

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



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# EXCELLENT DRILL RESULTS EXPECTED TO LEAD TO A SIGNIFICANT RESOURCE UPGRADE AT MCINTOSH

#### **Highlights**

- The third phase of RC drilling at Target 1 has produced highly encouraging broad intercepts including 27 m @ 5.49% TGC from surface in T1GRC136, 14 m @ 4.87% TGC from 26 m in T1GRC 138 and 66 m @ 4.04% TGC from 38 m in T1GRC 134.
- These intercepts will be incorporated into the current database and will contribute to an expected significant resource upgrade.
- · Resource upgrade expected shortly.
- Strong progress in the initial flotation recoveries for coarse flake graphite from Targets 5 and 6 augur well for the production of pure concentrates from these areas.

Technical Director, Dr Craig Rugless, said "These new flake graphite intercepts at Target 1 will be added to the existing resource and are expected to result in a significant resource upgrade. We are now closing in our 20 year mine life target for the McIntosh Project.

Dr Rugless further commented that a bulk 1 tonne sample from the Target 1 extension has now been submitted for beneficiation at Nagrom Metallurgical Laboratories in Kelmscott and will produce enough pure flake graphite to be provided to potential end users for testing.

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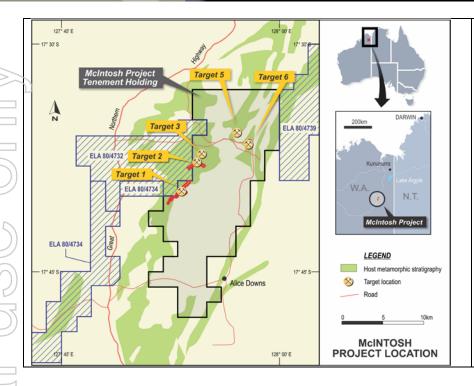


Figure 1 Location of flake graphite Target areas in the McIntosh Project that are curren subject to baseline environment studies.

Lamboo ELA applications –

Lamboo ELA applications – hatched.

The Company has completed 4392 m of RC drilling in several drilling campaigns during the current field season at the McIntosh Project (Figure 1). The drilling programs have effectively confirmed that the Target 1 mineralisation extends over a strike length of 2500 m and can exhibit true widths of up to 40 m that are amenable to open – cut mining (Figure 2).

Additional coarse flake graphite mineralisation occurs over an aggregate strike length of 2700 m at Targets 5 and 6 and exhibit locally concentrations in tectonised zones. The mineralisation remains open both along strike and at depth in all Target areas.

### Target 1 Resource Estimate Parameters

Additional RC drilling at Target 1 was conducted in two phases and involved 24 holes (2538 m - Table 2, Appendix 1). Broad flake graphite intercepts have been achieved and will result in a resource upgrade that is due to be completed in early 2014. Drilling has confirmed that the graphite schist continues 2000 m southeast of the current resource. More detailed resource drilling was conducted on 80 m traverses to the south and north of the main zone that was extended by an aggregate 400 m, or double the strike of the existing resource (Figure 2).

The Target 1 graphite schist remains open in all directions. A new Program of Work (POW) has now been approved and will allow drilling to occur 250 m to the north and 500 m to the south of the existing drill holes to give an overall strike length of 3000 m for the Target 1 graphite schist.



