

# **ASX** ANNOUNCEMENT

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LAMBOO RESOURCES Limited ABN 27 099 098 192

ASX: LMB

### **CORPORATE OFFICE**

Level 6, 344 Queen Street Brisbane QLD 4000

#### **OPERATIONS OFFICE**

Unit 2, 7 Packard Street Joondalup WA 6027 Telephone: +61 8 9301 1047

### CONTACT

#### Richard Trevillion Chief Executive Officer richard@lambooresources.com 0412 307 087

Tony Cormack Executive Director / Head of Operations tony@lambooresources.com 0427 349 451

#### Ken Banks Investor Relations kbanks@bigpond.net.au 0402 079 999

# SIGNIFICANT COPPER / NICKEL POTENTIAL AT TARGET 4.

Lamboo Resources (ASX:LMB or **Lamboo**) is pleased to announce the final results of the 3-dimensional interpretation of Target 4 at the McIntosh Flake Graphite Project in the East Kimberley Region of Western Australia.

## HIGHLIGHTS:

- 3-dimensional VTEM interpretation of Target 4 has identified the thickest conductors with the highest conductance levels recorded at McIntosh to date.
- The highly conductive bodies at Target 4 are interpreted as being attributable to copper / nickel mineralisation.

The final 3-dimensional interpretation of the VTEM supermax aerial survey data for Target 4 has been completed by geophysical consultant Russell Mortimer working through Southern Geoscience Consultants (SGC). The final processed VTEM supermax aerial survey data has identified a large target anomaly with extremely high conductivity believed to be a response to copper and/or nickel. Target 4 is believed to be a large synformal structure (downward closing fold) having strong potential for thickening of the unit along the fold hinge.

Lamboo Resources Head of Operations, Tony Cormack, commented "The interpretation of the VTEM supermax survey is continuing to deliver exceptional results with the large scale copper / nickel potential identified at Target 4 providing a significant opportunity for the Company". . . developing high purity flake for new technologies



Lamboo Resources is pleased to announce that the final 3-dimensional interpretation of Target 4 has been finalised by Russell Mortimer at SGC. The interpretation has identified a large synformal structure with a 2 kilometre strike length potential for copper / nickel mineralisation with the main target anomalies being in excess of 600 metres across strike.

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The September 2014 VTEM supermax survey over the McIntosh Flake Graphite Project (see Figure 1) covered a total of 642 line kilometres and identified a total of 12 high-priority anomalies. Five of these were previously identified by induced polarisation (IP) and historical electromagnetic (EM) techniques and confirmed to be flake graphite schist by geological field mapping, petrographic analysis, rock chip sampling and exploration drilling.



Figure 1: Final processed VTEM supermax imagery (channel 49BZL) of the McIntosh Flake Graphite Project

East Kimberley, Western Australia.

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# Target 4 - Melon Patch



Figure 2: Target 4 anomaly (channel 49BZL) with VTEM flight lines .

The VTEM interpretation of the Target 4 prospect has identified large, highly conductive bodies believed to be associated with the presence of copper and nickel. These highly conductive bodies are located within the layered intrusion known as the McIntosh Sill which is enveloped by meta-sediments and para-gneisses of the Tickalara Metamorphics. The geological setting at Target 4 is very similar to that found at the nearby Savannah Nickel mine operated by Panoramic Resources (see Figure 7). Figure 2 highlights the large scale of the conductors at Target 4 believed to be associated with copper / nickel mineralisation within the layered McIntosh Sill intrusion.

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Figure 3: Plan view of the Target 4 anomaly (channel 49BZL) with model plates.

Very high conductance levels (>750S) are apparent within Target 4 indicating the potential for a different target / commodity type. However, substantially better developed flake graphite mineralisation cannot be discounted, as denoted by the orange model plates. Two main strong and broad conductive centres of primary interest at the Target 4 prospect area are defined by the high amplitude, late channel VTEM imagery. VTEM modelling has highlighted the presence of multiple, broad and highly conductive units associated with the two main centres (Figure 3).

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305268436 100-50 885700E 885700E 230 130 14 AMBOO RESOURCES Strong Conductance EM Response Strong Model Plates >750S Moderate Conductance Model Plates >300S Weak

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Figure 4: South-west looking oblique view of the Target 4 anomaly (channel 49BZL) with model plates.

