Lamboo Resources is an Australian exploration company focusing on substantial flake graphite assets located in the East Kimberley and South Korea



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# MAIDEN JORC RESOURCE FOR McINTOSH FLAKE GRAPHITE PROJECT, WESTERN AUSTRALIA

Lamboo Resource Ltd is pleased to report a maiden JORC resource for the McIntosh Flake Graphite Project based on RC and diamond drilling completed at Target 1 in the final quarter of 2012.

# **Highlights**

- The maiden JORC resource under the inferred and indicated categories for Target 1 is 5,323,000 tonnes grading 4.91% TGC (Total Graphitic Carbon) (5.06% Total Carbon - TC) for 262,400 tonnes of contained graphite.
- The Target 1 resource is based on initial drilling over a 400 metre strike and represents only 10% of Target 1's interpreted strike length of the graphitic schist horizon based on airborne EM data.
- Target 1 has been prioritised for an initial JORC resource estimation at the McIntosh Project. Potential for further flake graphite resources exists at Targets 2, 3, 5 and 6.

Lamboo Resources Ltd is pleased to announce a maiden indicated and inferred resource in compliance with the JORC Code at McIntosh Target 1 of 5,323,000 tonnes grading 4.91% TGC (5.06% TC) over a strike length of 400 m and to a depth of 200 m RL. The resource contains 262,400 tonnes of contained graphite at a nominal cut-off grade of 2% TGC (refer Table 1).

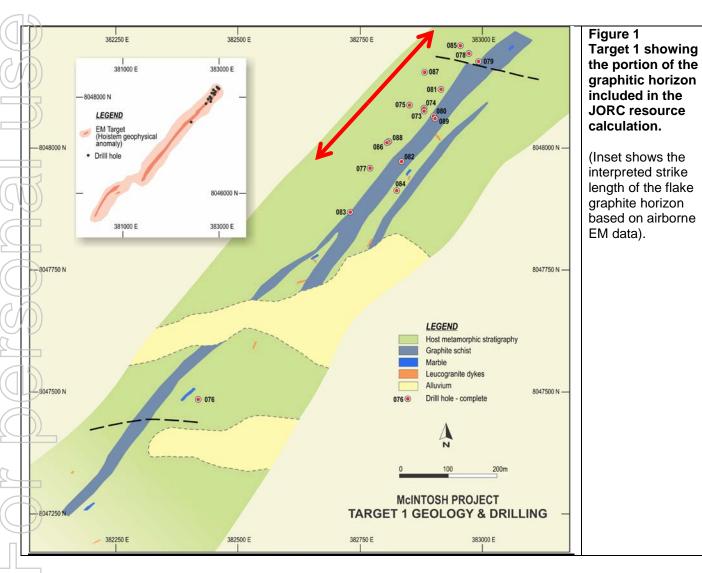
The resource represents only 10% of the interpreted strike length of the host graphite horizons at Target 1 and is open both along strike and at depth (**Figures 1 and 2**).



Table 1 -Target 1 Flake Graphite Resource estimated at 2.0% TGC lower cut off (\*)

Project	Area	Ore Type	Resource Classification	Tonnes	Graphite (%TGC)	Contained graphite (tonnes)
Target 1	I Graphite	Primary	Indicated	3,615,000	4.89	177,800
		Oxide	Inferred	350,000	5.03	17,600
		Primary	Inferred	1,359,000	4.93	67,000
		Oxide + primary	Total Resource	5,323,000	4.91	262,400

\*Resource modelling was undertaken with IMS mining software by Mr William Seldon Mart as the Competent Person. Seldon Mart is a principal of MineMap Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy.



Studies are underway to determine the potential for additional JORC compliant flake graphite resources at Targets 2 and 3 based on the available data. It is planned to continue drilling the balance of Target 1 as well as Targets 5 and 6 during the up-coming field season with the aim being to at least double the global JORC Code compliant resource in the short term.



The McIntosh JORC resource study covered the oxidised and primary zones at Target 1. The oxidised zone extends to an average depth of approximately 20 m and exhibits little difference in grade and flake graphite quality compared with the primary zone. The main difference between the two zones is the specific gravity (SG or rock density). The average SG for the oxidised zone was found to be 2.38 and the primary zone to be 2.72 that is reflected by the higher sulphide content in the primary zone. The higher SG values in the primary zone will result in increased tonnes of graphite per cubic metre of ore for the same grade of graphitic carbon.

