

## ASX ANNOUNCEMENT

*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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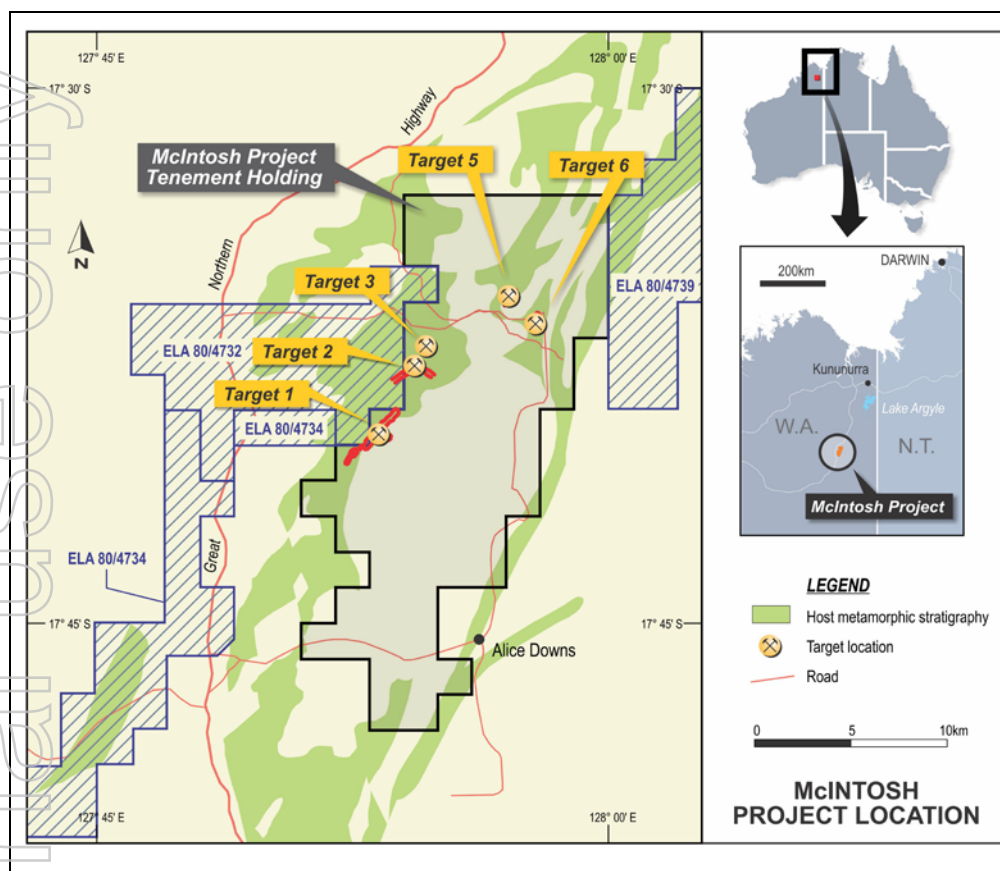
[www.lambooresources.com.au](http://www.lambooresources.com.au)

## QUARTERLY ACTIVITIES REPORT

### PERIOD ENDING 31 DECEMBER 2012

#### Highlights

- A total of 93 RC and diamond drill holes comprising 12,200 m have been completed at Targets 1, 2 and 3 at the McIntosh Graphite Project.
- Consistent results from Target 1 have enabled the estimation of an exploration target that has the potential to be increased further based on the Company having drilled only 10% of the 3.5 km strike length of the associated geophysical IP and EM anomalies. Target 1 represents one of five flake graphite targets recognised within the McIntosh Project.
- Targets 5 and 6 have shown strong visual flake graphite in outcrop with rock chip values up to 17.8 TGC% along with encouraging results from preliminary RC drilling at Target 6.
- South Korean Mining Right (No 200216) has been granted over the Samcheock flake graphite project with a 200,000 tonne inferred JORC resource established for a portion of the project.
- The budget has been approved to commence exploration over the South Korean flake graphite targets.



