# Lincoln increases Kookaburra Gully Graphite Project resource by 87% to become second largest graphite resource on Eyre Peninsula

- **Kookaburra Gully Graphite Project (KGGP) overall Mineral Resource increases 87% to 12.26Mt at 7.31% total graphitic carbon (TGC).**
  - **Upgrade driven by inaugural Mineral Resource Estimate for Kookaburra Gully SW Extended of 5.12Mt at 4.86% TGC (Inferred) and 0.58Mt at 7.73% TGC (Indicated) for total of 293,900 tonnes of contained graphite.**
  - **Overall KGGP contained graphite increased by 80% to 896,000 tonnes.**
  - **Significant strike extent remains untested, with potential for resource growth**
- **KGGP** is now the second largest known resource on South Australia's Eyre Peninsula, **confirming Lincoln's strategic position in** Australia's premier **graphite province**.
- Three-month drill program to commence focussed on **increasing confidence** at the high-grade Kookaburra Gully and Koppio deposits.
- **An updated KGGP Feasibility Study at higher planned throughput due in 2H CY24**.

**Lincoln Minerals Limited (Lincoln** or **Company)** (ASX:LML) is pleased to announce its inaugural Mineral Resource Estimate (MRE) for the Kookaburra Gully SW Extended deposit, part of its high-grade Kookaburra Gully Graphite Project (KGGP) in Australia's premier graphite province on South Australia's Eyre Peninsula.

Kookaburra Gully SW Extended Inferred MRE is **5.12 million tonnes at 4.86% Total Graphitic Carbon (TGC) for 249,000 tonnes of contained graphite** at 2% TGC cut-off. This also comprises an Indicated Resource of **0.58Mt at 7.73% TGC for 45,000t of contained graphite**.

The KGGP comprises the Kookaburra Gully, Koppio and Kookaburra Gully SW Extended deposits, which now collectively total **12.26 million tonnes at 7.31% TGC** at a 2% TGC cut-off **(an 87% increase) for 896,000 tonnes of contained graphite (an 80% increase).**

The Indicated and Inferred Resource, completed by GeoSupport FX, is based on results of 144 drill holes and a total of 8,489m of drilling.

**Lincoln Minerals CEO Jonathon Trewartha** commented: *"This is an amazing result for Lincoln Minerals at our Kookaburra Gully Graphite Project, with this important upgrade coming from the South-West Extended deposit, clearly demonstrating the significant scale potential of Lincoln's Kookaburra Gully Graphite Project.*

*This significant MRE upgrade now positions Lincoln Minerals with the second largest known graphite resource on South Australia's Eyre Peninsula, underscoring the region's strategic characteristics, as Australia's premier graphite province.*

*I am confident that the addition of this inaugural resource, when combined with the next three months drilling at our high-grade Kookaburra Gully and Koppio Deposits will deliver us a resource to support a potential 10-year*

*life of mine at significantly higher production than the 2017 Feasibility Study, which was based on a production rate of 35Ktpa graphite concentrate, and which yielded a IRR of 33%[1].*

*The resource upgrade provides strong momentum for our plans to commence an update to the Feasibility Study expected to commence mid-2024 and is scheduled for delivery in the second half of 2024."*

***Table 1**: Measured, Indicated and Inferred Resource for Kookaburra Gully SW Extended above 2% TGC cut-off*

| Category | Tonnes (mt) | TGC (%) | Density (t/m$^3$) | Contained Graphite (t) |
|---|---|---|---|---|
| **Measured** | | | | |
| **Indicated** | **0.58** | **7.73** | **2.61** | **44,900** |
| | | | | |
| **Inferred** | **5.12** | **4.86** | **2.64** | **249,000** |
| | | | | |
| **Total M+I+I** | **5.70** | **5.15** | **2.64** | **293,900** |