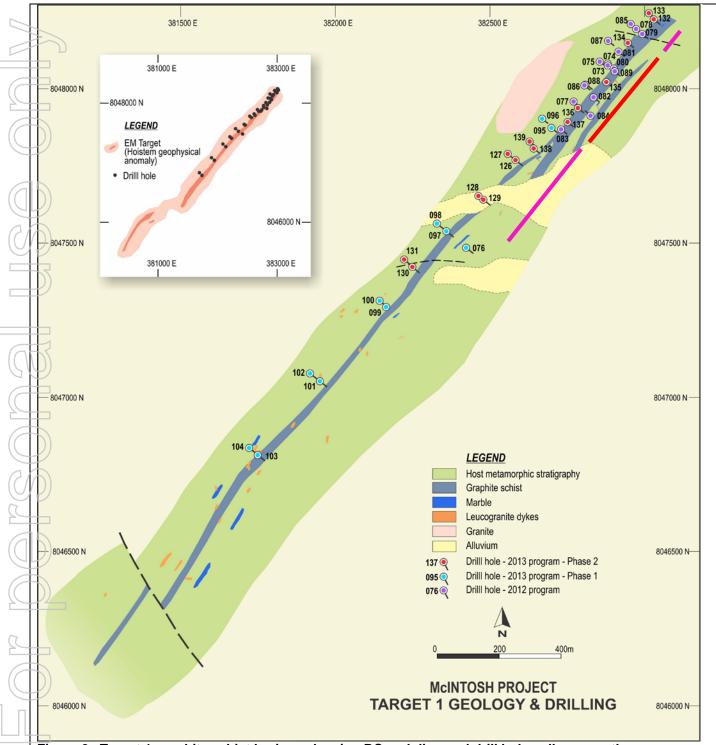


Figure 2. Target 1 graphite schist horizon showing RC and diamond drill hole collars over three campaigns in 2012 and 2013. The existing JORC resource estimate is highlighted by the red bar and the extensions to be included in the resource upgrade are outlined in pink. All drill holes targeting the graphite schist horizon intersected graphite and will be added to the resource when the drill density is increased.



#### McIntosh Targets 5 and 6 - RC Drill hole Results

Assay results for 11 drillholes completed in September and October, sited at Targets 5 and 6 have now been received. Assay results are tabulated in Appendix 1.

The graphite mineralisation at Targets 5 and 6 extends from surface to depths of up to 138m. In all cases the graphite schist host remains open at depth.

Target 5 has an overall mapped strike length of 1500 m with true widths up to 30m (refer Figure 3). Similarly, Target 6 has shown consistent downhole widths up to 54m for the host graphitic schist. Target 6 graphite schist has been geologically mapped over a strike length of 1500m and is coincident with a strong conductive aerial EM anomaly that is open along strike (refer Figure 4).

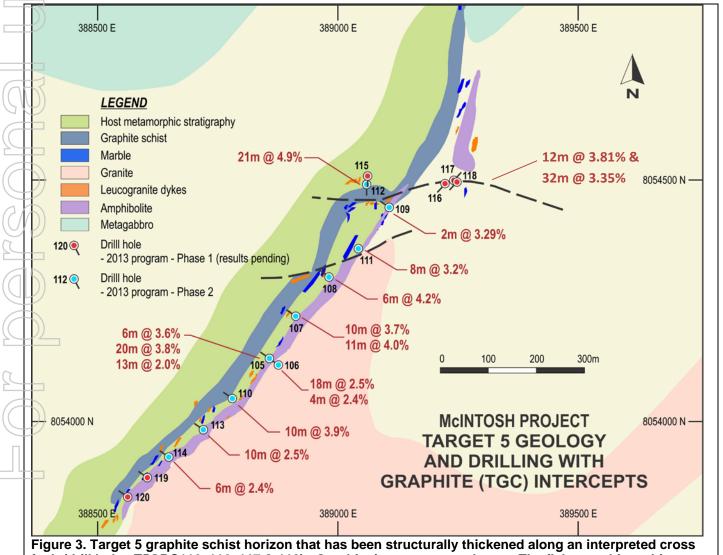
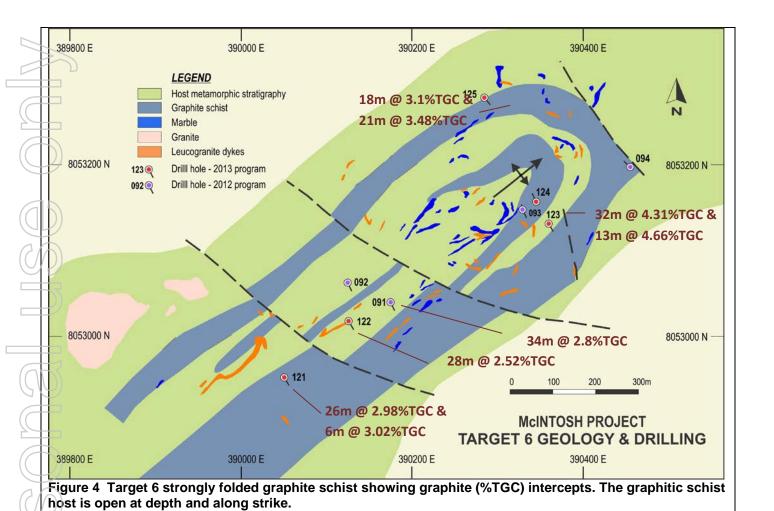


