



17 May 2017

The Manager ASX Announcements

Improved graphite Mineral Resource status at Kookaburra Gully on South Australia's Eyre Peninsula

Resource definition drilling by Adelaide-based Lincoln Minerals Limited (ASX:LML) ("Lincoln" or "Company") at the Company's flagship Kookaburra Gully Graphite Project located on South Australia's Eyre Peninsula has increased the confidence level of the Mineral Resource inventory to a combined Measured, Indicated and Inferred Mineral Resource of 2.03 million tonnes at 15.2% total graphitic carbon (TGC) (using 5%TGC cut-off)

Batch and lock-cycle metallurgical test work has confirmed that graphite concentrates can be produced readily at 93% to 98% TGC and 94% to 98% LOI, and can be produced at greater than 90% recovery from a simple flow sheet.

All analytical results and Mineral Resources are in accordance with JORC Code 2012.

Kookaburra Gully Drilling

During 2016, Lincoln completed 884.4 m of diamond core drilling for which the analytical and metallurgical results and an updated Mineral Resource are reported here. Drilling informed the geotechnical model, provided key graphite intervals for metallurgical testwork and confirmed grade and continuity of the Kookaburra Gully graphite deposit.

Updated Mineral Resource

OreWin Pty Ltd (OreWin) was commissioned by Lincoln to update the 2014 resource model for the Kookaburra Gully graphite deposit to include 2016 diamond core drilling data.

The updated Kookaburra Gully modelling work incorporates all drillhole data available at 4 November 2016, which includes 52 aircore and/or reverse circulation holes and 11 diamond core holes. A total of 1,785 drillhole assays for carbon (C), total graphitic carbon (TGC) and sulphur (S) were available for this modelling.

Quality assurance and quality control (QA/QC) data were available in the form of certified reference material (CRM) standards, field duplicates, laboratory repeats, and blanks. This QA/QC data was reviewed by OreWin and no material quality issues were identified.

Two mineralised domains were interpreted – an inner, higher grade core (>5% TGC) (DOMAIN=1) surrounded by a lower grade halo (>2% TGC) (DOMAIN=2). Solid wireframes were developed to represent these two domains. A key component of the resource model update was the addition of waste rock characterisation to inform proposed mining schedules and sequencing.

Carbon and TGC grades were estimated using ordinary kriging (OK) methods and validated using inverse distance (ID2) methods. Density was also estimated in the same manner. The resultant Mineral Resource is as follows.

The new Mineral Resource total at a 5% TGC cutoff (2.03 million tonnes at 15.2% TGC) is slightly smaller and slightly higher grade than the original resource (2.2 million tonnes at 15.0% TGC) but, importantly, now includes a Measured Mineral Resource.



Kookaburra	Gully	Mineral	Resource	Inventory
------------	-------	---------	----------	-----------

DOMAIN	CLASS	Tonnage (Mt)	C (%)	TGC (%)	Density
1	1	0.39	16.7	14.9	2.60
2	1	0.11	3.7	3.0	2.46
Total M	easured	0.50	13.8	12.3	2.57
1	2	1.08	16.4	14.9	2.52
2	2	0.58	3.5	3.1	2.50
Total Indicated		1.65	11.9	10.8	2.51
1	3	0.56	17.9	16.0	2.51
2	3	0.22	3.7	3.0	2.62
Total Inferred		0.78	13.9	12.3	2.54
Overall Total >2% TGC Measured + Indicated + Inferred		2.94	12.8	11.4	2.53

INCLUDES OVERALL TOTAL >5% TGC	2.03	16.9	15.2	2.53

DOMAIN 1 = Interpreted at 5% TGC nominal cut-off DOMAIN 2 = Interpreted >2% TGC halo CLASS 1 = Measured

CLASS 2 = Indicated

CLASS 3 = Inferred

Kookaburra Gully Graphite Project - Mineral Resource Drill Hole Locations



Figure 1: Locations of Drillholes at Kookaburra Gully

Metallurgical Results

Detailed metallurgical test work has been completed on three bulk samples representing different elevations in the orebody or stages in the proposed mining sequence of Kookaburra Gully:

- LOX1 a 50 kg near-surface oxide sample from shallow (< 5 m BGL) trenches in the central and northern parts of the orebody (weathered graphite schist above 152 m AHD);
- LMC11 a master composite sample of approximately 150 kg from diamond drill core and aircore drill chips, representing the middle levels of the orebody (relatively fresh graphite schist below 133 m AHD); and
- LSU1 a deeper 50 kg sample from near the base of the proposed pit (fresh sulphide-bearing graphite schist below 101 m AHD).

The results of that metallurgical test work are summarised in the table below.

