



## Highly prospective new EM targets for nickel, Mt Eureka Project

### SUMMARY

- Two new, high-priority drill targets for nickel sulphides have been identified from ground EM survey data (eastern ultramafics)
- Two high-priority targets based on re-interpretation of previous VTEM and ground EM data (western ultramafics)
- Drilling to resume around mid-June 2014, to complete suspended programme and to test new high-priority targets
- Results of drilling completed prior to suspension of programme to be reported within 2-3 weeks

### Introduction

Cullen has identified a new target for nickel sulphides from recently completed ground EM surveying, and a review of VTEM and other ground EM data, collected in March and April 2013, has identified three other targets as high-priority. Cullen is planning to test these new targets, and complete the residual RC drilling from the recently suspended programme, caused by rain, as soon as practicable but once heritage surveying and statutory approvals have been received for the new targets. Cullen believes combining the remaining holes from the suspended programme with testing of the new targets is the most cost effective approach. These additional targets are considered by Cullen to be highly prospective as follows (see figures):

### Silverbark North Prospect area

#### 1. Eastern Ultramafics (E53/1209) – Strong new ground EM conductor identified

Cullen recently completed two lines of ground EM (Moving loop electromagnetic survey) across an outcrop of channel facies ultramafic, interpreted by Cullen to be part of a strike-extensive, thin ultramafic unit that may represent the same ultramafic horizon which hosts the Camelwood nickel sulphide deposit of Rox Resources Limited (Rox), located ~3km south of Cullen's tenement boundary. Cullen's ground EM survey detected a strong bedrock conductor. The modelled plate dips moderately to steeply east from ~180m depth and appears unrelated to the eastern BIF/Chert units at Silverbark North prospect. RC drilling to test this new conductor plate is planned.

#### 2. Eastern Ultramafics (E53/1637) – new ground EM conductor interpreted

A review of ground EM data along the strike of the abovementioned ultramafic has highlighted a second anomaly, and a conductor plate has been modelled and test hole positions identified.

#### 3. Western Ultramafics - south (E53/1209 and E53/1637)

A reinterpretation of the VTEM (March 2013) and ground EM data (April 2013) available for the western ultramafic corridor has been completed by Cullen's geophysical consultants.

This work has re-modelled the conductor trend and new test drill hole positions have been identified.

#### 4. Western Ultramafics - north (E53/1209)

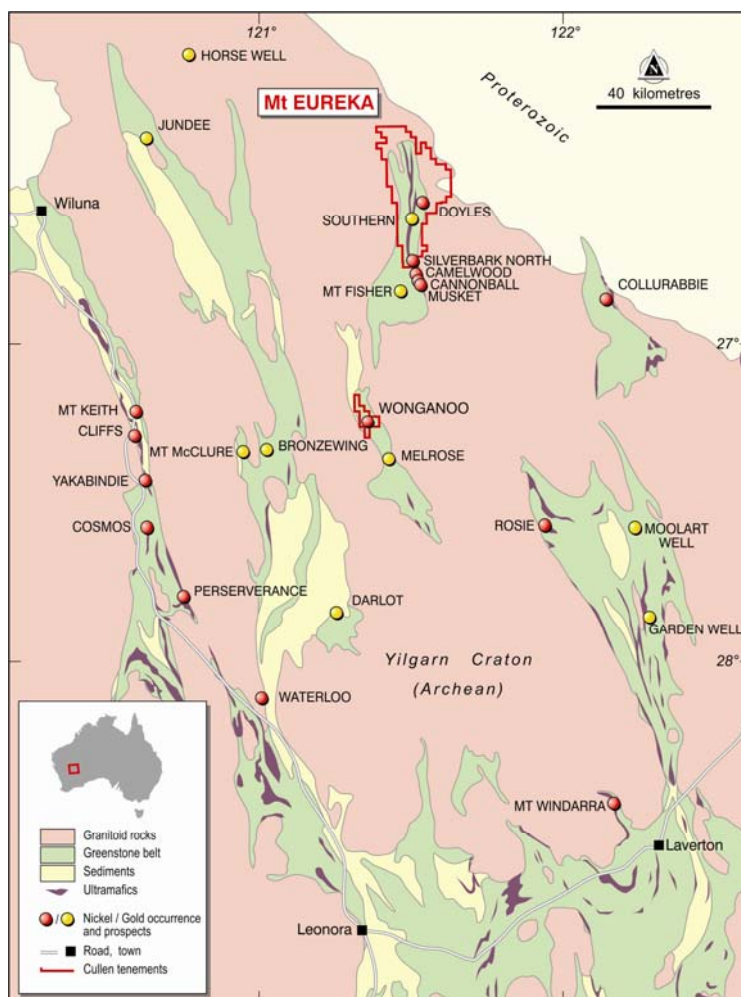
A second, discrete 1<sup>st</sup> order VTEM anomaly from Cullen’s March, 2013 survey occurs within the western ultramafics in a favourable structural and lithological position, based solely on aeromagnetics interpretation as the area is covered by sheetwash. Limited ground EM data from the surveying by a previous joint venture partner confirms a strong conductor is present. The VTEM data will be modelled for hole positioning at this target.