Figure 3. Target 5 graphite schist horizon that has been structurally thickened along an interpreted cross fault (drill holes T5GRC112, 116, 117 & 118). Graphite intercepts are shown. The flake graphite schist horizon remains opens both at depth and to the north.





## McIntosh Targets 5 and 6 - Metallurgical Flotation Studies

Results of initial metallurgical testwork carried out at Actlab Laboratories, Canada as well as ongoing work at the Guangzhou Research Institute of Non-ferrous Metals (GZRINM) indicate that McIntosh Targets 5 and 6 are achieving higher preliminary flake graphite concentrates than were initially achieved for Target 1. Target 6 has achieved over 81% TGC (Actlabs) and 87% TGC (GZRINM) at high recovery levels that puts the graphite mineralisation in the region of producing flake graphite mines in Southern China (93%TGC at 80% recovery). This tenor of graphite is currently being treated by hydrometallurgical techniques to achieve (lithium) battery grade graphite flake currently sold in China.



# Table 1 Initial flotation of flake graphite from Targets 2, 5 and 6 compared with Target 1 (after Actlabs Laboratories, Canada)

McIntosh Graphite Target	Initial Float Conc	Recovery	Gravity Conc	Recovery
Target 1	26.5% TGC	79.3%	29.7% TGC	79.0%
Target 2	50.1% TGC	92.3%	47.9% TGC	81.6%
Target 5	45.1% TGC	89.3%	51.4% TGC	97.7%
Target 6	81.2% TGC	79.8%	75.7% TGC	74.1%

Petrographic studies have shown that Targets 5 and 6 contain coarse flake graphite up to 500 µm (Figures 6 and 7). This has been confirmed in metallurgical testing of drill samples from the recent program (refer to the graph in Figure 5).

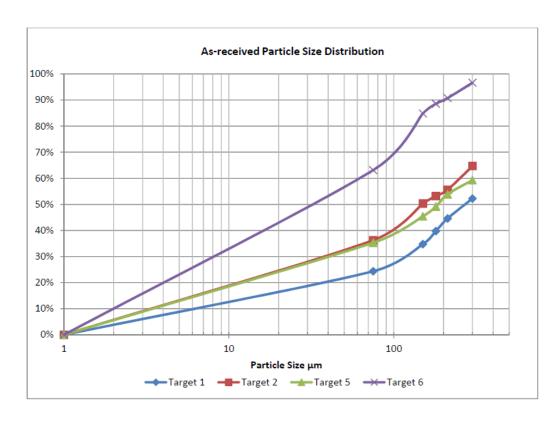


Figure 5 Particle size versus distribution graph showing the relative flake graphite sizes in the samples examined from Target 1, 2, 5 and 6. It is worth noting that the samples represent RC pulps that have undergone grinding during the sample collection.



#### Photomicrographs of flake graphite from Targets 5 and 6 under the polarising microscope

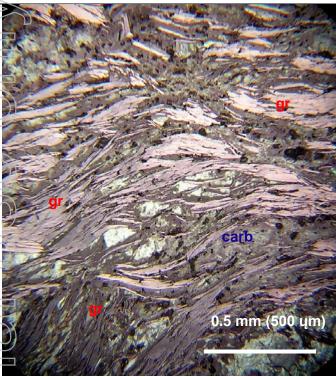


Figure 6A Target 5 (Sample 508507) showing coarse flake graphite (gr) aggregates or "clumps" paralleling an anastomosing schistosity. Crossed polars under reflected and transmitted light. Field of view – 1.5 mm.