	Ма	Master Composite		Oxide Surface Composite			Deeper Composite			
		LMC11			LOX1			LSU1		
Depth BGL*		40–119 m			1–5 m		99–119 m			
Depth AHD (above sea level)	81–133 m		Trenches 2 & 4 190–183 m Trench 1 152–156 m		66–101 m					
Graphite recovery		ca. 90⁺%			ca. 90 ⁺ %	ca. 90⁺%		ca. 90⁺%		
Total Concentrate Grade		96.6% TGC			95.0% TGC		95.1% TGC			
Screened Concentrate	Assay TGC%	Assay LOI%	Dist'n %	Assay TGC%	Assay LOI%	Dist'n %	Assay TGC%	Assay LOI%	Dist'n %	
+300 μm	93.2	96.0	0.1	97.8	97.1	0.4	97.4	97.4	0.31	
+177 μm, -300 μm	93.2	96.0	3.5	97.8	97.1	5.2	97.4	97.4	4.7	
+150 μm, -177 μm	95.8	97.2	3.9	96.4	97.7	4.7	97.0	97.6	6.9	
+106 μm, -150 μm	96.6	97.5	11.4	97.0	97.3	14.8	97.5	97.7	13.9	
+75 μm, -106 μm	96.7	97.4	11.4	97.1	97.2	12.7	96.0	97.6	12.2	
-75 μm	96.8	96.8	69.7	93.8	94.5	62.2	94.0	94.6	62.0	

Metallurgical Test Results

*BGL is below ground level; AHD is Australian Height Datum; Dist'n is distribution TGC is Total Graphitic Carbon; LOI is Loss on Ignition Standard Sieve/Mesh Sizes are: 80# = 177 µm; 100# = 150 µm; 200# = 75 µm

BACKGROUND

Resource Geology

The Kookaburra Gully graphite deposit occurs within Palaeoproterozoic Hutchison Group metasediments on eastern Eyre Peninsula. High-grade metamorphism to Upper Amphibolite facies, and locally to Lower Granulite facies, has produced coarse-grained flake graphite within graphitic schist units. The graphite occurs in a number of steeply-dipping lenses with an aggregate thickness of about 15–30 m in the central and southern parts of the deposit as interpreted from surface mapping carried out by Lincoln and drillhole intercepts based on OreWin's interpretation. The main graphite unit is 14–20 m thick. The interpreted dip of the graphite units is about 50° to 85° to the east–south-east but they are complexly folded and an interpreted plunging anticline was derived from work carried out by Pancontinental Mining trenching and surface mapping fitted to drillhole intercepts.

Tertiary weathering has altered and oxidised the Hutchison Group down to ca. 130 m AHD and formed a thick saprolitic or oxide zone locally capped by ironstone.

The Mineral Resource at Kookaburra Gully has a strike length of 585 m and a depth extent of at least 125 m below ground level.

Drilling, Sampling and Analysis Techniques

The Kookaburra Gully Mineral Resource, which is reported in accordance with the JORC Code (2012), is based on drilling completed by Lincoln in 2013, 2014 and 2016. Phase 1 and 2 drillholes were drilled by slimline aircore (AC) and / or reverse circulation (RC). Phase 1 totalled 37 holes for 3,904 m in 2013 (3,352 m AC and 552 m RC (14% RC)). Phase 2 totalled 15 holes for 1,349 m in 2014 (1,344 m AC and 5 m RC). Phase 3 (2016) diamond core drilling totalled 11 holes for 884.4 m and 12 water monitoring wells.

The total Kookaburra Gully exploration database comprises 76 drillholes and 15 trenches, of which 51 drillholes and nine trenches have accompanying assay data.

A total of 6,218.8 m of drilling was completed, of which 4,694 m (75.5%) was drilled by AC, 884.4 m (14.2%) by diamond drilling, with the remainder (10.3%) drilled by RC; the latter mostly as depth extensions to aircore holes, but also used for 12 holes drilled for groundwater testing.

The majority of the holes were drilled at 60° towards NW on NW–SE drill lines. Drillhole spacing generally ranged from 20–40 m along lines on 40–80 m spaced drill lines (Figure 2). Diamond core holes targeted specific geotechnical, tailings wall foundation, and metallurgical intercepts and thus azimuth and dips varied accordingly (See Drillhole Table).

All samples were collected at 1 m intervals and were dried, crushed (if necessary), then pulverised and analysed for carbon, sulphur, and total graphitic carbon by TC001 and Grav4D methods respectively at Bureau Veritas' Adelaide laboratory. The density of selected samples was determined by laboratory Pycnometer density measurements on pulverised pulps and the Archimedes and Pre-Saturation methods on core pieces.