**Figure 1**

**Location of flake graphite Target areas in the McIntosh Project. Lamboo ELApplications-hatched**

### **Target 1 Summary**

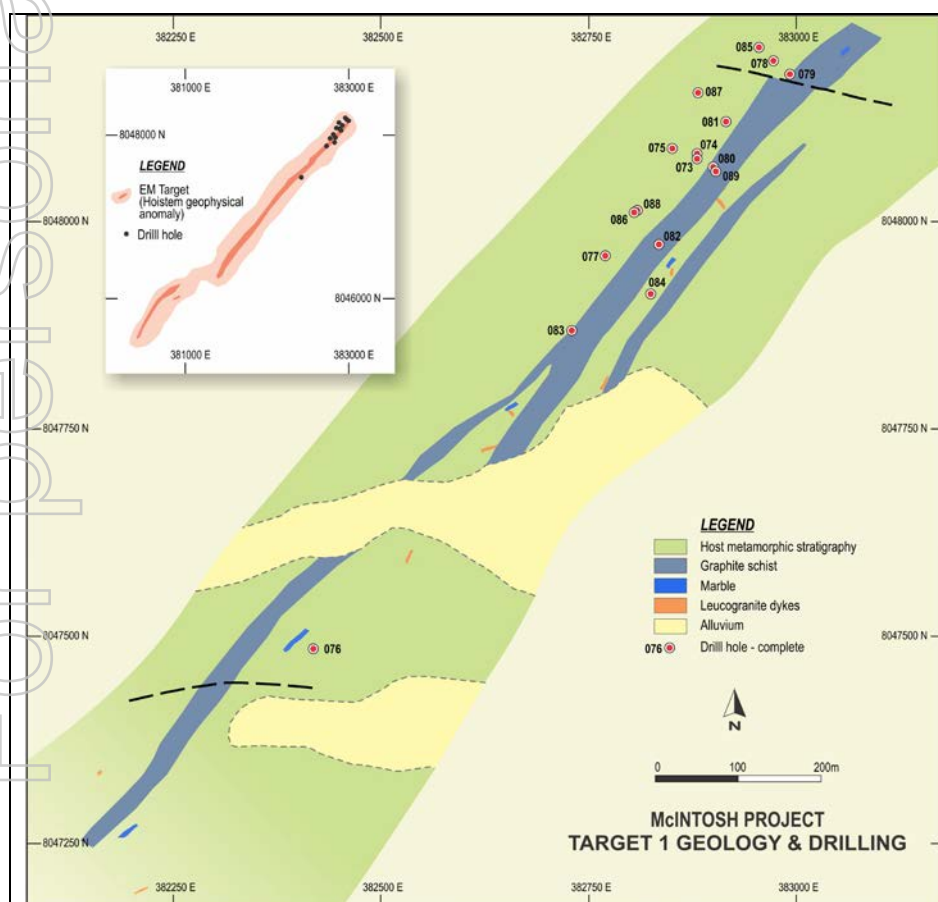
Work carried out under the initial drilling program that commenced in September bodes well for the future development of the McIntosh Flake Graphite Project. In summary;

- Target 1 has to date tested only 10% of the 3.5 km length of the strong aerial electromagnetic (EM) anomaly associated with the flake graphite mineralisation. This is part of the >10km aggregated strike length referred to above.
- Two graphitic horizons occur over a width of approximately 70 m. RC drilling has identified downhole flake graphite widths of up to 80 m from 110 m in drill hole T1GRC 087 and 50 m from 55 m in drill hole T1GRC 086. See TGC assays (Table 1).
- Flake graphite has been confirmed from the surface to a depth of 50 m in the vertical metallurgical hole – T1GDD089 and has been shown to extend to a depth in excess of 150 m (open at depth) in the inclined hole – T1GRC 087 at Target 1. This has positive implications for lowering waste to ore ratios and reducing potential mining costs.
- Data from drill holes T1GRC 074 and T1GRC 080 confirm that the graphite schist horizon at Target 1 correlates with the surface geological mapping where the graphite schist horizon has been traced over a strike length of at least 1 km (Figure 2). The graphitic schist target remains open at depth.

- The northern portion of Target 1 has been extensively drilled (refer Figure 2) with the graphite schist remaining open to the south and extending into ELA 80/4732, a Lamboo Resources' tenement application, to the north (refer Figure 1).
- Rapid RC and diamond drill hole penetration of the graphitic schist horizons at Target 1 are indicative of a relatively soft host rock that will aid mining and beneficiation of the graphitic schist horizon. Preliminary metallurgical testing at SGS – Lakefield Oretest in Perth has confirmed the potential for good recoveries of flake graphite.