#### “AK47” Prospect

In addition to the above targets, Cullen is commencing a review of all geological and geophysical data available for the “AK47” **nickel prospect** where drilling in 2002-2003 by WMC, a previous joint venture partner, intersected 0.2m of massive sulphide with 1.93% Ni, with 0.42% Cu and 0.7g/t Pt+Pd. The review will include relogging of the core – stored at Mt Keith, and some field studies.

#### Wonganoo Prospect

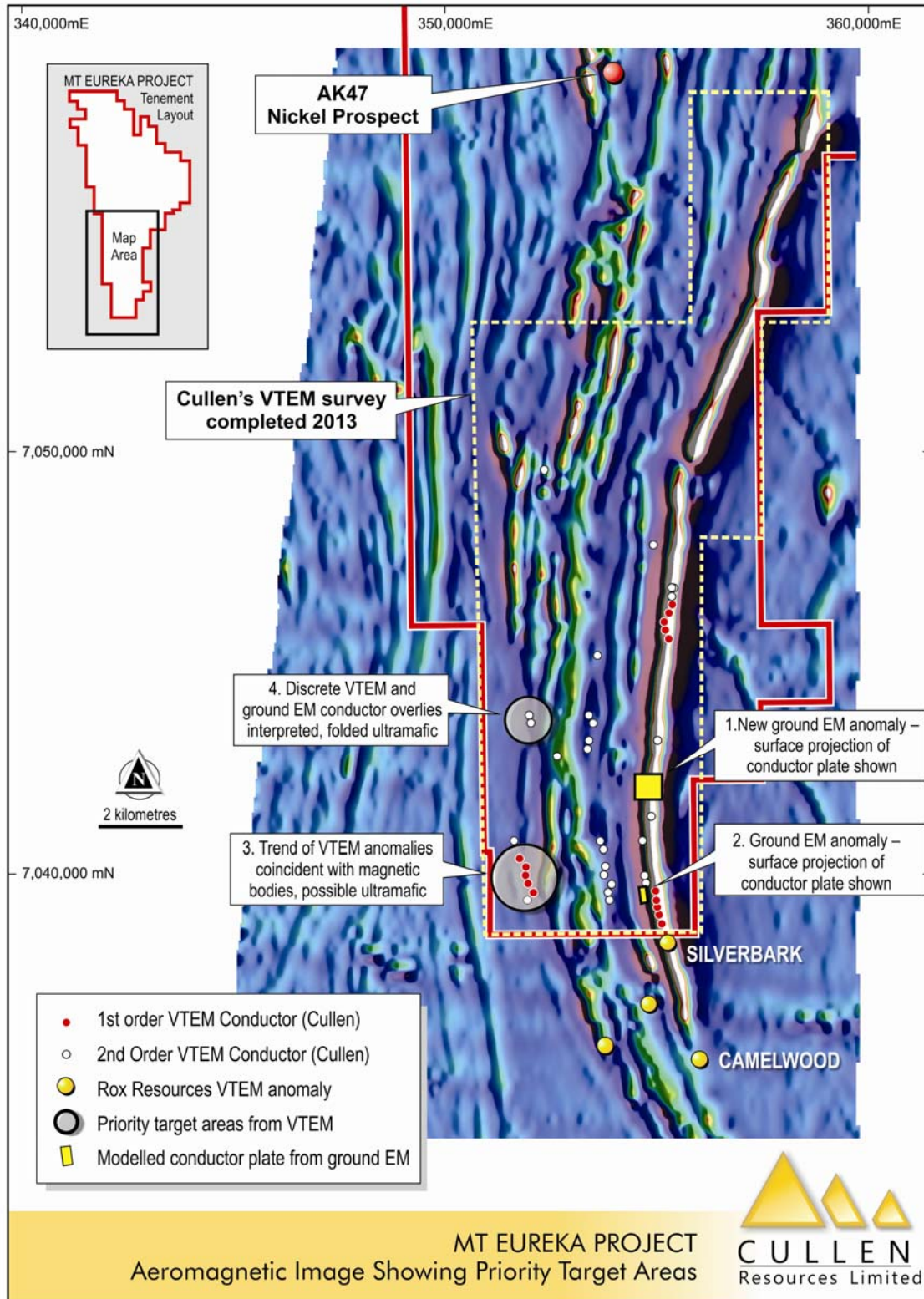
Cullen has also completed four lines of ground EM surveying at the **Wonganoo Prospect (E53/1611)**. This tenement is in the Dingo Range greenstone belt south of Wonganoo Homestead and northwest of the Melrose gold deposit (see figure below). The surveying at Wonganoo returned several strong conductors across the targeted komatiite horizon with interpretation of the data in progress.