Figure 2: Plan view of Cell Model coloured by Mineral Resource Class

Estimation Methodology

Geological interpretations have been completed as 3-D solid wireframe models. The orebody is represented by a full 3-D array of cells (a block model). The parent cell size is 5 m (E) x 10 m (N) x 5 m (RL). Each model cell (or subcell) was flagged according to where the cell centroid lies relative to the ore domain wireframes. The flagging process utilised a more-intensely subcelled intermediate version of the volume model, which had cell dimensions of 5 m (E) x 5 m (N) x 2.5 m (RL); the purpose of this step was to ensure optimal honouring of the boundaries, yet produce a final model that has appropriate cell sizes for estimation. Estimation of C, TGC, and S has been undertaken using the ordinary kriging method (OK), with validation estimates produced using inverse distance methods to a power of two (ID2). Density was also estimated in the same manner. The three sources of density data – Archimedes method, Pre-Saturation method, and density from Pycnometer measurements – were used in the estimation of density into the model cells. Where multiple types of density data existed for the same sample (i.e. KK033 116–117 m and KK027 69–70 m) Pycnometer-derived density was given higher priority.

A 'no grade capping' strategy was considered appropriate based on statistical analysis. Samples within the mineralised domain that have not been assayed are set to 0% TGC to ensure that their presence dilutes the grade – this is to counter any inflation of the volume that occurs as a result of the inclusion of these intervals within the mineralised zones. Statistical validation of the estimates was undertaken to provide a global understanding of the performance of the estimation process. This involved a comparison of statistical characteristics of the model estimates relative to the drillhole data. The mineralisation interpretation was based on nominal cut-offs of 5% TGC (high-grade core) and 2% TGC (lower grade halo). Cut-off grades are based upon data statistics that show a naturally elevated population at 5% TGC, and the 2-5% TGC data is transitional around the 5% mineralisation. The mineralisation is ring fenced on the basis that it is higher than the regular background levels, which would otherwise be artificially elevated by it.

Classification Criteria

The resource classification has been applied to the Mineral Resource estimate based on the drilling data spacing, grade and geological continuity, and data integrity. The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity. The Measured Mineral Resource classification is based on a nominal drillhole spacing of 20 m x 40 m (along drill lines and between drill lines respectively), the Indicated Mineral Resources classification on 40 m x 40 m drill spacing, and the Inferred Mineral Resource classification on 80 m x 80 m drill spacing. The classification reflects the view of the Competent Person.

Metallurgical Methods

Batch and lock-cycle metallurgical bench-scale testing of representative bulk aircore, diamond drill core, and trench samples of the Kookaburra Gully graphite deposit was undertaken to optimise the flotation of graphite and removal of gangue minerals.

Sample ID	Drillhole or Trench ID	From (m)	To (m)	Sample Type	Depth From AHD (m)	Depth To AHD (m)
LMC11	KGT01	45	57	half core	132.9	122.5
LMC11	KGT11	51	70	half core	113.3	109.8
LMC11 (& LSU1)	KGR01	114	137	half core	100.9	81.0
LOX1	Trench 1	0	4	rock	156.0	152.0
LOX1	Trench 2 & 4	0	4	rock	190.0	183.0
LOX1	KGT03	6	16	half core	181.3	172.7
LSU1	КК005	76	94	aircore sample	100.1	84.5
LSU1	КК022	57	67	aircore sample	113.7	105.1
LSU1	КК026	45	52	aircore sample	117.8	111.8

Metallurgical Samples

Metallurgical testwork was undertaken by Independent Metallurgical Operations Pty Ltd (IMO) utilising the services of their metallurgical laboratory, Metallurgy Pty Ltd. Samples underwent sample preparation; comminution testing; characterisation testwork including head chemical characterisation,

solids specific gravity, QEMSCAN and optical mineralogy; and detailed batch flotation flowsheet development including rougher, regrind and cleaner stages through to locked cycle verification on sample LMC11. Samples were ground to P100 < 500 μ m to achieve optimum flotation kinetics then processed by a rougher/regrind/cleaner flotation circuit. Flotation stages were conducted using a Denver Flotation D12 flotation machine with cells ranging from 4 litres to 1 litre depending on the flotation stage and concentrate volume. The regrind stages were conducted using a vertically stirred mill. Size by size assay analysis was conducted on the final concentrate from each test. The final cleaner concentrate was sized by screens, and cyclosizer below 53 μ m, to determine the size and grade distribution.

Graphite Rights

The graphite rights on Exploration Licences ELs 4998 and 5065 and Mineral Lease ML 6460 are held by Australian Graphite Pty Ltd (AGL), a 100% wholly-owned subsidiary of Lincoln. On those tenements, under agreements with Centrex Metals Limited and its subsidiary South Australian Iron Ore Group Pty Ltd, Lincoln and AGL jointly have the rights to all minerals except iron.

Dr A John Parker Managing Director

Competent Persons' Report

Information in this report that relates to exploration activity, exploration results and exploration targets was compiled by Dr A John Parker who is a Member of the Australasian Institute of Geoscientists and Managing Director of Lincoln Minerals Limited and Mr Dwayne Povey who is a member of the Australasian Institute of Mining and Metallurgy and Chief Geologist for Lincoln Minerals. Dr Parker and Mr Povey have sufficient experience relevant to the styles of mineralisation and to the activities which are being reported to qualify as Competent Persons as defined by the JORC Code, 2012. Dr Parker and Mr Povey consent to the release of the information compiled in this report in the form and context in which it appears.