***Table 2:** Kookaburra Gully total Mineral Resources*

| **Measured and Indicated Mineral Resource Estimates** | **Cut-off Grade (% TGC)** | **Tonnage (Mt)** | **Average Grade (% TGC)** | **Contained Graphite (kt)** | **Density (g/cc)** |
|---|---|---|---|---|---|
| **Kookaburra Gully** | | | | | |
| **Measured** | 2% | 0.50 | 12.28 | 61 | 2.57 |
| **Indicated** | 2% | 1.65 | 10.78 | 178 | 2.51 |
| **Koppio** | | | | | |
| **Indicated** | 2% | 2.84 | 7.53 | 214 | 2.74 |
| **Kookaburra Gully Extended** | | | | | |
| **Indicated** | 2% | 0.58 | 7.73 | 45 | 2.61 |
| **TOTAL MEASURED + INDICATED[2]** | **2%** | **5.57** | **8.94** | **498** | **2.64** |
| **Inferred Mineral Resource Estimates** | **Cut-off Grade (% TGC)** | **Tonnage (Mt)** | **Average Grade (% TGC)** | **Contained Graphite (kt)** | **Density (g/cc)** |
| **Kookaburra Gully** | | | | | |
| Inferred | 2% | 0.78 | 12.3 | 96 | 2.54 |
| **Koppio** | | | | | |
| Inferred | 2% | 0.79 | 6.72 | 53 | 2.7 |
| **Kookaburra Gully Extended** | | | | | |
| Inferred | 2% | 5.12 | 4.86 | 249 | 2.64 |
| **TOTAL INFERRED[3]** | **2%** | **6.69** | **5.95** | **398** | **2.64** |

[1] Feasibility Study and Ore Reserve Lincoln Minerals Limited ASX release 27 November 2017

**Kookaburra Gully SW Extended deposit**

Lincoln's Kookaburra Gully SW Extended (KGE) Deposit is located within Lincoln Mineral's Exploration Licence EL6024, which is proximal to Port Lincoln on South Australia's Eyre Peninsula.

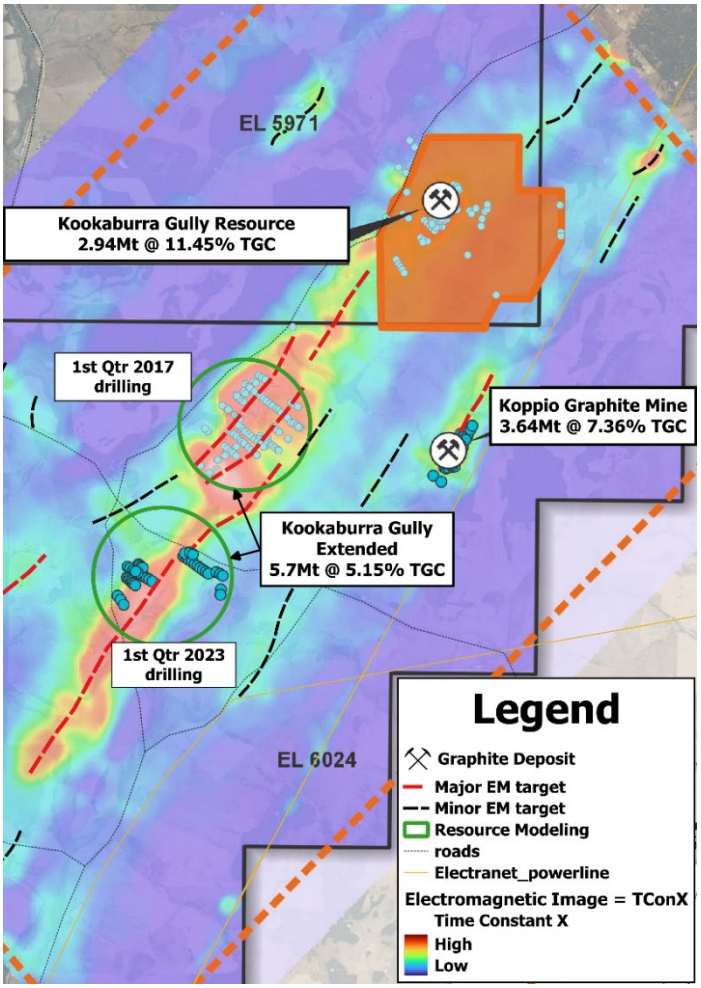


***Figure 1:*** *Lincoln's Kookaburra Gully Graphite Project deposits*

The overall KGGP is situated between Renascor's Siviour Graphite Project (containing 8.5Mt graphite at 6.9% TGC with a 2.3% TGC cut-off) to the northeast and Quantum Graphite's Uley Project (containing 0.76Mt at 10.5% TGC with a 3.5% TCG cut-off) to the southwest, with all three projects situated on the Hutchison Group, which is the dominant graphite mineralisation trend in the region (Figure 2).