Assays have now been received from Targets 1 and 2 in RC and diamond drill holes showing visual flake graphite. Target 1 shows excellent geological continuity with a true width of up to 30 m, a vertical depth of at least 200 m and a drilled strike length of 350 m. The target graphitic schist remains open at depth. **An initial exploration target<sup>1</sup> of 5 to 6 Million tonnes grading between 5 and 6 TGC% has been identified.** Additional drilling is planned to test the entire geophysical EM target at Target 1 and potentially increase this target further based on the Company having drilled to date only 10% of the 3.5 km – long geophysical anomaly (refer inset in Figure 2).

*This targeted tonnage and grade is conceptual in nature and there has been insufficient work to define a Mineral Resource under the JORC Code and it is uncertain if further exploration will result in the determination of a Mineral Resource.*



Significant RC and diamond drill hole flake graphite intercepts from Targets 1 and 2 are shown in Table 1 with an estimate of the graphite content as volume% based on the TGC% value (see Section on Graphite Volume% Uplift Factor).

**Table 1 Targets 1 and 2 drill hole intercepts**

Drill Hole	From (m)	To (m)	Interval (m)	TGC wt%	TotC wt%	TotS wt%	Est. graphite content (vol %) using 1.2x factor
<b>T1GRC 073</b>	27	47	20	5.1	5.19	4.47	<b>6.1%</b>
<b>T1GRC 074</b>	33	87	54	4.93	5.21	4.76	<b>5.9%</b>
<b>Incl</b>	38	84	46	5.36	5.61	4.72	<b>6.4%</b>
<b>T1GRC 077</b>	37	54	17	6.11	5.94	4.32	<b>7.3%</b>
<b>T1GRC 079</b>	8	39	31	5.18	6.1	1.66	<b>6.2%</b>
<b>Incl</b>	18	38	20	6.29	6.72	2.46	<b>7.5%</b>
<b>T1GRC 080</b>	0	72	72	5.67	6.03	2.98	<b>6.8%</b>
<b>T1GRC 081</b>	40	79	39	5.0	5.32	4.07	<b>6%</b>
<b>T1GRC 086</b>	60	99	39	4.32	5.44	3.1	<b>5.2%</b>
<b>T1GRC 087</b>	111	183	72	5.16	5.52	4.47	<b>6.2%</b>
<b>T1GRD 088</b>	54m	97m	43m	6.8%	6.9%	4.0%	<b>8.16%</b>
<b>Incl</b>	77m	93m	16m	7.9%	8.1%	3.8%	<b>9.48%</b>
<b>T2GRC 040</b>	17	28	11	6.4	7.4	5.7	<b>7.7%</b>
<b>T2GRC 039</b>	7	18	11	6.3	7	1.8	<b>7.6%</b>
	22	25	3	7.4	9.1	5.9	<b>8.9%</b>
<b>T2GRC 038</b>	46	51	5	6.1	6.7	8.2	<b>7.3%</b>



## Metallurgy

A 2.13 m interval of HQ core from the metallurgical drill hole T1GRD 089 and tested by SGS Lakefield in Perth has confirmed that good visual recoveries were achieved for the flake graphite schist ground to -80# (mesh) or <180  $\mu\text{m}$  (Figure 3). It is important to note that the sample was taken from primary mineralisation and is likely to be consistent for this graphite horizon at depth. The nature of the flake graphite float concentrate will be confirmed by detailed assays plus petrographic and Scanning Electron Microscope studies, expected to be completed during the next quarter.



**Figure 3**

**Successful flotation of graphite ground to -80# or <180 $\mu\text{m}$ . The sheen on the large bubbles represent the flake graphite concentrate “floating” on the surface of the bubble. Flake graphite is separated by this process.**

## **Graphite Volume% Uplift Factor**

Specific gravity (SG) data has now been received from diamond drill holes – T1 GRD 088, 089 and T2 GRD 003. Based on the sulphide (TotS%) assays, that can be directly related to the pyrrhotite (sulphide) content with a known high specific gravity of 4.65, and the expected low specific gravity of graphite of 1.8 (approx), an overall graphite volume% uplift factor can be computed for the sulphide – rich graphite samples.