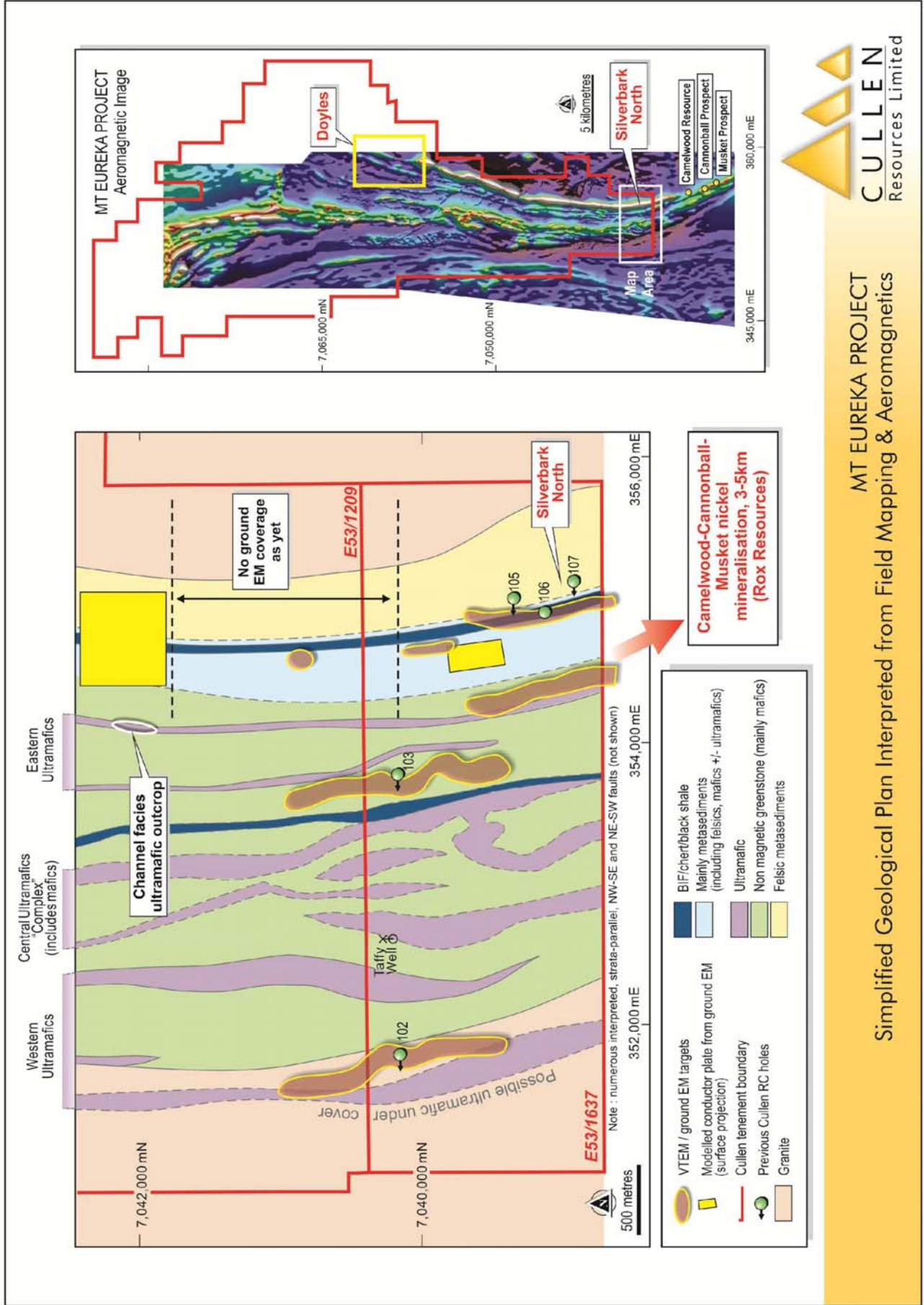


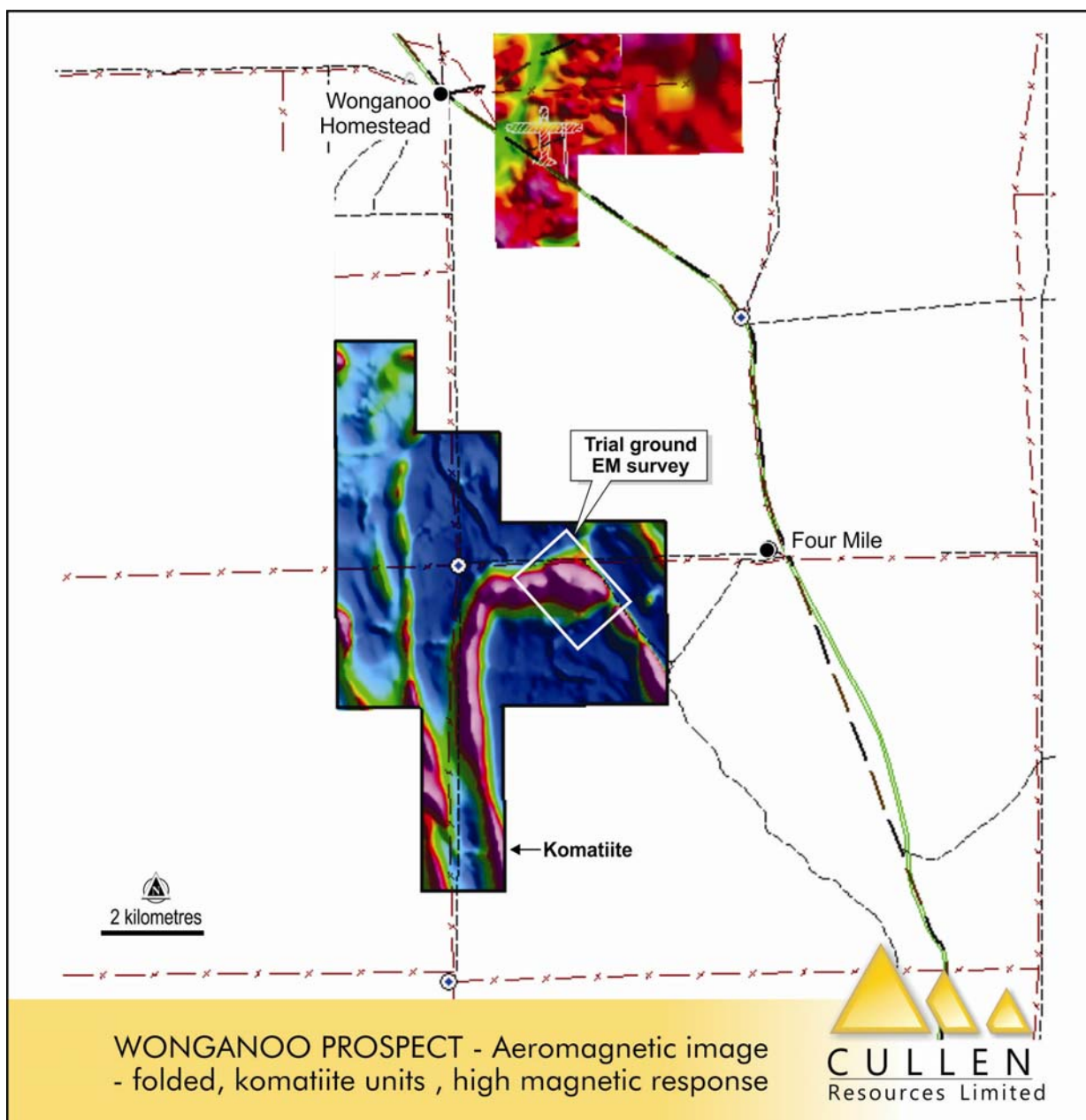
Mt EUREKA PROJECT - Location Plan

\* **Mt Eureka Project** – ELs 53/1299, 1300, 1209, 1630,1635,1637,1611 - Cullen 100%

Cullen’s Managing Director, Chris Ringrose comments: “New geophysical data and geological pointers together suggest that we have now identified the best analogy to the geological setting of the Camelwood-Cannonball-Musket trend of nickel sulphide mineralisation in our ground, in the south east corner of the project. We are increasingly confident that the position of various anomalies in this area is directly along strike from known nickel sulphide mineralisation. The prospectivity of the western trend also looks interesting. We are looking forward to the next round of drilling with optimism.”







The Information in this report that relates to Exploration Results for the Mt Eureka project includes reference to the results of a VTEM survey flown by Cullen and first reported to the ASX in an announcement of 22 March, 2013 entitled: “VTEM Survey identifies multiple conductors, Mt Eureka”; and the results of ground EM surveying by Cullen first reported in an ASX announcement of 6 June 2013 entitled: “Four priority massive nickel sulphide targets for RC drilling, Mt Eureka Project, W.A.” These results have