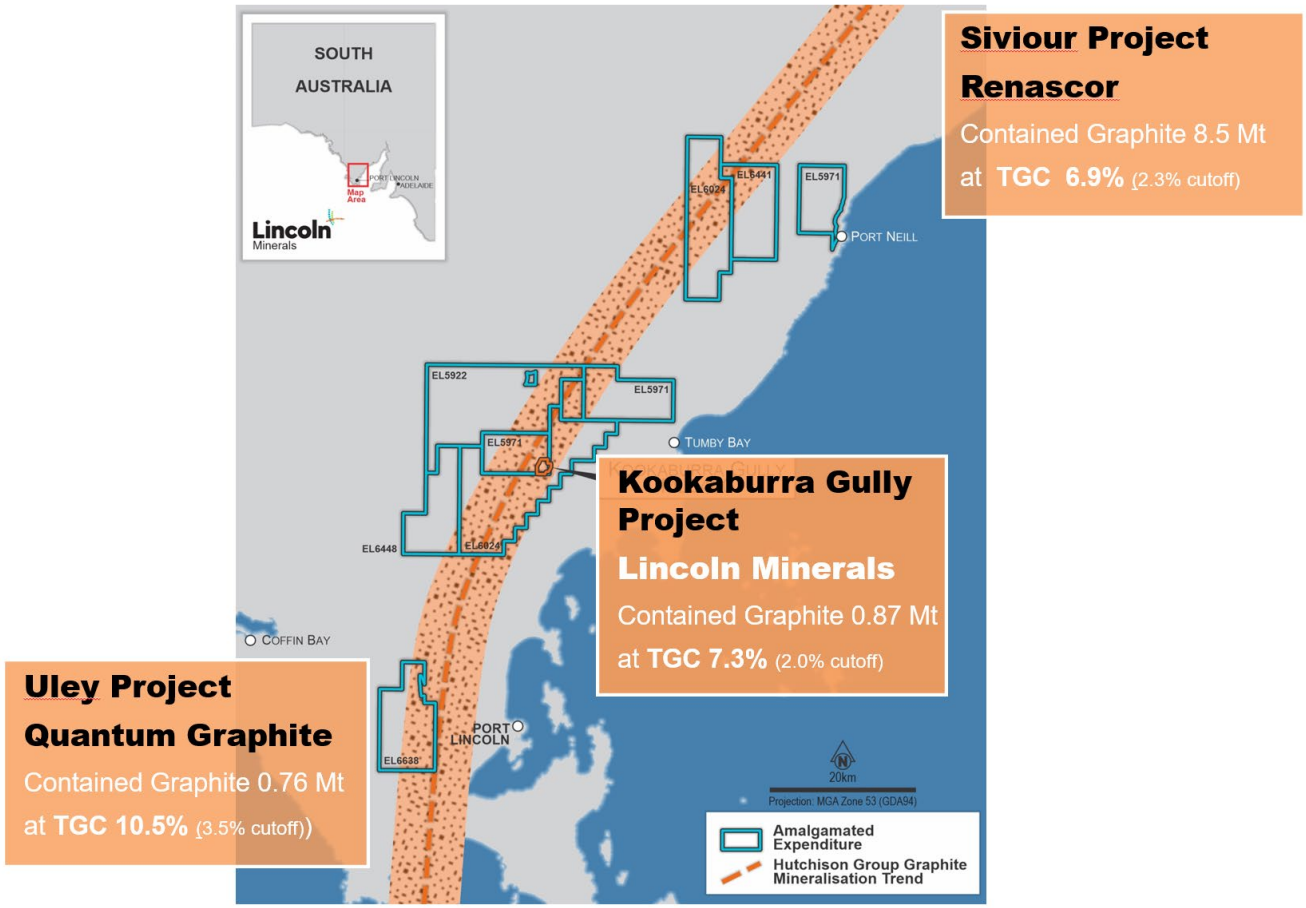


***Figure 2:*** *Graphite mineralisation trend on South Australia's Eyre Peninsula*

The KGE deposit is defined by multiple EM anomalies over a 5km long corridor which extends southwest from the Kookaburra Gully deposit in the north, with today's resource representing only a portion of the prospective area owned by Lincoln.