Information in this report that relates to Mineral Resources was compiled by Ms Sharron Sylvester who is a Member of the Australasian Institute of Geoscientists (RPGeo 10125) and a full-time employee of OreWin Pty Ltd. Ms Sylvester has sufficient experience relevant to the styles of mineralisation and to the activities which are being reported to qualify as a Competent Person as defined by the JORC Code, 2012 and consents to the release of the information compiled in this report in the form and context in which it appears.

Information extracted from previously published reports identified in this report is available to view on the Company's website www.lincolnminerals.com.au. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources and Exploration Targets, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Drillhole Intercepts

2014 Aircore Drillhole Intercepts

HOLEID	FROM	то	INTERVAL	С	TGC
			(m)	(%)	(%)
КК038	20	29	9	11.6	9.1
and	32	34	2	11.9	11.6
and	86	88	2	10.1	9.5
КК043	46	71	25	17.5	16.0
includes	46	69	23	18.8	17.2
and	94	98	4	19.2	18.0
КК044	47	48	1	10.6	8.3
КК046	67	69	2	8.6	6.9
КК048	87	107	20	10.4	9.3
includes	87	90	3	4.0	3.4
includes	92	107	15	12.9	11.6
КК052	94	104	10	13.1	12.2
and	114	120	6	5.1	4.4
and	126	128	2	18.5	17.1

2016 Diamond Drillhole Intercepts

HOLEID	FROM	то	INTERVAL	С	TGC
			(m)	(%)	(%)
KGR01	97	136	39	10.8	10.3
includes	104	109	5	19.4	18.6
includes	117	128	11	21.5	20.7
KGT01	8	11	3	7.0	6.2
and	37	58	21	19.1	18.6
and	83	85	2	20.0	19.3
KGT02	7	9	2	13.7	12.0
KGT03	5	39	34	10.8	8.7
includes	7	16	9	25.6	21.1
KGT11	6	9	3	6.1	5.6
and	39	42	3	9.8	8.2
and	51	70	19	15.4	14.4

JORC TABLE 1

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling Techniques	 Phase1 and 2 drillholes were drilled by slimline aircore (AC) and / or reverse circulation (RC). Phase 1 totalled 37 holes for 3,904 m in 2013 (3,352 m AC and 552 m RC (14% RC)). Phase 2 totalled 15 holes for 1,349m in 2014 (1,344m AC and 5m RC). Phase 3 diamond drilling totalled 11 holes for 884.4m in 2016. A 12 hole water monitoring well program was completed in 2016 as Phase 4
	The total Kookaburra Gully exploration database comprises 76 drillholes and 15 trenches, of which 51 drillholes and nine trenches have accompanying assay data.
	 A total of 6,218.8 m of drilling was completed, of which 4,694 m (75.5%) was drilled by aircore blade, 884.4 m (14.2%) by diamond drilling, with the remainder (10.3%) drilled by reverse circulation hammer (RC); the latter mostly as depth extensions to aircore holes, but also used for 12 holes drilled for groundwater testing.
	• The majority of the holes were drilled at 60° towards NW on NW–SE sections. Drillhole spacing 20–40 m along lines on 40–80 m spaced drill lines. Diamond core holes targeted specific geotechnical, tailings wall foundation and metallurgical intercepts and thus azimuth and dips varied accordingly (See Drillhole Table).
	Mineralisation was graphitic schist.
	• There are a total of 3,493 carbon assay data in the drillhole database, of which 2,043 have corresponding TGC assay data. Following mineralisation interpretation, 1,163 of these samples were flagged as being within the mineralised envelopes.
	 QA/QC data was collected at a rate of approximately 16% or 1-in-6 samples. Results from the QA/QC analysis were acceptable.
	 Up to five certified carbon and sulphur standards, six TGC standards, blanks, sample preparation standards and field duplicates were used.
	 Field duplicates were routinely collected and analysed.
	 Blanks were routinely submitted.
	 All AC/RC samples were collected at 1 m intervals, and sub samples of bulk composite samples were passed through an air-operated, three-tier riffle splitter to produce a 3–5 kg analytical sample. Six percent (108 samples) contained moisture and were scoop speared to ensure sample quality and representivity.
	All diamond core drilling was HQ3 61.1 mm diameter and drill core was placed in poly core trays.
Drilling Techniques	 The drillholes were drilled using predominantly aircore method. Aircore drilling utilises a blade drill bit of 3 ¼ inches in size (~85 mm), and where hard ground is encountered a slim-line hammer is run for indurated parts of the drillhole (slim line allows changeover from aircore to RC hammer without the need for reaming). Where greater depth into fresh rock was required, a 4 ¾ inch reverse circulation (RC) face sampling hammer was employed. Diamond core was obtained in HQ3 (61.1 mm) size.
	Drill rods are 3 m in length. Diamond drill runs were 1.5 m
Drill Sample Recovery	 Aircore and RC drilling recovery is considered to be acceptable. After each 1 m interval the driller would pause to ensure the sample stream was cleared, and after each rod (3 m) the hole was cleared before sample collection recommenced. Total diamond core recovery was 94%.
Logging	All aircore and RC cuttings / chips were logged at 1 m intervals and representative keepsake chip trays made. All chip trays have been photographed.
	Observed down hole drillhole graphite intercepts were recorded at the time of drilling and updated after assays were received.
	All diamond core has been geologically and geotechnically logged.
Sub-Sampling Techniques and Sample Preparation	 All AC/RC analytical samples were three-tier riffle split. Six percent (108 samples) contained moisture and these samples were scoop speared to maximise representivity and sample quality. The riffle splitter was air vibrated and air cleaned after each sample passed. A field duplicate was taken at a rate of approximately 1 in 20 samples, exactly mirroring the original sample. A resampling program for waste rock characterisation utilised AC/RC reference samples and were 50:50 riffle split with samples lengths ranging from 1-5m composites. Diamond core was sampled as half and quarter core samples due to Metallurgical testwork requiring
	greater sample weights.