The most significant feature of the 3-dimensional interpretation at Target 4 is the regional scale fold hinge which correlates extremely well with surface mapping and geochemistry. The interpretation has highlighted regional scale folding of the layered intrusion which is bound by regional scale faulting. Target 4's setting is an ideal structural 'trap' for mineralisation which along with the favourable lithology and high grade metamorphism represents the right geological environment for copper / nickel mineralisation to occur.

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384,000 385,500 387,000 388,500 Malachite outcrop 055,000 (See Figure 5) EmTpp Melon Patch 2: Rock chip assay 8.5% Cu & 1.65% Ni Wamex (A5686). Rock chip assay 1.33% Cu & 3,054,250 3,054,250 1.35% Ni Wamex (A44375) VTEM Cu/Ni conductor projected to surface 053,500 Melon Patch 1: Rock chip assay 22.5% Cu & 2.35% Ni Wamex (A5686, A5687) Haul Road 385,500 388,500 384.000 387,000

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Figure 5: VTEM Cu/Ni conductor projected to surface with malachite outcropping along strike (refer Figure 6).



Figure 6: Malachite in outcrop (387346mE ; 8054882mN) located just north of Melon Patch 2 (refer Figure 5).

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The folded synform structure at Target 4 has a shallow south-westerly plunge with a maximum depth of 140m below the surface. This synformal structure combined with the shallow depth of the conductor makes it ideally suited to an open pit operation. Target 4 is also strategically located on an existing haul road and just 14 kilometres from the Great Northern Highway. Regionally, Panoramic Resources is currently operating the Savannah and Copernicus Nickel / Copper Mines located 30km north-north-east and 10km south-east respectively from the Target 4 prospect (see Figure 7).

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Figure 7: Target 4 location relative to Panoramic Resources Savannah and Copernicus Ni/Cu mines.

The Company rates the copper / nickel potential at Target 4 extremely highly and is planning a small number of exploration drill holes into the main synformal conductor in the next phase of drilling, planned after the wet season. The Company will determine the best way to develop any copper / nickel potential from the Target 4 prospect after analysis of the drill testing has been completed.

"Target 4 really is a significant development and *whilst our focus is firmly placed on getting the McIntosh Flake Graphite Project into production* it truly does represent a fantastic opportunity for the Company" commented Tony Cormack, Head of Operations at Lamboo.



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## **Tony Cormack**

Executive Director / Head of Operations

#### **Competent Persons Statement**

Information in this report relating to exploration results and geological data at the McIntosh Project is based on information previously compiled and / or reviewed by Mr. Tony Cormack, Member of the Australasian Institute of Mining and Metallurgy and a full-time employee of Lamboo Resources Limited. Mr. Cormack has sufficient experience which is relevant to the activity previously undertaken to qualify as a "Competent Person", as defined in the 2012 edition of the Australasian Code of Reporting of Exploration Results and consents to the inclusion in this report of the matters reviewed by him in the form and context in which they appear.



## Appendix 1 – JORC 2012 Criteria

# Section 1

Criteria	Commentary
Sampling techniques	Reverse Circulation (RC) drilling was employed to generate 2 to 3 kilogram samples which represent 1m splits. The samples are taken directly from the cone splitter during the drilling process.
Drilling techniques	RC using a 5.5 inch hammer. Holes ranged up to a maximum depth of 198m.
Drill sample recovery	RC split samples have been recovered from a cyclone and cone splitter mounted to the drill rig. The sample recovery and physical state were recorded.
Logging	All RC chips were geologically logged in the field by qualified geologists.
Sub-sampling techniques and sample preparation	1m samples from the RC drilling were submitted to either Actlabs or ALS Laboratories in Perth. The samples were riffle split on a 50:50 basis, with one split pulverised and analysed for Total Graphitic Carbon (TGC), Total Carbon (TC) and Total Sulphur (TS) using a Leco Furnace, and the other split held as in storage.
Quality of assay data and laboratory tests	The RC samples that were submitted to the laboratory include a duplicate, sand blank and certified standard at approximately every 20 <sup>th</sup> sample submitted. The duplicate and standard samples were statistically analysed as part of the QAQC process and the data and was found to be satisfactory.
Verification of sampling	Verification was based on use of duplicates, standards and blanks used. No
and assaying	adjustments to assay data has been made.
Location of data points	Drill hole collars were surveyed by Whelans Surveyors, Kununurra using a differential GPS. Preliminary RC collars were located by hand-held Garmin 62S and Garmin 76c Global Positioning System ("GPS") units with a typical ±5 metres accuracy. The map projection used is the Australian Geodetic MGA 94 Zone 52.
Data spacing and distribution	RC drill holes at the Target 1 Extension and Targets 2, 3, 5 and 6 are spaced on traverses 80 to 250 m apart.
Orientation of data in	RC drill holes were drilled at near perpendicular to the strike of the graphitic schist
relation to geological	horizons. Diamond drill core has been oriented using a Reflex ACE tool (Act II),
structure	with $\alpha$ and $\beta$ angles measured and positioned using a Kenometer.
Sample security	Samples were collected from the cone splitter in calico bags and then placed in self sealing plastic bags prior to being put into bulka bags. The bulka bags were then transported by road to Actlabs in Perth. The samples were processed and the pulps despatched to Actlabs Laboratories in Canada or ALS in Brisbane. The sample security is considered to be adequate.
Audits or reviews	Sampling techniques and data have been handled by an independent data management services in Perth, WA – Rock Solid Data Pty Ltd.