An airborne electromagnetic survey completed in 2012 highlighted a number of conductive anomalies, which Lincoln is systematically drill testing. It has delineated graphite Mineral Resources at the Kookaburra Gully and the Koppio deposits (Figure 1).

**Resource Geology**

Kookaburra Gully host rock appears to be graphitic schist, within a parcel ofmeta sedimentary units and schist occurring within the Palaeoproterozoic Hutchison Group metasediments. These metasediments occur on the eastern Eyre Peninsula where 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 is generally strata bound and is interpreted to be the high-grade metamorphic equivalent of original carbonaceous sediments.

At Kookaburra Gully SW Extension, near-surface outcrops have been extensively weathered and oxidized to a clay-rich graphite schist. At depth below 130m AHD these grades into fresh graphite schist and then progressively into a locally pyritic graphite schist. The immediate host rocks are garnet-biotite gneiss with local pegmatite and marble. A similar lithological setting was indicated from the drilling completed by Lincoln at the KGE drilling 1.5km to the north of this current program. However gently plunging folding was interpreted with the graphite being both gently undulating to steep dipping.

At Kookaburra Gully SW Extension, the graphite schist strikes 30° and dips 50° to subvertical to the east. The graphite units have been folded multiple times and/or sheared during at least three phases of deformation.

**Drilling, Sampling, and Analysis Techniques**

Drilling at KGE in 2017 consisted of 100 aircore and reverse circulation (RC) holes for ~5,340m. The program tested the central portion of the EM anomaly of about 1,100m in strike length and returned numerous significant intercepts of graphite mineralisation. (as announced in ASX release dated 23 May 2017.

Drilling in 2023, focussed on an area further southwest of the main KGE drilling. Lincoln completed a ground-based EM survey to assist in targeting the drillholes and preliminary results indicated a subtle elongate conductive zone extending over 600m in a northeast-southwest direction. This southern area was drilled as part of the 2023 program and graphite intersections were returned from several holes (as announced in ASX release dated 4 July 2023).

Broad-spaced drilling of 44 air core holes for 2950m on east-west lines of approximately 400m line spacing and 40m between holes was completed across this interpreted north-east conductive zone. Closer spaced 80m lines of drilling were completed in areas where holes intersected graphite mineralisation to better define the extent of the mineralisation.

Drill holes were drilled at 60°-65° towards west-northwest depending on overall drill rig slope and a single vertical hole (KE117) was completed due to surface topography. Drillhole spacing was 25–40 m along lines and on broadly spaced lines (approximately 400m) aimed at interpreted Electromagnetic targets. Where graphite was indicated spacing was on infill 80 m spaced drill sections along strike.

A total of 197 assay samples were collected and submitted to the laboratory of which 181 were drill samples and 16 QA/QC samples: a rate of approximately 8%. Two certified total graphitic carbon and carbon standards, blanks, and field duplicates were used in two sample batches.

Drill material was collected at 1m intervals and put through a three-tier riffle splitter to produce a 3–5kg analytical sample. Any samples that contained moisture were scoop speared to ensure sample quality and representivity.

Individual 1m sample intervals for splitting were determined by the geologist based on visual logging of graphite and zones with lesser visible mineralisation were composited at various intervals of 2-4m. Sub-samples of composite samples were passed through the splitter to provide background data for resource estimation as required. Any samples that contained moisture were scoop speared to ensure sample quality and representivity.

Samples with no graphite indications were not sampled.

Data was plotted in ArcMap GIS to visually inspect the field results including drillhole locations, survey information, geology and assay intervals.

All AC and RC cuttings / chips were logged at 1m 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.

**Estimation Methodology**

For previous MRE estimation at the Kookaburra Gully and Koppio prospects, Lincoln used two cut-offs for the domaining of the deposits, namely a 2% and 5% wireframe.

For KGE, GeoSupport FX used a primary deterministic model (i.e., wireframe) to constrain the grade domains, mostly above 0.7% TGC. Within the constraining wireframe, a total of 10 probabilistic grade domains were developed on TGC grade for East Wing and West Wing.