Criteria	Commentary
	 Analytical samples were dried, crushed (if necessary), pulverised and subsampled at Bureau Veritas' Whyalla laboratory, then analysed for carbon, sulphur and total graphitic carbon (TGC) by TC003 and Grav4D methods respectively at Bureau Veritas' Adelaide laboratory.
	 All 2013 Phase 1 AC/RC samples were also analysed on site by portable XRF.
	 Unique sample identification numbers were given to all samples to ensure laboratory integrity and random placement of QA/QC samples throughout the batch.
	 Samples are dried (105°C), crushed to 3 mm (if required), and then pulverised in Cr steel bowls to 85% passing 75 micron. Grind checks are undertaken at a rate of 1-in-20.
Quality of Assay	Total combustion using a carbon-sulphur analyser, determines carbon and sulphur.
Data and Laboratory Tests	 A portion of the sample is dissolved in weak acid (HCI) to liberate carbonate carbon. The residue is then dried at 420°C driving off organic carbon and then analysed by a sulphur–carbon analyser to give total graphitic or elemental carbon (TGC).
	Standards, duplicates and blanks were inserted randomly throughout each batch.
	 Field duplicates show a 99.4% correlation in TGC.
	Standards and blanks show no bias and good precision.
	 2 samples were contaminated in the laboratory sample preparation stage and have been removed the assay database.
Verification of	No twinned holes have been drilled at this stage of project.
Sampling and Assaying	 AMC Consultants Pty Ltd and OreWin Pty Ltd have undertaken various studies on the resource, but no independent verification of sampling or assaying has been undertaken to date. It is expected that this will be undertaken in subsequent stages of assessment.
	Data validation and documentation are recorded in Datamine macros to satisfy audit trails.
Location of Data	 All drillhole and trench survey information were surveyed with differential GPS.
Points	 All survey information is in DATUM GDA 94 Map Projection UTM Zone 53 South and elevations in metres AHD.
	 A LIDAR survey has been completed over the project area producing an accuracy of ±25 cm contour surface.
Data Spacing and Distribution	 Drillholes were drilled on NW-SE traverses initially spaced 80 m and partially infilled to 40 m. Spacing of drillholes along traverses was from 20 m to 40 m.
	 Zones of low or no graphite content were composited to 2 m and 4 m samples for assaying. All visual graphite samples were assayed at 1 m intervals.
Orientation of Data in Relation to	 Orientation of drillholes is appropriate for the orientation of the mineralised lodes. Holes were drilled at approximately 60° toward 300–320° based on trench mapping.
Geological	 The indicated strike of mineralization is 030°
	No material sampling orientation bias is expected.
Sample Security	 The sampling programme was managed by LML staff. No contractors were associated with sampling. Sample ledgers were recorded onsite and poly-weaves containing samples zip tied and delivered to Bureau Veritas' Whyalla preparation laboratory then transported to the analytical laboratory in Adelaide. At specified stages in the laboratories, samples were received, receipted, secured before commencing sample preparation and analysis.
Audits or Reviews	No audits or reviews have been undertaken at this time.
	Section 2 Reporting of Exploration Results
Mineral Tenement and Land Tenure Status	 Exploration Licences EL 4998 and EL 5065: Licensee is South Australian Iron Ore Group (SAIOG) Pty Ltd (a subsidiary of Centrex Metals Limited which holds the iron ore rights jointly with Wuhan Iron and Steel Limited in a JV company, Eyre Iron Pty Ltd). By agreement with SAIOG and Centrex, Lincoln Minerals Limited and its wholly-owned subsidiary Australian Graphite Pty Limited own the rights for all other minerals. EL 4998 currently expires 11/04/2017 and EL 5065 expires on 05/08/2017. An application for renewal of EL 4998 is in progress.
	 Mineral Lease ML 6460, which covers an area of 300.76 hectares was granted to Australian Graphite Pty Limited on 03/06/2016 and expires on 02/06/2037. Australian Graphite Pty Ltd is a wholly owned subsidiary of Lincoln Minerals Limited.
	All tenements are in good standing.
	The project is located on freehold land.
Exploration Done by Other Parties	 Pancontinental Mining discovered graphite mineralisation in the 1980's at Kookaburra Gully through a series of trenches and surface mapping. However, no drilling was undertaken.