# Section 2

Criteria	Commentary
Mineral tenement and land tenure status	Lamboo Resources Limited holds eight (8) granted ELs and three (3) ELAs within the McIntosh Project area in the East Kimberley, WA. The tenements cover a total area of 665.3 km <sup>2</sup> . All granted mining tenements are in good standing and there are no encumbrances, royalties or impediments except for E80/4733 that is subject to a mill gate net royalty of 1%.
Exploration done by other parties	The East Kimberley has been largely explored for base metals and diamonds with no active previous exploration for graphite. Graphite had been noted by Gemutz during regional mapping in the Mabel Downs area for the BMR in 1967, by Rugless mapping and RAB drilling in the vicinity of Melon Patch bore, to the east of the Great Northern Highway in 1993 and has been located during nickel exploration by Australian Anglo American Ltd, Panoramic Resources Ltd and Thunderlarra Resources Ltd over the last 20 years.
Geology	Lamboo Resources Ltd recognised the potential for graphite schist horizons to occur in the high grade metamorphic terrain of the Halls Creek Mobile Zone in the East Kimberley of Western Australia. The host stratigraphy has been mapped as the Tickalara Metamorphics extending for approximately 130 km along the western side of the major Halls Creek Fault. The metamorphic rocks reach granulite metamorphic facies under conditions of high-temperature and high-pressure although the metamorphic grade in the McIntosh area appears to be largely upper amphibolite facies with the presence of key minerals such as sillimanite and evidence of original cordierite. Lamboo has identified graphite schist horizons and accompanying aerial EM anomalies over a strike length in excess of 10 km within the granted tenements with potential for another 25 km strike length of graphite schist in EL applications. The McIntosh target areas contains typical flake graphite and include five (5) identified target areas – Targets 1, 2, 3, 5 & 6. Targets 1, 2, 3 and 5 have been drilled to date with additional drilling planned for Targets 1, 3, 4, 5 and 6.
Drill hole Information	A total of 165 RC and diamond drill holes have been completed at Targets 1, 2, 3, 5 and 6 at McIntosh Graphite for a total of 17,985.5 metres.
Data aggregation methods	All data is handled by an independent database manager in Perth, WA - Rock Solid Pty Ltd.
Relationship between mineralisation widths and intercept lengths	There is a very close relationship between the graphitic schist unit and Total Graphitic Carbon TGC% assays. The presence of graphitic schist is clearly evident in both the RC chips and diamond drill core so that the assay widths can be clearly related to the geological logs.
Diagrams	Refer to the figures in the text of this document
Balanced reporting	All RC samples from drilling at Targets 1, 5 and 6 have been analysed and reported on.
Other substantive exploration data	All exploration data has been reported on and include 165 RC and diamond drill holes that have resulted in a JORC 2012 compliant resource at Target 1.
Further work	RC and diamond drilling programs are planned for graphitic schist Targets 1, 2, 5 and 6. Additional drilling at Target 1 is planned to increase the graphite resource.



