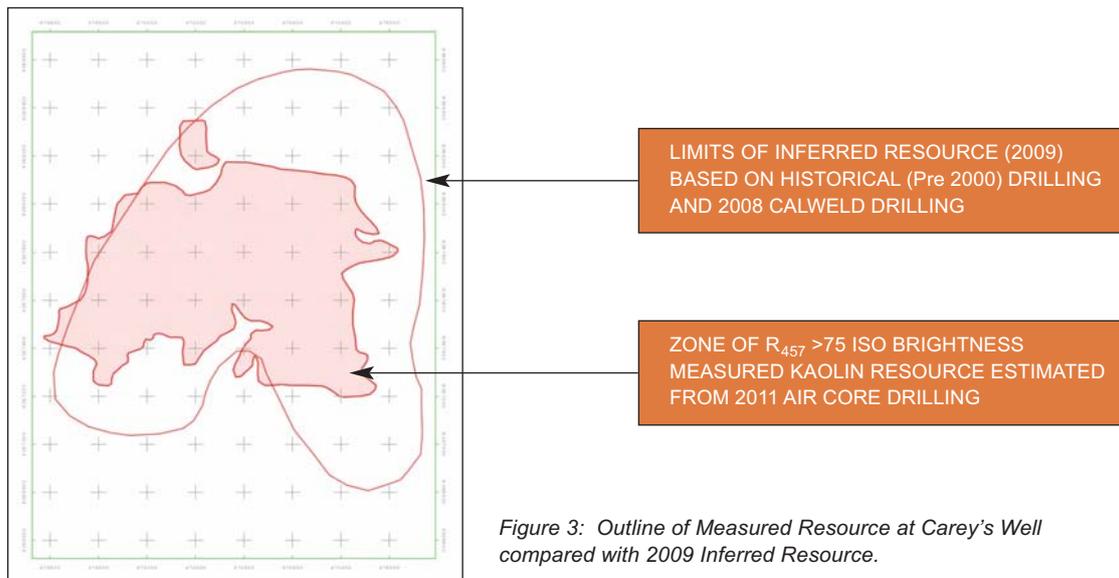


Figure 3: Outline of Measured Resource at Carey's Well compared with 2009 Inferred Resource.

CAREY'S WELL KAOLIN DEPOSIT continued

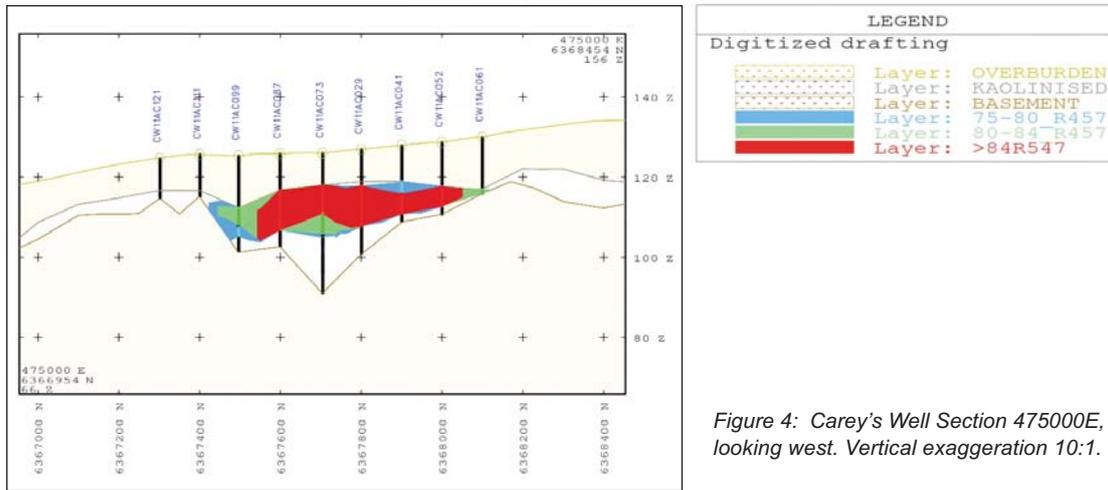


Figure 4: Carey's Well Section 475000E, looking west. Vertical exaggeration 10:1.

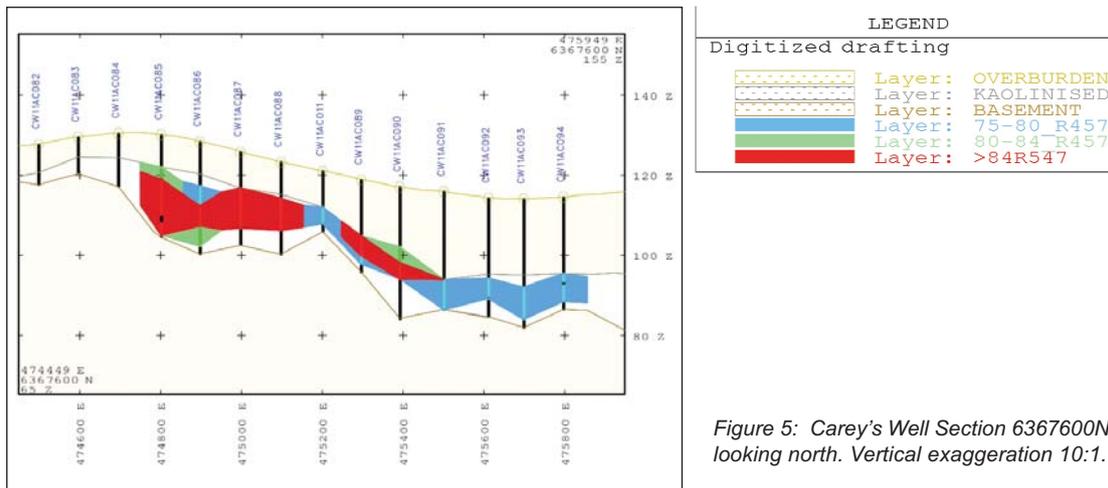


Figure 5: Carey's Well Section 6367600N, looking north. Vertical exaggeration 10:1.

Data in this document that relates to Exploration Data and Mineral Resource Estimates for the Carey's Well Kaolin Deposit is based on information evaluated by Mr Lewis Barnes who is a Member of 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 Competent Persons 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 Pty Ltd and he consents to the inclusion in the document of the Mineral Resources in the form and context in which they appear.

The geological setting, style and continuity of the Carey's Well kaolin deposit have been reviewed externally and independently by Ian P. Youles (B.Sc., A.R.S.M., FAusIMM, MIMMM, C.Eng), who considered that reasonable prospects exist for eventual economic extraction of the Measured Mineral Resource. Mr. Ian Youles has sufficient experience, which is 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'. Mr. Ian Youles consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.