Criteria	Commentary						
Geology	 The Kookal on eastern facies has p folded and/ Tertiary we 	 The Kookaburra Gully graphite deposit occurs within Palaeoproterozoic Hutchison Group metasediments on eastern Eyre Peninsula. High grade metamorphism to Upper Amphibolite and locally Lower Granulite facies has produced flake graphite within graphitic schist units. The graphite units have been multiply folded and/or sheared during at least three phases of deformation. Tertiary weathering has altered and oxidised the Hutchison Group down to ca. 130m AHD and formed a 					
Drillhole	thick saprol	itic zone locally	capped by iron	stone.	LENGTH (m)	פוס	ΔΖΙΜΠΤΗ
Information		EA31110	(102C40 7		120		217
	KK038	583290.0	6192648.7	155.3	120	-60	317
	KK039	582931.2	6102507.2	157.0	59	-60	320
	KK040	582907.8	6102560 7	162.1	67	-00	221
	KK041	583330 4	6102515 1	172.0	70	-60	321
	KK042	583250.4	6192/188 3	172.9	120	-60	320
	KK043	583115 2	6192355 6	158.2	99	-60	307
	KK045	583149.4	6192330.2	158.8	90	-60	308
	KK046	583186.4	6192336.2	156.9	99	-60	314
	КК047	583297.1	6192868.0	174.7	114	-60	95
	KK048	583361.5	6192535.6	168.3	120	-60	322
	КК049	583633.2	6192639.7	168.2	90	-60	323
	КК050	583656.0	6192608.6	173.2	39	-60	328
	KK051	583290.0	6192648.7	155.3	45	-60	317
	КК052	583281.5	6192463.5	175.7	135	-60	324
	KGR01	583470.6	6192797.9	199.6	140.7	-60	310
	KGT01	583254.1	6192512.4	171.9	121.4	-60	270
	KGT02	583283.4	6192658.2	154.6	43.5	-60	270
	KGT03	583451.2	6192893.8	186.5	119.7	-60	270
	KGT04	583525.3	6192862.5	199.9	117.9	-60	87
	KGT05	583797.2	6192633.7	171.9	28.6	-85	89
	KGT06	583766.1	6192555.8	182.0	17	-85	90
	KGT07	583757.3	6192476.7	190.9	33.3	-85	90
	KGT08	583820.3	6192658.3	169.9	20.9	-84	86
	KGT09	583824.8	6192706.8	176.0	10.2	-85	102
	KGT10	583393.1	6192654.4	157.6	120.1	-60	95
	KGT11	583390.0	6192654.7	157.5	111.1	-60	267
	KGW01	583002.4	6193385.6	148.5	4.4	-90	0
	KGW02	582881.4	6193099.1	147.1	5	-90	0
	KGW03	582961.0	6193044.5	147.8	5	-90	0
	KGW04	583056.7	6193313.2	147.9	4.5	-90	0
	KGW05	582753.4	6192568.4	143.3	5	-90	0
	KGW06	583703.1	6192667.2	168.4	7.5	-90	0
	KGW07	584591.9	6192699.0	211.1	10.5	-90	0
	KGW08	582961.8	6193043.9	147.9	11.5	-90	0
	KGW09	581767.1	6191411.6	136.0	9.2	-90	0
	KGW10	583141.6	6192309.7	155.3	4.5	-90	0
	KGW11	583614.7	6192172.3	174.7	9	-90	0
	KGW12	582206.7	6192080.6	138.4	5.3	-90	0
Data Aggregation Methods	 Drillhole int weighted. No further of 	ercepts were ba	nsed upon a 2% he data was un	o TGC assay sa dertaken prior t	mple cut-off. Ave o estimation.	erage grades	were length-