The uplift factor ranges between 1.1x to 1.4x (av. 1.2x) to give the estimated graphite volume% in the sulphidic McIntosh graphite mineralisation occurring below a vertical depth of approximately 50 m (refer to Table 1). The uplift factor is based on the proportion of the relatively light flake graphite (density or SG ranging between 1.8 and 2.2) compared with the heavier sulphide (wt% of sulphur calculated as pyrrhotite with an SG of 4.65) plus the silicate host rock components (with a typical SG of 2.6) in the sample that now has a measured SG value (see column in Table 1). The resulting difference represents the potential uplift value for graphite as a volume% in the sample and is listed in Table 1. If all the minerals had the same density or SG as the overall SG of the host rock the uplift value would be equivalent to 1x (ie no affect).

This will also be reflected in the JORC resource where the increased SG of the McIntosh sulphidic graphite mineralisation will be represented by a relative increased volume percentage of graphite per tonne in the resource. The affect of the uplift factor on the increased vol% graphite in drill holes T1GRD 088, T6GRC 092 and T6GRC 093 is shown in Tables 2 and 3.

**Table 2 Specific Gravity Measurements and Estimated Vol% Graphite Content**

Drill hole	Sample No	From(m)	To(m)	TGC%	Tot C%	Tot S%	SG	Est Pyrrhotite (wt%)	Graphite vol uplift factor
<b>T1GRD 089</b>	LB557567	11	12	6.21	7.31	0.02	<b>2.4</b>	0.0548	<b>1.06</b>
	LB557569	13	14	5.74	7.21	0.03	<b>2.41</b>	0.0822	<b>1.06</b>
	LB557576	18	19	0.025	6.7	4.91	<b>2.51</b>	13.4534	<b>0.91</b>
	LB557581	23	24	7.28	7.32	5.74	<b>2.45</b>	15.7276	<b>1.04</b>
	LB557589	31	32	7.16	7.17	5.13	<b>2.52</b>	14.0562	<b>1.08</b>
	LB557595	36	37	7.37	7.37	5.58	<b>2.54</b>	15.2892	<b>1.09</b>
	LB557602	43	44	6.16	6.05	5.49	<b>2.64</b>	15.0426	<b>1.10</b>
<b>T1GRD 088</b>	LB557615	56	57	6.91	7.11	4.21	<b>2.71</b>	11.5354	<b>1.17</b>
	LB557625	65	66	5.82	5.94	3.82	<b>2.71</b>	10.4668	<b>1.14</b>
	LB557633	72	73	6.69	6.75	4.3	<b>2.69</b>	11.782	<b>1.15</b>
	LB557637	75	76	7.08	4.98	7.17	<b>2.7</b>	19.6458	<b>1.13</b>
	LB557646	84	85	10.4	10.6	5.21	<b>2.73</b>	14.2754	<b>1.25</b>
	LB557653	91	92	8	8.26	4.52	<b>2.7</b>	12.3848	<b>1.18</b>
	LB557657	95	96	4.46	4.48	3.28	<b>2.76</b>	8.9872	<b>1.14</b>
<b>T2GRD 003</b>	LB556078	105.61	105.78	1.51	1.52	3.83	<b>2.86</b>	10.4942	<b>1.09</b>
	LB556080	106.33	106.96	2.3	2.23	2.08	<b>3.11</b>	5.6992	<b>1.23</b>
	LB556081	106.96	107.78	6.54	6.59	5.48	<b>3.26</b>	15.0152	<b>1.37</b>

## **Targets 5 and 6 - Initial RC Drilling and Rock Chip Geochemistry**

Preliminary RC drill hole results have been received for a new target - Target 6 that forms part of the aggregate >10 km strike length of the interpreted graphite schist within the McIntosh Project. Accessible RC drilling targets from cleared tracks resulted in the intersection of multiple intervals of visual flake graphite over broad downhole widths in excess of 80 m in two drill holes - T6GRC 091 and 093, of the 4 RC holes drilled. The graphitic horizons intersected in T6GRC 091 and 093 correlate with anomalies achieved from ground geophysical IP traversing (refer Figure 4). Drill hole T6GRC92 was drilled to the west of the graphite schist horizon and intersected weak graphite above the target (ie 2.99 TGC% over 3 m from 60 m) and will be used as a pre-collar hole in a planned diamond drilling program. Assay results have been returned for drill hole T1GRC093, with results from T6GRC 091 pending. The assays results have confirmed that grades in excess of 10 TGC% are achievable in drill holes in the McIntosh Project (refer Table 3) with higher grades supporting the economic potential of an area that has received only preliminary exploration to date.