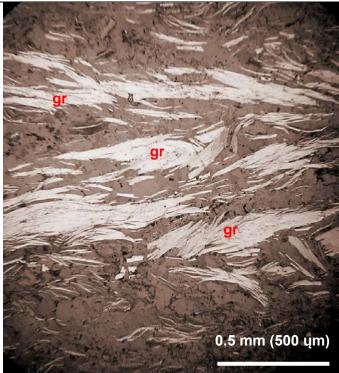


Figure 6B Target 5 (Sample 508511) – detail of coarse flake graphite. Plane polarised reflected light. Field of view – 1.5 mm.

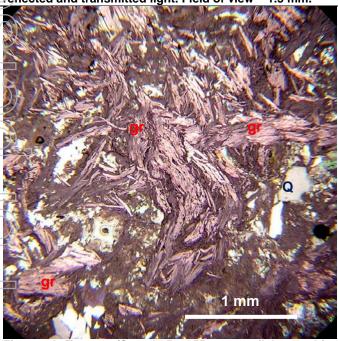


Figure 7A: Target 6 (Sample 508455 - strong flake graphite (gr) aggregates or "clumps" associated with minor quartz in the graphitic schist host. Plane polarised reflected light. Field of view – 3 mm.

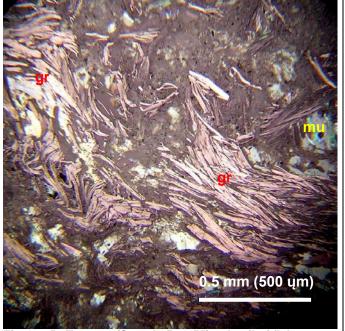


Figure 7B: Target 6 (Sample 508455) – detail of flake graphite aggregates associated with platy muscovite (mu) in the graphitic schist host. Note the flake size relative to the bar scale. Plane polarised reflected light. Field of



view - 1.5 mm.

#### MicIntosh Target 1 - Bulk Sample Metallurgical Beneficiation

A 1 tonne bulk sample of RC pulps from Target 1 has been provided to Nagrom Laboratories in Kelmscott, WA for metallurgical beneficiation. A flow sheet has now been developed for the beneficiation of the Target 1 flake graphite (refer ASX:LMB Announcement 6<sup>th</sup> November) and this will be further optimised to achieved a higher grade flake graphite product.

Enough high grade flake graphite will be produced (approx. 50 Kg) to satisfy the testing requirements of potential high – tech end users and provide material for the recently formed Advanced Particle Group (APG) subsidiary of the Company. It is planned that bulk flake graphite processing will be completed early in the first quarter of 2014.

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 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.