Criteria	Commentary
Relationship Between Mineralisation Widths and Intercept Lengths	Planned orientation of drillholes was aimed to intersect mineralisation as close to perpendicular as possible, and within the level of variability of dip of the mineralised lodes. Down hole lengths have been used to estimate the width of the graphite unit as true width is not known.
Diagrams	 Refer to LML 19 February 2013 ASX announcement for maps and sections for drillholes KK001 to KK037.
	Refer Figure 1 for locations of 2013, 2014 and 2016 drillholes.
Balanced Reporting	Drillhole intercepts for holes KK001 to KK037 are included in the LML 19 February 2013 ASX announcement.
Other Substantive Exploration Data	Continuous disclosure of Exploration Results including metallurgical results are found in LML Quarterly and Annual reports to the ASX.
	Details of groundwater and other environmental factors are described in AGL's Mining Lease Proposal available for download on LML's website.
Further Work	• Continuous disclosure of Exploration Targets and Results are found in LML Quarterly and Annual reports to the ASX.
	 Australian Graphite Pty Ltd is advancing the Kookaburra Gully Graphite Project and completing numerous technical studies to formulate its Program of Environment Protection and Rehabilitation (PEPR) before construction and mining can commence.
	Section 3 Estimation and Reporting of Mineral Resources
Database Integrity	 All field data is manually recorded, and initially visually inspected for errors. Data is then imported into and plotted in a Geographic Information System (GIS) using Target for ArcGIS 3D modeling software to visually inspect the field results including drillhole locations, survey information, geology and assay intervals. Each geological dataset is made into comma delimited CSV forms and imported into Datamine Studio 3/RM, where records are validated. All corrections are undertaken at this stage before modelling is commenced.
Site Visits	Competent Persons:
	 Dr John Parker made several visits during the drilling programs and made recommendations on future drillhole locations. LML Chief Geologist, Dwayne Povey, was present onsite for all drilling and managed all field activities including drilling, sampling and data management. All sampling and data collection were inspected and found to be in good order. Sharron Sylvester from OreWin made one visit to the project area before commencing Mineral Resource estimation.
Geological Interpretation	 An interpreted plunging anticline was derived from work carried out by Pancontinental Mining trenching and surface mapping and this interpretation could be fitted to drillhole intercepts. AMC revised LML's geological domain interpretations for the graphite mineralisation (Lincoln Minerals Limited, ASX Announcement 26 March 2013). This revised geological interpretation was based on the geological interpretations provided by LML and AMC's assessment of the drillhole information. Modifications to the interpretations have been subsequently undertaken to allow 3-D modelling to be completed. The updated interpretations have been developed to reflect interpreted continuity in the geological strata and do vary from those supplied by LML. LML's postulated folded anticline structure is considered by OreWin to be reasonable; however, this was to prove very difficult to model in practice, and OreWin believes that the modified interpretation does not conflict with LML's interpretation in a material way. Modifications to the interpretations have been undertaken in consultation with LML geologists. Upon receipt of new data, all geological domains were refined by OreWin in November 2013 and November 2016, and these domains ultimately used for the updated resource estimation.
Dimensions	Strike length of approximately 585 m with the main graphite unit 14–20 m in width. Mineralisation extends to at least 125 m below surface.
	• The deposit is immediately cut off to the south, but is at the northern end of 4.5 km long electromagnetic anomaly. The deposit is open to the north.
Estimation and Modelling Techniques	Interpretation and grade estimation were completed using ArcMap, Geosoft Target for ArcGIS and Datamine Studio 3/Studio RM software.
	 Interpretations have been completed as 3-D surface and solid wireframe models. The prehody model is represented by a fully 3 D array of colls (a block model). Parent colls are 5 m y
	10 m x 5 m (E x N x RL).
	• Model cells and drillhole data were flagged with DOMAIN attributes according to their location relative to interpreted mineralisation wireframes. Samples and cells within the high-grade core wireframe are flagged as DOMAIN=1, and those in the outer halo are flagged as DOMAIN=2.
	• Estimation of C, TGC, S and density has been undertaken using the ordinary kriging method (OK), with