not been updated to comply with JORC 2012 as the information has not changed materially. Information in this report may also reflect past exploration results, and Cullen’s assessment of exploration completed by past explorers. The Company confirms it is not aware of any new information or data which materially affects the information included in this announcement.

**ATTRIBUTION:** Competent Person Statement

*The information in this report that relates to exploration activities and 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 2012 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.*

**Table Data description as required by the 2012 JORC Code**

<b>Section 1 Sampling techniques and data</b>		
<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Comments re ground EM programme</b>
Sampling technique	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	A ground electromagnetic survey was completed using a Moving In-Loop configuration. Transmitter loops were 200m x 200m with a three component fluxgate sensor was used as the receiver.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	At least two readings were performed at each station in order to ensure data repeatability.
	Aspects of the determination of mineralisation that are material to the Public report In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	No drilling reported in this release
Drilling technique	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method etc.).	No drilling reported in this release
Drill Sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	No drilling reported in this release

	Measurements taken to maximise sample recovery and ensure representative nature of the samples.	No drilling reported in this release
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No drilling reported in this release
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	No drilling reported in this release
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.	No drilling reported in this release
	The total length and percentage of the relevant intersections logged	No drilling reported in this release
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	No drilling reported in this release
	If non-core, whether riffles, tube sampled, rotary split, etc. and whether sampled wet or dry.	No drilling reported in this release
	For all sample types, quality and appropriateness of the sample preparation technique.	No drilling reported in this release
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No drilling reported in this release
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	No drilling reported in this release