The JORC Code compliant resource has been calculated from a drill hole database at Target 1 comprising a total of 17 RC and diamond drill holes (including diamond drill hole tails) that targeted aerial electromagnetic (EM) and follow-up ground induced polarisation (IP) anomalies. The persistent nature of the anomalies facilitated drilling on traverse at 60 to 80 m intervals along the target graphitic schist. Hole spacing varies from 20 to 50 m along the traverses with twin RC and diamond drill holes completed in addition to a vertical HQ metallurgical drill hole. The resource estimation has been based only on the initial drilling of a planned extensive drilling program that will continue in the 2013 field season.

The RC samples were split on site using the cyclone on the rig with the individual metre split samples sent directly to ALS Laboratory in Brisbane via a preparation facility in Darwin. The diamond core samples were transported to Lamboo Resources' warehouse/office in Perth, geologically and structurally logged, wet and dry photographed and split by diamond saw into 1 metre intervals and sent to Actlabs Laboratory in Vancouver, Canada via a preparation facility in Perth. Both sample sets were subject to regular duplicate samples, the addition of certified graphite standards and the inclusion of non-graphite blanks according to JORC QA/QC requirements.

A single twinned hole pair at Target 1 showed a grade increase in the diamond core hole in comparison to the RC drill hole. Detailed checking of all sampling, sample preparation methods and analytical results is suggesting that the RC drilling may potentially be under reporting the Total Graphitic Carbon (TGC) and Total Carbon (TC) grade. In addition, preliminary statistical studies show that the overall grade of the RC drill hole flake graphite intercepts at Target 1 are slightly less than the diamond drill hole data (9.3% lower – refer **Table 2**) probably due to the tendency for some flake graphite to be lost from the RC drill cyclone during sample collection. In contrast, the Total Sulphur (TS) content in the RC holes tends to be slightly higher (4.0% higher) due to the preferential collection of the heavier sulphides in the same collection process. This discrepancy could account for the slightly lower than expected Total Graphitic Carbon (TGC) grade in the JORC resource estimation.

Table 2 Statistical comparison of diamond drill core and RC data from Target 1

Diamond drill core sample	Number of samples	Mean	Median	Standard Deviation	
%TGC	212	5.05	5.61	2.67	
%TC	212	5.09	5.61	2.73	
%TS	212	3.86	3.79	1.60	
RC samples	Number of samples	Mean	Median	Standard Deviation	Variation from DDH median (%)
%TGC	380	4.99	5.09	1.67	- 9.3%
%TC	380	5.16	5.3	1.7	- 5.5%
%TS	380	4.03	3.94	1.31	+ 4.0%



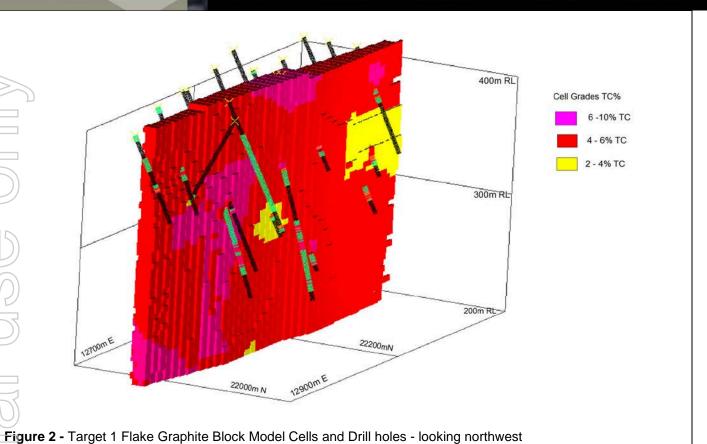
Preliminary metallurgical studies have been encouraging with flake graphite liberated both by standard flotation methods and reverse gravitational techniques using a Wilfy Table. The reverse gravitational techniques are currently being trialed based on three fractions – 1mm + 250 µm, - 250 + 75 µm, - 75 + 38 µm. The "slime" or graphitic component has been isolated in all three fractions in the approximate proportions of 5%, 25% and 70%, with sulphides representing the heavy component. The metallurgical testwork is ongoing and will increase confidence in the resource as increased concentrate TGC grades and flake graphite recoveries are achieved.