A rockchip program was also undertaken for both Targets 5 and 6 with encouraging results as noted below.

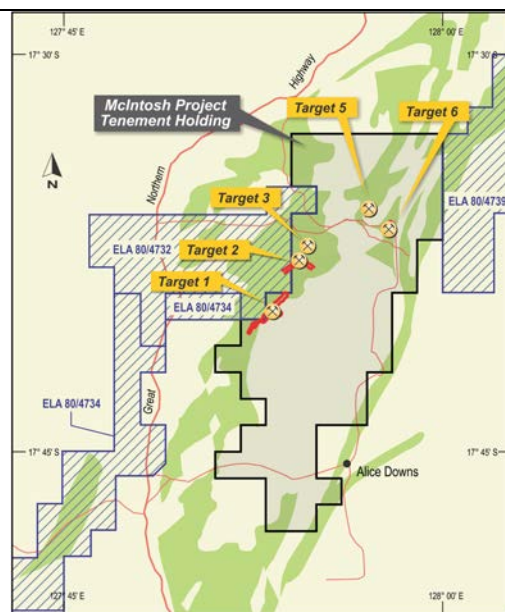
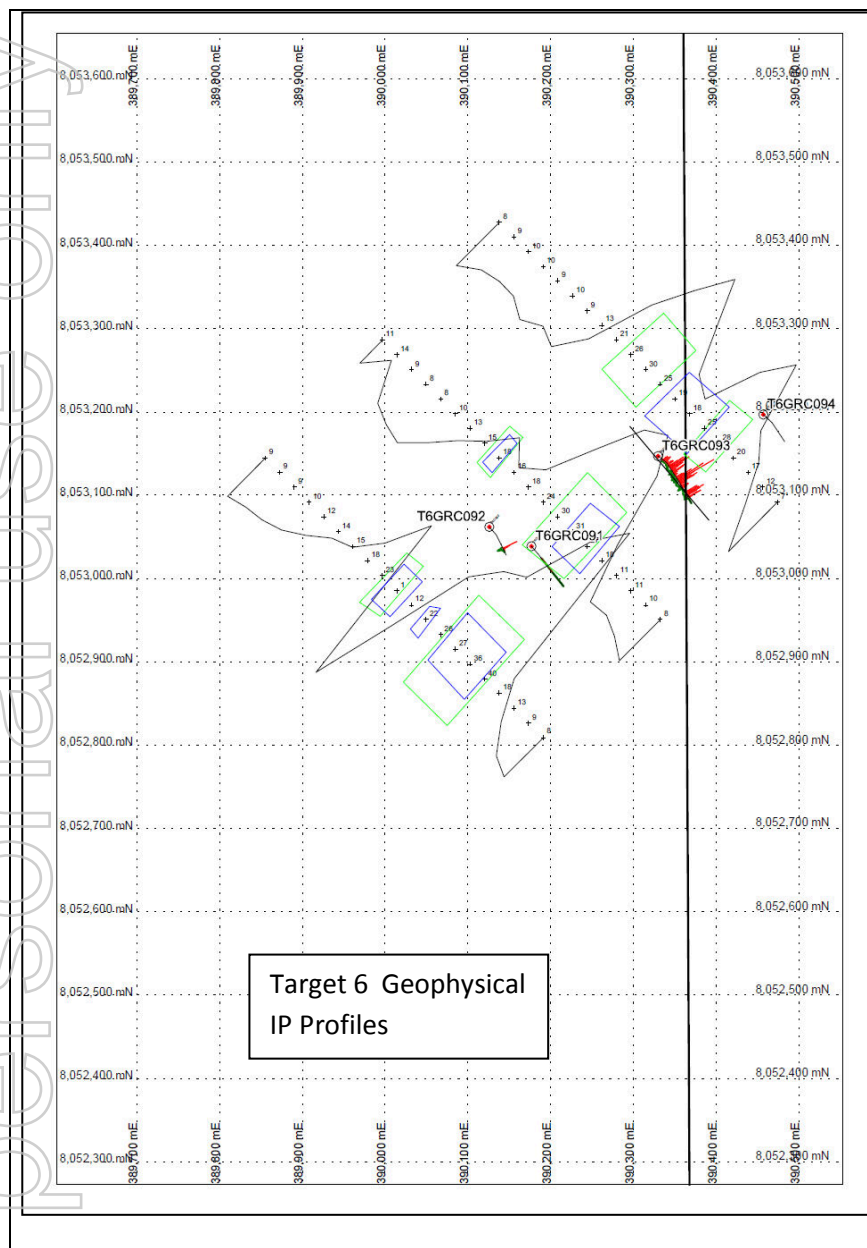
**Table 3 Target 6 - Preliminary Drill hole Intercepts**

