



CULLEN RESOURCES LIMITED

ABN 46 006 045 790

[www.cullenresources.com.au](http://www.cullenresources.com.au)

ASX Symbol: CUL

ASX ANNOUNCEMENT

17 January 2013

**AIRBORNE EM SURVEY PLANNED FOR  
NICKEL SULPHIDE TARGETS IN HIGHLY - PROSPECTIVE MT EUREKA  
PROJECT, NORTH EASTERN GOLDFIELDS, WA**

**Highlights**

- Discovery of nickel sulphides by Rox Resources Limited at Fisher East greatly enhances prospectivity of Cullen's Mt Eureka Project to the north
- Prospective Fisher East ultramafics interpreted by Cullen to extend into its E53/1209 and ELA 53/1637 tenements and beyond
- One of the largest VTEM anomalies outlined by Rox's geophysical survey on their Mt Fisher East Project area, appears to extend onto Cullen's ELA53/1637 tenement and is an immediate target upon tenement granting
- An airborne EM geophysical survey has now been scheduled, to identify potential nickel sulphide targets across some 10km of untested stratigraphy in the southern part of Cullen's tenure, with target prioritization and drill testing to follow as soon as possible (pending all statutory approvals and heritage surveys)
- Appraisal of previous nickel sulphide exploration at Mt Eureka (WMC/BHP Billiton 2001-10) by Newexco (2010) has highlighted 3 EM conductors as priority drill targets in the northern part of Cullen's tenure.

**Background**

Cullen Resources Limited (Cullen) holds (100%) a large area (~650km<sup>2</sup>) of approved tenure (E53/1299, 1300, 1209 and PLs 53/1264, 1265) and applications (ELAs 53/1630, 1635, and 1637) in the **Mt Eureka** Greenstone Belt in the North Eastern Goldfields of Western Australia, which includes several targets for nickel sulphides. The high prospectivity of Cullen's ground is confirmed by the discovery of nickel sulphides by Rox Resources Limited (Rox) at **Fisher East** which adjoins Cullen's ground to the south (ASX releases by Rox, ASX: RXL, of 19/12/2012 and 14/1/2013) - see Figure.

Unit 4, 7 Hardy Street  
South Perth | Western Australia 6151  
Telephone: +61 8 9474 5511 | Facsimile: +61 8 9474 5588  
E-mail: [cullen@cullenresources.com.au](mailto:cullen@cullenresources.com.au)  
Website: [www.cullenresources.com.au](http://www.cullenresources.com.au)

For personal use only

---

## Untested prospective stratigraphy for nickel sulphides at Mt Eureka

The discovery of nickel sulphides in RC drilling has been reported by Rox at the Camelwood Prospect, located approximately 3km south of Cullen's ELA53/1637 boundary, in their Mt Fisher East project area. This discovery highlights a prospective ultramafic horizon and stratigraphic package which is interpreted by Cullen, from in-house aeromagnetic data, to extend into Cullen's tenements E53/1209 and ELA 53/1637, and beyond. This easternmost part of the Mt Eureka Greenstone Belt stratigraphy is untested for nickel sulphides for at least 10km to the north of the Rox Resources Limited/Cullen boundary in Cullen's ground – see Figure.

### Drill-ready nickel targets from previous exploration

The westernmost of the interpreted ultramafic horizons of the Mt Eureka Greenstone Belt within E53/1209 has previously been explored by a Cullen/Independence Group Limited Joint Venture (2004 - 2007) – a re-appraisal of this work is underway. WMC Limited and later BHP Billiton in joint venture with Cullen discovered nickel sulphides at the "AK47" prospect and drilled other EM anomalies generated from a combination of airborne and ground geophysics when exploring the Mt Eureka Greenstone Belt ultramafics in general. Consulting group Newexco Services Pty Ltd (Newexco, 2010) has completed an appraisal of all geophysical data from previous nickel exploration within the Mt Eureka Greenstone Belt completed by WMC and BHP Billiton; this work has highlighted several EM conductors that warrant further investigation.

Three of these conductors, "H3", "H4" and "H6", were rated by Newexco as immediate drill targets for massive sulphides as follows:

- **Conductor "H3"** - previously tested by a single hole which, according to Newexco, fell short of the modeled conductor.
- **Conductor "H4"** - appears to have significant strike extent and has not been adequately tested by the single hole completed to date – "GBD015" (BHP Billiton, 2009), which had a best result of 0.5m @ 0.95% Ni and 0.29% Cu, and ~5m @ ~0.3% Cu near the bottom of hole. The most conductive source of the downhole EM from GBD 15 is located approximately 50m below this hole and is a prime target for follow-up drilling.
- **Conductor "H6"** - is geophysically analogous to target H4 yet it remains untested by drilling. The H6 anomaly is strike-extensive and a moving-loop EM survey over this conductor has accurately verified the plate geometry of the source.

All three conductors lie in the northern part of the Mt Eureka Greenstone Belt and there are other significant nickel anomalies and prospects in Cullen's tenure indicated by previous exploration including:

- **"AK47"** - 0.2m @ 1.93% Ni from 140m, GBD 002 – WMC, 2003;
- **"95MER003"** - the eastern RAB anomaly (11m @ 0.86 % Ni – Dominion 1995), possibly on the same stratigraphic horizon as the Fisher East nickel sulphides discovery and some 20km to the north; and
- Several VTEM and ground EM anomalies near **"GBD 15"**, where further RC drilling and/or geophysical work is required – see Figure.