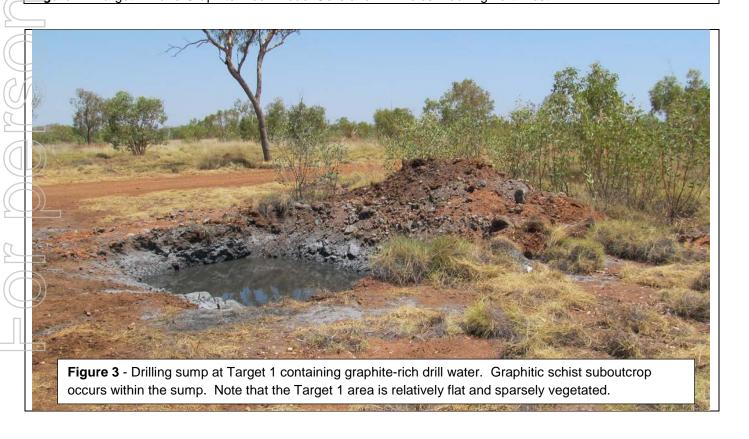
#### **Geological Graphite Model at Target 1**

A local grid rotated 40 degrees east of Magnetic North was developed for the McIntosh Project and used to model Target 1 due to the northeast – southwest trending strike direction of the graphitic schist unit. Block modelling for the resource estimation used a cell size of 2m east – west, 10m north – south and 5m RL (vertical depth). Grades were interpolated with a search ellipsoid using Inverse Distance squared (ID2) to assign grades within a hard assay boundary of 2% Graphite Carbon (TGC). The resource is a single tabular body and geometrically well defined. Drilling in the oxide zone was limited and the Oxide Resource was classified as "Inferred".

Target 1 has proven to be a simple compact and tabular body that should be amenable to open cut mining (Figure 2). The 20 to 40 m width and down dip extension of the graphitic schist has been confirmed to be relatively consistent based on the RC and diamond drilling completed to date. The graphitic mineralisation occurs at surface with only the top 0.5 m excluded from the resource calculations (Figure 3). There appears to be little difference in the quality and size of the flake graphite based on systematic petrographic studies (refer Flake Graphite Size). The graphitic schist will represent relatively soft rock mining in contrast to the more robust, relatively unweathered granite gneiss hanging wall rocks that should facilitate maximum angle batters in a potential mining operation.









### **Lamboo Resources - JORC Resources Summary**

Lamboo has calculated a JORC resource for Target 1 at McIntosh, East Kimberley WA based on an open-pit model and, along with announced resources in South Korea, now has a total JORC resource inventory containing 304,000 tonnes of flake graphite (Table 3).

Table 3 - Lamboo Resources JORC flake graphite resources summary including Target 1 at McIntosh, WA and South Korean Projects

Location	Oxide - Inferred		Primary - Inferred		Primary - Indicated	
	Tonnes	%TGC	Tonnes	%TGC	Tonnes	%TGC
WA McIntosh – Target 1	350,000	5.03	1,359,000	4.93	3,615,000	4.89
Graphite (tonnes)	17,600		67,000		177,800	
South Korea - Geumam			200,000	10		
Graphite (tonnes)			20,000			
- Samcheok			200,000	5		
Graphite (tonnes)			10,000			
) Taehwa			170,000	7		
Graphite (tonnes)			11,900			
Total graphite (tonnes)	17,600		108,900		177,800	

## Dr Craig Rugless Technical Director

#### Competent Persons Statement

Information in this "ASX Announcement" relating to Exploration Results and geological data has been compiled by the Technical Director of Lamboo Resources Ltd, Dr Craig S. Rugless who is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute Geoscientists. He has sufficient experience that is relevant to the types of deposits being explored for and qualifies as a Competent Person as defined by the JORC Code 2012. He consents to the inclusion of this information in the form and context in which it appears in this report.

Information in this "ASX Announcement" relating to Mineral Resources at the McIntosh Project was compiled by Mr William Seldon Mart who is a principal of MineMap Pty Ltd, an independent consulting company in the mining and resources industry, and is a Member of the Australasian Institute of Mining and Metallurgy (Membership No 111779). He has sufficient experience that is relevant to the types of deposits being explored for and qualifies as a Competent Person as defined by the JORC Code 2012. He consents to the inclusion of this information in the form and context in which it appears in this report.

Information in this "ASX Announcement" relating to Inferred Mineral Resources associated with the Company's projects in South Korea was compiled by Mr Christopher Sennet who is the principal of Senlac Geological Services Pty Ltd. Mr Sennet is a Fellow of the Australian Institute of Geoscientists and a Member of the Society of Economic Geologists and has sufficient experience that is relevant to the types of deposits being explored for and qualifies as a Competent Person as defined by the JORC Code 2012. He consents to the inclusion of this information in the form and context in which it appears in this report.