Drill Hole	From	To	Interval	TGC wt%	TotC wt%	TotS wt%	Est. graphite content (vol %) using 1.2x factor
T6GRC 093	17m	118m	101m	2.25%	2.31%	2.63%	2.7%
Incl	73m	83m	10m	5.35%	5.36%	4.0%	6.42%
Incl	74m	76m	2m	10.78%	10.92%	4.7%	12.9%
T6GRC 092	60m	63m	3m	2.99%	2.99%	4.38%	3.6%
T6GRC 091							NSR
T6GRC 094							Assays Pending

**Table 4 – Targets 5 and 6 Graphite Rock Chip Geochemistry**

Target	Sample No.	GDA East	GDA North	Total Graphitic Carbon - %TGC	Total carbon - %C	Total sulphur - %S
Target 5	508453	388764	8054063	5.93	6.44	0.03
	508458	388859	8054205	6.24	12.4	0.02
	508460	388776	8054207	1.82	9.7	0.02
	508463	388807	8054143	10.7	13.2	0.03
	508464	388872	8054225	9.61	0.03	15.1
	508469	388834	8054146	17.8	23.4	0.04
Target 6	508454	390343	8053142	3.95	3.99	0.43
	508455	390438	8053173	11.7	11.9	0.04
	508456	390453	8053182	3.43	3.45	0.07
	508461	390408	8053209	8.22	8.34	0.31
	508462	390431	8053184	4.28	8.71	0.02
	508465	390428	8053170	6.66	13.1	0.01
	508466	390060	8053007	5.48	5.63	0.76
	508467	390389	8053157	3.24	6.59	0.07
	508468	390443	8053174	5.75	6.11	0.1





**Figure 4**

Ground IP profiles showing the interpreted location of the graphite horizons (as blue boxes) and location of preliminary RC drill holes at Target 6. The figure above shows the location of Target 6 in the McIntosh Project.

### McIntosh Petrographic Analysis – Strong Flake Graphite Confirmed

Petrographic analysis of core samples from Target 2 confirm that sulphides (pyrrhotite) are interlayered with flake graphite and may have the beneficial effect of helping to separate graphite flakes during processing. Flake graphite is typically concentrated as aggregates that parallel layers within the host rock (ie schistosity) rather than being potentially locked within quartz and feldspar as individual flakes. The latter style of mineralised host is typical of other flake graphite deposits and can substantially add to mining and milling costs. Crushing of this material can also reduce flake size and integrity. This does not appear to be problem for the McIntosh style of graphite mineralisation.



Surface rock chip samples from Targets 5 and 6 have confirmed the presence of strong flake graphite (refer Figures 4A and 4B). Graphite typically occurs as clumps of coarser flake graphite that should be amenable to beneficiation. Ground geophysical (induced polarisation or IP) surveying and airborne EM have shown that the graphitic schist horizons at Targets 5 and 6 extend over an aggregate strike length of 2 km (Figure 1).