Section 3	Estimation and Reporting of Mineral Resources
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Criteria	Commentary
Database integrity	The data as provided by the laboratory is added directly to the McIntosh Project metadata administered by the database manager, Rock Solid Pty Ltd who have checks and balances in place to ensure data reliability. Field data is similarly covered by in – house checks. Rock Solid Pty Ltd provides a full QA/QC report based on the statistical analysis of certified standards and duplicates prior to incorporation into the resource database.
Site visits	The Competent Person has undertaken extensive work on the project site and is familiar with all the Lamboo personnel and the outside contractors employed, including the RC and Diamond drilling contractors used for the drilling.
Geological Interpretation	The graphite schist host at Target 1 essentially represents a steeply dipping planar body that is concordant with the host high grade metamorphic stratigraphy. There is very good correlation between RC and diamond drill holes, both along strike and at depth, and there is no reason to believe that there will be any unforeseen complications in the geological and assay data. The extensions to the mineralised zone that form part of this resource upgrade are consistent with the geological interpretation used for the original JORC resource estimate. The extension of the Target 1 resource also correlates well with the aerial EM anomaly that defines the mineralised zone. The factors affecting the continuity of grade are limited to variability of the thickness of the graphite unit which is to be expected in such a high grade metamorphic terrain. A small number of felsic intrusives were intersected. These have affected the grade due to dilution. Such intrusions are likely to be irregular and thus cannot be reasonably modelled. Consequently the intrusives have been included in the resource and have resulted in a minor dilution in grade.
Dimensions	The graphitic schist host covered by the current JORC resource extends over a strike length of 580 m and extends to a depth of about 200 m in areas tested by diamond drilling. The north-eastern end of the graphitic schist has only been tested by RC drilling during 2013 thus limiting the tonnage in the northern portion of the resource at depth.
Estimation and modelling techniques	<ul> <li>Block modelling using an ellipsoidal ID<sup>2</sup> search. Statistical analysis indicate no high grade outliers and no upper cut was applied to the assay data.</li> <li>IMS computer software was used. A standard cross section flitch interpretation was completed. All drill assays were used to interpolate the block centroid value.</li> <li>Block modelling used a standard block size of 10 m (N-S), 2 m (E-W) and 5 m in height. No sub-blocking was used. Downhole sample lengths were 1 m intervals.</li> </ul>
Moisture	The tonnages were estimated on a dry basis as per the assay data used.
Cut-off parameters	A 2% TGC cut-off was adopted based on a simple statistical analysis and the natural cut-off exhibited by the mineralised lenses. Note that four individual isolated single resource blocks aggregating 1,088 tonnes were included in the resource although marginally less than the 2% TGC cut-off. Excluding these blocks from the resource was considered to be unrealistic in view of the likely bulk mining method.



Mining factors or assumptions	The style of mineralisation and the presence of the mineralisation at the surface with only a very small poorly mineralised cap of about 1 m lends itself to open-cut mining of the graphite schist lens. The true widths exhibited by the graphite schist of up to 40 m ensure that open cut mining could be extended to a depth of at least 200 m. The steep dip of the mineralised lens that occurs in relatively unweathered and competent crystalline rocks will enable maximum batter angles to be safely used in an open cut mine. Mining methods would be by conventional truck and loaded open cut methods
	although continuous surface mining methods will be assessed. There will be some internal dilution due to cross-cutting dykes although these would appear to be minimal at Target 1 based on surface geological mapping and geological logging of the drill holes.
Environmental factors or assumptions	Dry season fauna and flora surveys have been already carried out with no evidence of endangered species in the area. The area at Target 1 is relatively flat with the presence of some cross-cutting creeks that are dry for most of the year. These creeks will have no significant impact on a managed mine site. There is some potential for oxidising sulphides in waste rock dumps and tailings dams.
Bulk density	Measurements were made by two independent laboratories by the weight in air/weight in water method on selected diamond core. Measurements were limited to graphite schist zones included in the resource. Densities of 2.38 for the oxide zone and 2.72 for the primary (unweathered) zone were applied.
Classification	The resource is a single tabular body in form. The oxide zone, although well defined geometrically, has been classified as "inferred" due to the limited assay data along the length of the resource. The primary zone has been classified as "indicated" to a maximum depth of 50 m in the vertical dimension below drill hole assay data. For primary resource blocks below the 50 m boundary from assay data the resource has been classified as "inferred". The knowledge of the Competent Person also reflects confidence in the use of these categories. The only questionable aspect in the resource estimation is the possibility that the RC drilling is under-reporting the %TGC grade. See note on twin holes.
Audit or reviews	The resource model and calculations have been reviewed by Mr Seldon Mart the principal of MineMap Pty Ltd and a Member of the AusIMM.
Discussion of relative accuracy of confidence	The Competent Person considers that this JORC resource estimate to be accurate based on the density of RC and diamond drilling employed, and the rigorous nature of the assay data provided by independent laboratories ALS Laboratories and Actlab Laboratories and verified by database managers, Rock Solid Pty Ltd. The geological data collected is deemed to be accurate and has been overseen by competent senior geologists, Mr Simon Attwell and Dr Craig Rugless. The geological data has been reviewed by Mr. Tony Cormack.