---

## Summary

Cullen sees excellent potential in the Mt Eureka Greenstone Belt to host economic Ni and/or Ni – Cu mineralization within the mafic-ultramafic lithologies. The area's high prospectivity based on the occurrence of massive nickel sulphides at the "AK47" prospect within the centre of Cullen's project area, and several other strongly anomalous nickel drill intersections from previous work, has been further enhanced by the discovery of nickel sulphides at Fisher East just south of Cullen's ground.

Cullen now plans to complete an airborne EM survey in the current Quarter (weather permitting); finalize a heritage agreement to allow ELA 53/1637 to be granted; and undertake a programme of target prioritization and drill testing across the various targets and prospects following heritage surveying and DMP environmental approval.

Dr. Chris Ringrose, Managing Director

17 January, 2013

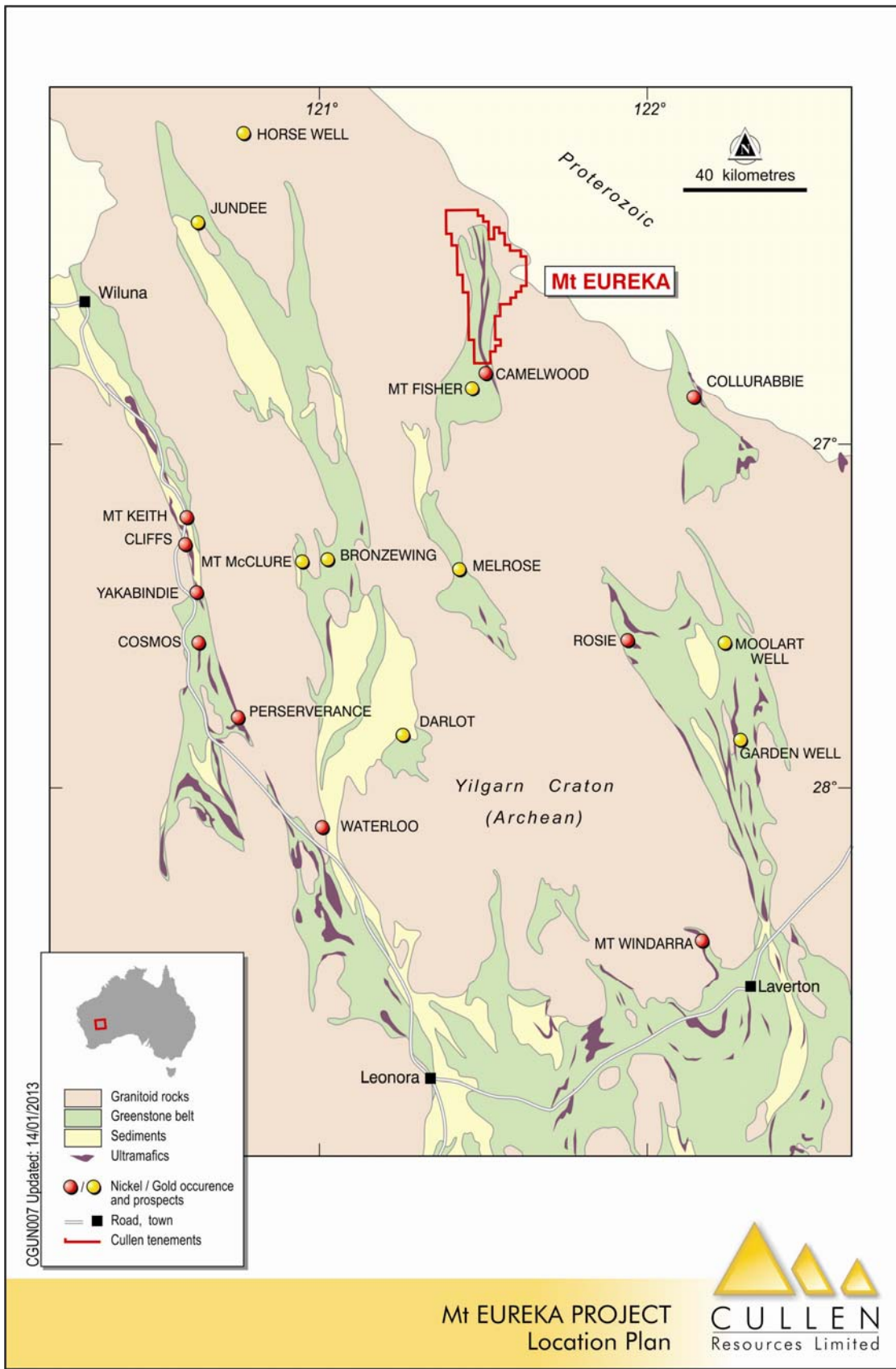
**ABOUT CULLEN:** Cullen is a Perth-based minerals explorer with a multi-commodity portfolio including projects managed through a number of JVs with key partners (FMG, APIJV (Aquila-AMCI), Hannans Reward, Northern Star, Matsa and Avocet), and a number of projects in its own right. The Company's strategy is to identify and build targets based on: data compilation, field reconnaissance and early-stage exploration (particularly geochemistry). Projects are sought for most commodities mainly in Australia but with selected consideration of overseas opportunities, with current activities in Namibia, Canada and Scandinavia. A number of Cullen's 100%-owned projects have now reached the target drill-testing stage.

### **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 Limited who is a Member of the Australasian Institute of Mining and Metallurgy. Dr. Ringrose is a full-time employee of Cullen Resources Limited. 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.*

### **Reference**

Ebner, N, 2010: A VTEM interpretation and Review of existing geophysics – E53/1299, E53/1300 , Newexco Services Pty Ltd (consultant's report).



Mt EUREKA PROJECT  
Location Plan



For personal use only