#### Photomicrographs of flake graphite from Target 6 under the polarising microscope

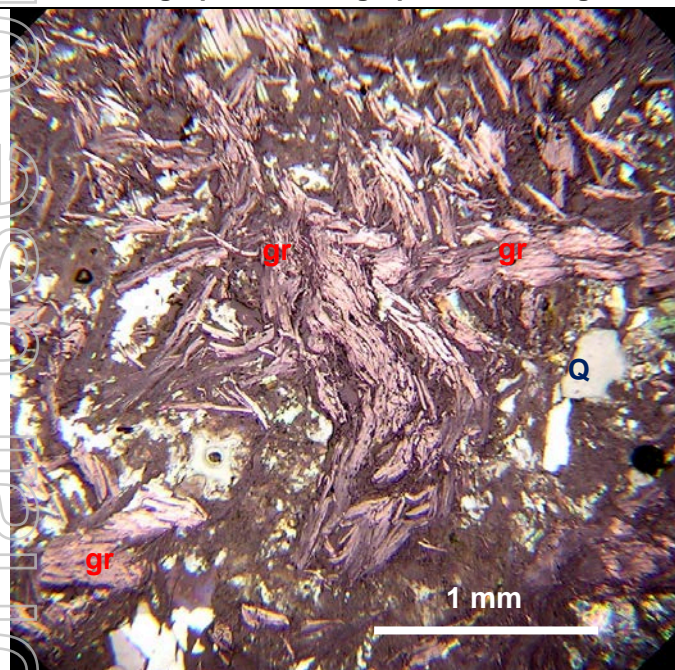


Figure 4A: Target 6 (Sample 508455 - strong flake graphite (gr) aggregates or “clumps” associated with minor quartz in the graphitic schist host. Plane polarised reflected light. Field of view – 3 mm.

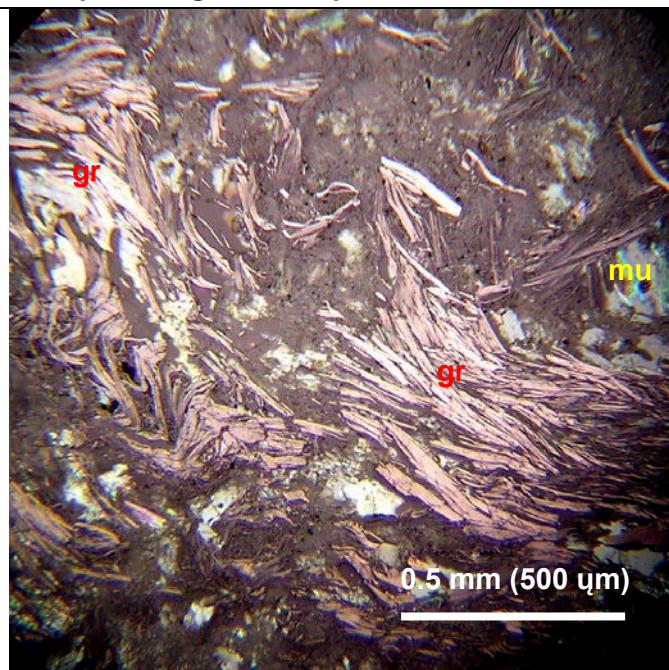


Figure 4B: Target 6 (Sample 508455) – detail of flake graphite aggregates associated with platy muscovite (mu) in the graphitic schist host. Note the flake size relative to the bar scale. Plane polarised reflected light. Field of view – 1.5 mm.

### Samcheok Graphite Project, South Korea

Lamboo Resource’s application for Mining Rights over the historical Samcheok graphite mine in South Korea was granted on 9 January 2013. The abandoned historical open cut graphite mine at Samcheok is located 215km east of Seoul (Figure 5A), situated on the eastern seaboard of South Korea, about 13km southeast of the port of Samcheok, in Donghae County of Gangwon-Do Province.

#### **Tenure**

Mining Right Samcheok 09-2, covering an area of 68ha, was recorded as Register Number 200216 by the Ministry of Knowledge Economy (“MOKIE”) Mining Titles Register (Figure 3). The Mining Right was granted to Won Kwang Mines Inc for a period of 7 years (until to 9 January 2020) for the purposes of graphite mining-exploration.



The original application for mining rights over Samcheok was lodged in April 2012 by Won Kwang Mines Inc, a wholly-owned Korean subsidiary company of Opirus Minerals Pty Ltd. The shareholders of Lamboo Resources Limited at the Annual General Meeting held on 14 December 2012 approved the acquisition of all the issued shares in Opirus Minerals Pty Ltd. Application for Mining Right Samcheok 10, located immediately south of Mining Right Samcheok 09-2, is being processed.

