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ASX:CUL

15<sup>th</sup> April 2011

## ASX ANNOUNCEMENT

### **Applications for coal and phosphate exploration, near Carnarvon, Western Australia.**

Cullen Resources Limited (Cullen) has applied for two new exploration licences, ELAs 09/1766 and 1885, located approximately 100km northeast of Carnarvon and 40km east of the Coastal Highway, in Western Australia. The new application areas are located in the Merlinleigh Sub-basin, and Cullen considers they are prospective for coal and phosphate.

According to Crostella (1995) the entire Permian sequence of the Merlinleigh and Byro Sub-basins, correlates with the Permian sequence in the Perth Basin, and the coal-forming environment of the Irwin River Coal Measures (Perth Basin) is similar to the Wooramel Group (Carnarvon Basin).

On ELA09/1766, a coal occurrence is reported in the WAMEX database ([www.wamex.com.au](http://www.wamex.com.au)). Drilling by CRA Exploration Pty Ltd in 1981, targeting kimberlite and diamonds, intersected 34m of shale, with coal contents between 15-50%. These intersections occur from 124m depth in the Permian Wooramel Group (rotary percussion drill hole, "M154", as reported by CRA). No specific details of the coal quality were reported, however, earlier drilling by BHP Ltd at Wandagee in 1975, located approximately 25km NNW of hole "M154", intersected a thin (0.75m) coal seam that was classified as para-bituminous with coking properties and 51-53% vitrinite. It is therefore conceivable that potential coal seams within Cullen's tenements may exhibit similar characteristics/qualities, possibly due to the intrusion of younger alkaline volcanic rocks that may have upgraded any Permian coal in their vicinity. Drill hole "M154" that intersected coal on ELA09/1766, terminated in the contact of coal-bearing sediments and a possible alkaline rock (logged as kimberlite?) with phlogopite (mica).

In addition to the coal occurrence, WAMEX also reports three phosphate occurrences on ELA09/1766. Collophane nodules at surface around Wandinny Dam were followed up by Cyanamid Australia Pty Ltd with drilling in 1966 which intersected horizons containing nodules with **24-27% P<sub>2</sub>O<sub>5</sub>**. The phosphate nodules occur along the contact of the early to late Cretaceous Winning Group sediments and the late Cretaceous Toolonga Calcilutite. Stratigraphically, this is a similar position to the Cardabia Phosphate Project (South Boulder Mines Ltd: ASX:STB) located approximately 120km to the north northwest. The phosphate-bearing sequence overlies the Permian, potentially coal-bearing, strata (see Figure).

Following grant of the tenements and all statutory approvals, Cullen intends to launch a drilling programme to explore both the phosphate and the coal potential of the tenements to obtain good qualitative and quantitative information.

Crostella, A., 1995, Structural evolution and hydrocarbon potential of the Merlinleigh and Byro Sub-basins, Carnarvon Basin, Western Australia: Western Australia Geological Survey, Report 45, 36p.

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Cullen views the Carnarvon coal and phosphate project as a strong addition to its coal exploration portfolio that comprises:

- Granted tenements and applications in the **Canning Basin** (JV with Advaita, a Singapore-based, India focused energy company, see ASX release 15<sup>th</sup> July, 2010) with drilling to commence this field season as soon as ground access and drill rig availability permits;
- Applications in the **Millungera and Galilee Basins** of north west Queensland (ASX release 29<sup>th</sup> October, 2010); and,
- Applications in the **Karoo Basin** in Namibia (ASX release 14<sup>th</sup> April, 2011).

These project areas cover a total of ~20,000 km<sup>2</sup>.

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**ATTRIBUTION - Competent Person Statement**

*The information in this report that relates to Exploration Results is based on information compiled by Dr Chris Ringrose, Managing Director, Cullen Resources Ltd who is a Member of the Australian Institute of Mining and Metallurgy. Dr. Ringrose is a full time employee of Cullen Resources Ltd. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined by the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr. Ringrose consents to the report being issued in the form and context in which it appears.*

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