Criteria	Commentary				
	validation estimates produced using inverse distance methods to a power of two (ID2).				
	• Estimates are derived using only those samples flagged with like-DOMAIN that fall within the search				
	ellipse.				
	 The dimensions of the search ellipse used for C, TGC, and S estimation are 75 m x 125 m x 50 m (E x N x RL). A two-pass search strategy was used, with the second pass using a search ellipse 375 m x 625 m x 250 m. 				
	 Because the density data is less prevalent, the dimensions of the search ellipse used for density estimation are 200 m x 400 m x 125 m (E x N x RL). A two-pass search strategy was used, with the second pass using a search ellipse 1,000 m x 2,000 m x 625 m. 				
	• The minimum number of samples for estimation to proceed in the first search pass was set to 6 and the maximum allowed was 20. This second pass used a minimum of 8 samples and a maximum of 24.				
	A variographic analysis of carbon and TGC in the high-grade core (DOMAIN=1) was completed.				
	Carbon variogram parameters were used in the estimation of carbon, sulphur, and density.				
	DOMAIN 1 parameters were applied to DOMAIN 2.				
	 Estimation has been undertaken into the parent cells, with like coded sub-cells being assigned the grade of the parent cell. 				
	 Variation in dip and dip direction of the lodes has been accommodated in the estimation process using Datamine's Dynamic Anisotropy method, which forces search ellipses to orient locally in a way that is pre-determined by the geologist. 				
	A 'no grade capping' strategy was considered appropriate based on statistical analysis.				
	 Samples within the mineralised domains that have not been assayed are set to 0% TGC to ensure that their presence dilutes the grade - this is to counter any inflation of the volume that occurs as a result of their inclusion within the mineralised zones. 				
	 Estimates were verified using manual methods of alternative calculation and by cross-verifying the wireframe volumes. Visual validation was completed, as was statistical evaluation comparing the estimates to the input drillhole data. Peer review has been undertaken. 				
Moisture	• Dry density was assigned as a default using the Pre-saturation and Archimedes method and Pycnometer density measurements. Where multiple types of data existed for the same sample, Pycnometer derived density was given higher priority.				
Cut-off Parameters	• The mineralisation interpretation was based on a nominal 5% TGC (high-grade core) and 2% TGC (lower grade halo) cut-off. No grade cutting was applied during estimation.				
Mining Factors or Assumptions	 It has been assumed from the orientation and shallowness of the graphite lodes relative to the topographic surface that the Kookaburra Gully mineralisation is amendable to open pit mining and has reasonable prospects of proceeding on that basis. 				
	Formal mining assessment is currently being undertaken.				
	 Further work is required to develop an empirically-derived set of mining assumptions and parameters at Kookaburra Gully. 				
Metallurgical Factors or Assumptions	• Extensive batch and lock-cycle metallurgical bench-scale testing of representative bulk aircore, diamond drill core and trench samples of Kookaburra Gully graphite has been undertaken to optimise the flotation of graphite and removal of gangue minerals.				
	 Metallurgical testwork was undertaken by Independent Metallurgical Operations Pty Ltd (IMO) utilising the services of their metallurgical laboratory, Metallurgy Pty Ltd. Samples underwent sample preparation; comminution testing; characterisation testwork including head chemical characterisation, solids specific gravity, QEMSCAN and optical mineralogy; and detailed batch flotation flowsheet development including rougher, regrind and cleaner stages through to locked cycle verification on sample LMC11. Samples were ground to P100 < 500 µm to achieve optimum flotation kinetics then processed by a rougher/regrind/cleaner flotation circuit. Flotation stages were conducted using a Denver Flotation D12 flotation machine with cells ranging from 4 litres to 1 litre depending on the flotation stage and concentrate volume. The regrind stages were conducted using a vertically stirred mill. Size by size assay analysis was conducted on the final concentrate from each test. The final cleaner concentrate was sized by screens, and cyclosizer below 53 µm, to determine the size and grade distribution. The bench-scale mechanical flotation tests demonstrate that flake graphite concentrates can be prepared at grades of about 93% to 98% TGC with recovery of at least 90% of the contained graphite (see LML 2015 and 2016 Annual Reports and this report) 				
Environmental Factors or Assumptions	• Detailed assessment of community and environmental factors, including groundwater modeling and flora and fauna surveys, has been undertaken, with a detailed assessment documented in AGL's Mining Lease Proposal (refer LML website).				

Criteria	Commentary
Bulk Density	 The Quantachrome Pycnometer Model MVP-2 is a precision instrument specifically designed to rapidly measure the volume of dry solid materials. The technique employs Archimedes principle of fluid displacement to determine the volume, with the displaced fluid being air or helium gas. A known weight of solid or pulverised sample is placed into the sample chamber of the pycnometer. The volume of this solid can be calculated by measuring the pressure difference when a known quantity of helium under pressure, is allowed to flow from a precisely known reference volume, into the sample cell. From the measurements of the mass and volume the specific gravity can be calculated. Dry density was assigned as a default using the Archimedes and Pre-saturation method and pycnometer density measurements. Where multiple types of data existed for the same sample, the pycnometer was given higher priority over the Archimedes and Pre-saturation method derived density. Archimedes samples were determined on aircore and diamond drill core samples which were erratically distributed, therefore a representative selection of assay pulps along the strike and width of the deposit including hanging and footwall waste rocks was made using the pycnometer method.
Classification	 Classification as Measured, Indicated, and Inferred Mineral Resources under the JORC Code (2012) has been applied to the Kookaburra Gully graphite mineralisation. The Mineral Resource classifications were based on OreWin's assessment of the availability and location of drillhole information, considered along with the interpreted geological continuity. Tonnages may not add up exactly as shown due to rounding of significant figures. The Competent Person is satisfied that the classification appropriately reflects what is currently known about the mineralisation.
Audits or Reviews	All resource modelling was undertaken by independent consultants.No audit has been completed to date.
Discussion of Relative Accuracy/ Confidence	 Following completion of OreWin's revised geological interpretations, polygons were developed to define Measured and Indicated Mineral Resources. Mineral inventory outside of the Measured and Indicated Mineral Resource boundaries has been classified as Inferred Mineral Resource. Only mineralisation within the interpreted high-grade core (DOMAIN=1) and outer lower grade halo (DOMAIN=2) are classified as Mineral Resources. The Mineral Resource classifications were based on OreWin's assessment of the availability and location of drillhole information, which, when considered along with the interpreted geological continuity. The classification is considered appropriate across the Kookaburra Gully deposit.