### Graphite Resources

The Samcheok project contains a JORC inferred flake graphite resource of 200,000 tonnes at 5% Cg. The aggregate strike of the resource is 300m and it is up to 80m thick and it contains fine to coarse grade flake graphite.

### Existing Infrastructure

The abandoned open cut at Samcheok includes derelict mine buildings, stockpiles and mine dumps overgrown by dense secondary regrowth vegetation. Concrete structures of the treatment plant, considered to be flotation cells, suggest that a low-grade mining product was being concentrated at the time of operation until its closure in about 1992.

The Samcheok graphite mine lies 13km southeast of the port town of Samcheok, a combined fishing and major cement clinker export port. Samcheok is accessed by an excellent modern Expressway from Seoul and rail line. The major port of Donghae has the closest container export facilities and is situated 22km northwest of the Samcheok graphite project (Figure 5B).



Figure 5A. Location Map of Lamboo Resources Graphite Projects in South Korea.

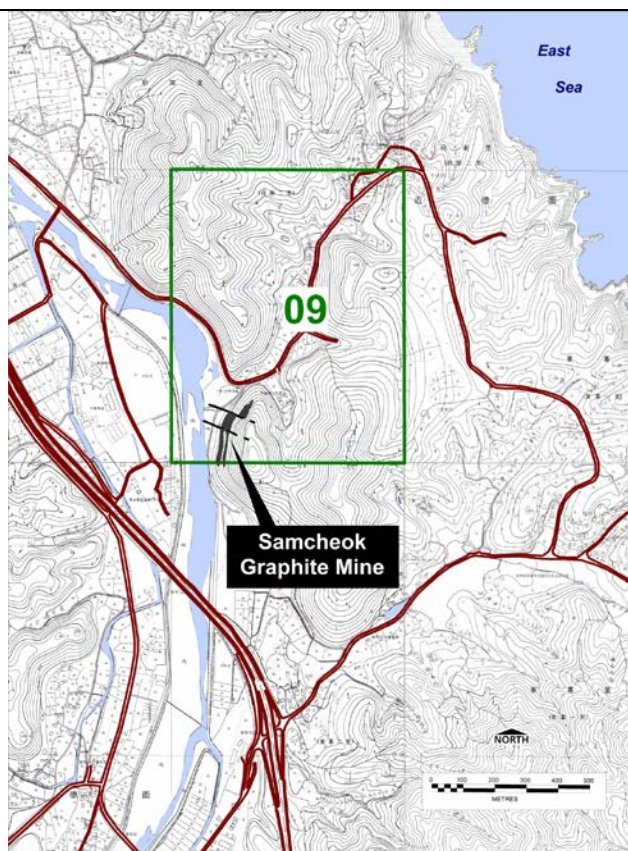


Figure 5B Topographic & Tenure Map, Samcheok Graphite Project.

## Budget Approval – South Korea

An initial budget of \$250,000 has been approved to establish an administrative office and commence exploration of priority flake graphite targets in South Korea. The graphite targets are close to potential markets in South Korea and are planned to be fast-tracked to JORC resource status during 2013.

**Dr Craig Rugless**  
**Technical Director Lamboo Resources Limited**

### Competent Persons Statements

Information in this “ASX Announcement” relating to Exploration Results, Geological Data and Tenure at the McIntosh Project has been compiled by the Technical Director of Lamboo Resources Ltd, Dr Craig S. Rugless who is a Member of the Australian 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 in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (JORC Code 2012 Edition). 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 the Inferred Resource, Exploration Results, Geological Data and Tenure at the Samcheok Project, South Korea has been compiled by Consulting Geologist Mr Christopher Sennitt, who is a Fellow of the Australian Institute of Geoscientists. Mr Sennitt has over 31 years experience in mineral exploration in Asia and Australia and has been actively exploring the Korean peninsula since 1994. Mr Sennitt holds BSc (Applied Geology, 1981) and MSc (Economic Geology, 1991) degrees and is a Fellow of the Australian Institute of Geoscientists and a Member of the Society of Economic Geologists. 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 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore reserves” (JORC Code 2012 Edition). He consents to the inclusion of this information in the form and context in which it appears in this report.