	Whether sample sizes are appropriate to the grain size of the material being sampled.	No drilling reported in this release
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	No drilling reported in this release
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	EM Receiver: Smartem 24; EM Transmitter: Phoenix TX-50; Sensor: fluxgate magnetometer; Current:30 amps; Base frequency: 1Hz.
Quality of assay data and laboratory tests	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	No drilling reported in this release
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	No drilling reported in this release
	The use of twinned holes	No drilling reported in this release
	Documentation of primary data, data entry procedures, data verification, data storage (physically and electronic) protocols.	All primary analytical data were recorded digitally and sent in electronic format to Southern Geoscience for quality control and evaluation.
	Discuss any adjustment to assay data.	No drilling reported in this release
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resources estimation.	No drilling reported in this release
	Specification of the grid system used.	The grid system is MGA_GDA94, Zone 51
	Quality and adequacy of topographic control.	Topographic data has been obtained from the 2009 VTEM survey, which uses a radar altimeter and GPS for calculation of the digital terrain model. The VTEM survey was flown along E-W lines spaced 200m.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	No drilling reported in this release



	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Reserve and Ore Reserve estimation procedure(s) and classifications applied.	No drilling reported in this release
	Whether sample compositing has been applied.	No drilling reported in this release
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	No drilling reported in this release
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No drilling reported in this release
Sample security	The measures taken to ensure sample security.	No drilling reported in this release
Audits or reviews	The results of and audits or reviews of sampling techniques and data.	All electromagnetic data was quality checked by Southern Geoscience Consultants
<b>Section 2 Reporting of exploration results</b>		
Mineral tenements and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interest, historical sites, wilderness or national park and environmental settings.	The prospects are located on Es53/1299,1637 and 1209 which are 100% owned by Cullen Resources Limited. Cullen has signed an agreement with Central Desert on behalf of the Wiluna traditional owners who have native title over the respective area. A heritage survey was conducted by Central Desert in late 2013 and approval was given to conduct non-ground disturbing activities on the survey area. Some areas have also been cleared for ground-disturbing activities, such as drilling.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenure is secure and in good standing at the time of writing.
Exploration done by other parties	Acknowledgement and appraisal of exploration by other parties.	A VTEM survey was carried out by BHP in 2009 that showed some VTEM anomalies in the survey area. The possible significance of these VTEM anomalies was recently recognised by Cullen and Southern Geoscience as part of a technical review.
Geology	Deposit type, geological settings and style of mineralisation.	The targeted deposit style is an Archaean komatiite-related nickel mineralisation.

Drill hole information	A summary of all information material for the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	No drilling reported in this release
	· Easting and northing of the drill hole collar	No drilling reported in this release
	· Elevation or RL (Reduced level-elevation above sea level in metres)and the drill hole collar	No drilling reported in this release
	· Dip and azimuth of the hole	No drilling reported in this release
	· Down hole length and interception depth	No drilling reported in this release
	· Hole length	No drilling reported in this release
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	No drilling reported in this release
Data aggregation methods	In reporting Exploration results, weighing averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually material and should be stated.	No drilling reported in this release
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No drilling reported in this release
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No drilling reported in this release
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	No drilling reported in this release

	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	No drilling reported in this release
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known')	No drilling reported in this release
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts would be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views..	No drilling reported in this release
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No drilling reported in this release
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations, geophysical survey results, geochemical survey results, bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or containing substances.	Previous VTEM surveying showed two discrete, late time anomalies which are possibly caused by significant accumulations of massive sulphide mineralization.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work will include RC and possibly diamond drilling of modeled conductive plates to test the nature of the conductors.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, providing this information is not commercially sensitive.	see attached plans

**REGISTERED OFFICE:** Unit 4, 7 Hardy Street, South Perth WA 6151

**Telephone:** 089 474 5511; **FAX:** 089 474 5588

**Contact:** Dr Chris Ringrose, Managing Director; email: [cringrose@cullenresources.com.au](mailto:cringrose@cullenresources.com.au)