#### Appendix 1 - Target 5 and 6 RC Drill Hole Intercepts

#### Table 2 Target 1 RC drill hole Intercepts - October Drilling Phase (refer Figure 2)

	Appendix 1 - Table 2 Targe	_				-	e (refer Fiç	gure 2)	
	Drill Hole	Collar GDA East	Co-ords GDA North	From (m)	To (m	Interval (m)	TGC%	Total C%	Total S%
	T5GRC126 Dip – 60° Az -127° EOH – 132m	382585	8047775	47	60	13	4.79		
	T5GRC127 Dip – 60° Az - 128° EOH – 138m	382560	8047796	91	102	11	4.23		
	T5GRC128 Dip – 60° Az - 128° EOH – 90m	382464	8047659	70	75	5	3.22		
	T5GRC129 Dip – 60° Az - 1283° EOH – 84m	382479	8047647	36	46	10	3.27		
	T5GRC130 Dip - 60° Az - 128° EOH - 90m	382248	8047427	35	59	24	2.68		
	T5GRC131 Dip – 60° Az - 128° EOH – 138m	382220	8047451	101	115	14	2.06		
	T5GRC132 Dip – 60° Az -127° EOH – 114m	383036	8048235	44	76	32	4		
	T5GRC133 Dip – 60° Az - 128° EOH – 150m	383020	8048256	77	105	28	3.19		
	T5GRC134 Dip - 60° Az - 127° EOH - 132m	382952	8048158	38	104	66	4.04		
	T5GRC135 Dip – 60° Az - 127° EOH – 490	382882	8048030	0	23	23	3.52		
				48	53	5	2.25		
	T5GRC136 Dip - 60° Az - 127° EOH - 66m	382788	8047946	0	27	27	5.49		
<u> </u>	T5GRC137 Dip – 60° Az - 127° EOH – 78m	382754	8047900	1	16	15	4.44		
	75GRC138 Dip – 60° Az - 127° EOH – 60m	382645	8047813	26	40	14	4.87		
	T5GRC139 Dip – 60° Az - 127° EOH – 108m	382631	8047837	76	84	8	4.31		
	Table 3 Targe	et 5 RC dri	II hole Inter	cepts (re	efer Figu	re 4)			
	Drill Hole	Collar GDA East	Co-ords GDA North	From (m)	To (m)	Interval (m)	TGC%	Total C%	Total S%
	T5GRC115* Dip - 60° Az -180° EOH - 102m	389057	8054510			no sigr	nificant resul	ts	
	T5GRC116 Dip - 60° Az -253° EOH - 66m	389216	8054495	10	12	2	3.59	6.41	0.01
П				17	39	22	3.17	3.21	2.61
<u> </u>	T5GRC117 Dip - 60° Az -253° EOH - 84m	389233	8054501	1	13	12	3.81	5.55	0.05
				24	56	32	3.35	3.47	2.83
	T5GRC118 Dip	389239	8054499	8	10	2	2.06	3.87	0.02

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Drill Hole	Collar GDA East	Co-ords GDA North	From (m)	To (m)	Interval (m)	TGC%	Total C%	Total S%	
T5GRC115* Dip – 60° Az -180° EOH – 102m	389057	8054510	no significant results						
T5GRC116 Dip - 60° Az -253° EOH – 66m	389216	8054495	10	12	2	3.59	6.41	0.01	
			17	39	22	3.17	3.21	2.61	
T5GRC117 Dip -60° Az -253° EOH - 84m	389233	8054501	1	13	12	3.81	5.55	0.05	
			24	56	32	3.35	3.47	2.83	
T5GRC118 Dip - 60° Az -093° EOH - 66m	389239	8054499	8	10	2	2.06	3.87	0.02	
			38	54	16	2.43	2.49	4.04	



T5GRC119 Dip - 59° Az -313° EOH - 60m	388606	8053882	40	46	6	2.43	2.34	3.61
T5GRC120 Dip - 59° Az -313° EOH - 48m	388566	8053843	24	26	2	2.54	2.51	3.14
			32	35	3	5.15	5.27	8.02
*Pre - collar. Note - intercepts calculated using a 2% Total Graphitic Carbon (TGC) lower cut and maximum interval of 4m internal dilution.								

		Intercepts					T =	T
Drill Hole	Collar GDA East	Co-ords GDA North	From (m)	To (m)	Interval (m)	TGC%	Total C%	Tot
T6GRC121 Dip – 60° Az -150° EOH – 168m	390051	8052952	28	54	26	2.98	3.09	4
			75	77	2	3.38	3.45	3
			87	89	2	4.29	4.43	4
			100	106	6	3.02	3.13	3
			119	124	5	2.55	2.59	5
T6GRC122 Dip – 60° Az - 150° EOH – 132m	390126	8053018	68	93	28	2.52	2.64	3
			102	105	3	3.0	3.13	3
			111	117	6	2.75	2.83	4
T6GRC123 Dp - 61° Az - 151° EOH - 96m	390360	8053132	7	31	24	3.29	3.78	2
J)			50	53	3	4.3	4.38	3
			58	61	3	2.74	2.74	3
			68	72	4	4.47	4.28	4
			77	78	1	4.79	4.88	
T6GRC124 Dip - 60° Az - 150° EOH - 120m	390344	8053158	31	38	7	5.67	5.82	
			49	50	1	3.23	3.42	3
7)			55	87	32	4.31	4.45	3
			95	108	13	4.66	4.87	5
T6GRC125 Dip - 60° Az - 150° EOH - 90m	390284	8053279	7	25	18	3.1	3.28	3
<del>//</del>			47	68	21	3.48	3.69	



#### Appendix 2 - JORC 2012 Criteria

According to clauses 18 and 19 of the 2012 JORC Code, the criteria in sections 1 and 2 of Table 1 need to be addressed when first reporting new exploration results. These are listed below and comments made on an "if not, why not" basis.

	why not" basis.  Section 1 Samp	ling Techniques and Data
	Section 1 Criteria	Commentary
	Sampling techniques	RC samples represent 2 kg splits taken from the cyclone during the drilling process.
	Drilling techniques	Reverse circulation (RC) using a 5.5 inch face sampling hammer
	Drill sample recovery	RC split samples have been recovered from rotary splitter in a cyclone attached to the rig.
U	Logging	RC chips were geologically are being logged in the field and will be verified by using a binocular microscope in the office.
	Sub-sampling techniques and sample preparation	Sample splits from the drilling rig were submitted to Actlabs Laboratory 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. A number of samples were analysed for a multi-element suite by ICP – OES and MS techniques after a total mixed acid digest.
	Quality of assay data and laboratory tests	The RC samples that have been collected to submit 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 will be statistically analysed to assess any untoward variations in the data.
	Verification of sampling and assaying	Verification was based on use of duplicates, standards and blanks used.
	Location of data points	Hand-held Garmin 62S and Garmin 76c Global Positioning System ("GPS") units have been employed with typical accuracy of coordinate data to be ±5 metres to locate rock chip sample positions.
		All holes have been subsequently professionally surveyed by Whelans Surveyors, Kununurra. The map projection used is the Australian Geodetic MGA Zone 52 (GDA 94).
	Data spacing and distribution	RC drillholes at the Target 1 Extension are spaced on traverses 250 to 450 m apart. RC drillholes at the Targets 5 and 6 were spaced on traverses 100 m apart.
	Orientation of data in relation to geological structure	RC drill holes were drilled normally to the strike of the graphitic schist horizons.
	Sample security	Samples were collected in calico bags and placed in self seal plastic bags prior to being put into bulka bags before being transported by road to Actlabs in Perth. The samples were processed and the pulps despatched to Actlabs Laboratories in Canada. 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 Reporting of Exploration Results** 

	Section 2 Criteria	Commentary
	Mineral tenement and	Lamboo Resources Limited holds six (8) granted ELs and five (3) ELAs within the
	land tenure status	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.
	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, 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 Zonet in the East Kimberley of Western Australia. The host stratigraphy has been mapped as
		the Tickalara Metamorphics that extend for approximately 130 km along the western side of the major transcurrent 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, 5 and 6.
00	Drill hole Information	A total of 139 RC and diamond drill holes have been completed at Targets 1, 2, 3,
		5 and 6 at McIntosh Graphite for a total metreage of 15992 m.
	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 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 Figure 1 for regional geology and flake graphite targets – Targets 1, 2, 3, 5 and 6 Refer Figure 2 for Target 1 geology and drill hole collars
		Refer Figure 3 for Target 5 geology and drill hole collars. Refer Figure 5 for Target 6 geology and drill hole collars. Refer Figure 6 for flake graphite – particle distribution for Targets 1, 2, 5 and 6. Refer Figure 6A & 6B for Target 5 photomicrographs. Refer Figure 7A & 7B for Target 6 photomicrographs.
	Balanced reporting	All RC samples from Phase 2 and 3 drilling at Targets 1, 5 and 6 have been analysed and reported on. Refer Appendix 1 – Tables 2, 3 and 4.
	Other substantive	All exploration data has been reported on and include 139 RC and diamond drill
	exploration data	holes that have resulted in an estimated JORC resource at Target 1
	Further work	JORC compliant RC and diamond drilling programs are planned for graphitic schist Targets 1, 5 and 6. Additional drilling at Target 1 is planned to increase the graphite resource.