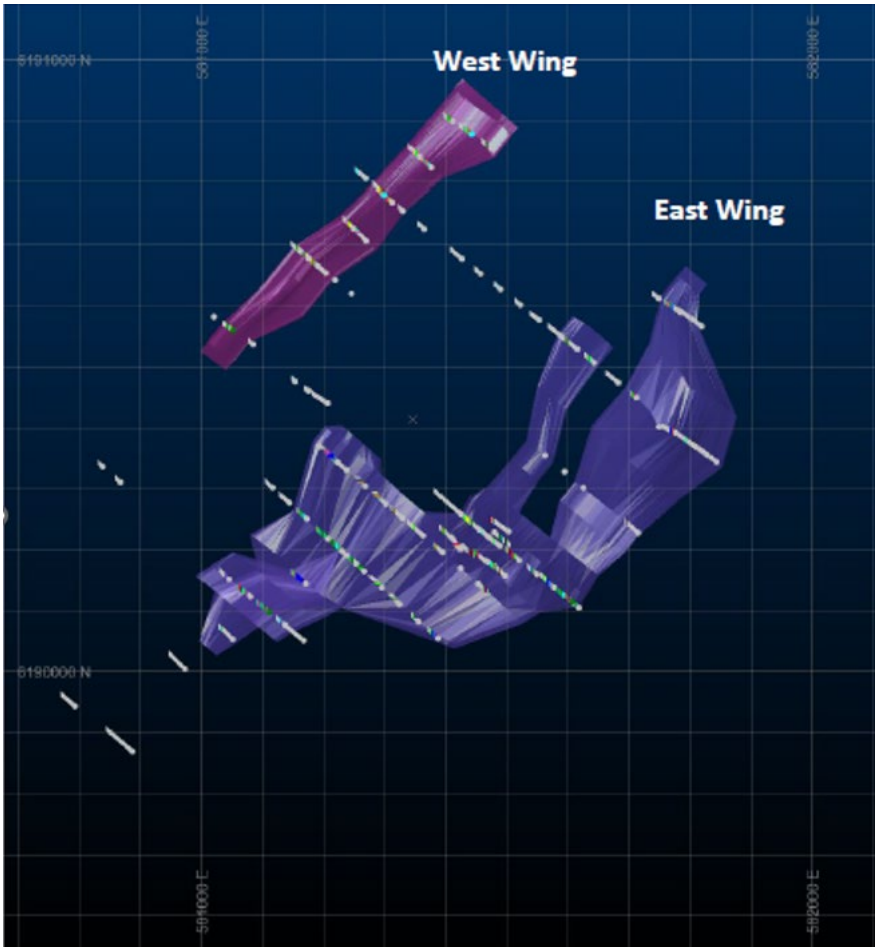


***Figure 3:*** *East and West Wings at Kookaburra Gully Extended*

Each of the cut-offs were estimated into a model of 5x10x2m block size using Indicator Kriging (IK). The first step in IK involves transforming the sample data into 0 and 1 with 1 being above the cut-off and 0 below the

cut-off. The output of the IK estimation is a probability of the block being above that cut-off, a number between 0 and 1. Each cut-off is assigning a domain code DOMMIN. For the West Wing domain, the code 201 applies to 0.1%, a code 202 applies to 0.25%, and so on up to 209. This designation is repeated for the East Wing, 301 to 309.

The volumes of each of the grade domains were tuned to match the declustered drill hole sample proportions by selecting the appropriate block probability. An acceptable difference between the proportions is <10% and ideally within 5%. This has been achieved in most cases.

The declustered sample proportions for each cut-off were generated by a Nearest Neighbour estimate of the TGC grade into a 2x2x2m block model.

**Approved for release by the Board of Lincoln Minerals Limited.**

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COMPETENT PERSONS STATEMENT

The information in this document that relates to Kookaburra Gully SW Extended Mineral Resources is based upon information compiled by Mr Shane O'Connell who is a Member of the Australasian Institute of Mining and Metallurgy. Mr O'Connell is a consultant to Lincoln Resources Limited and has sufficient experience relevant to the style of mineralisation, the type of deposit under consideration and to the activity undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr O'Connell consents to the release of the information compiled in this report in the form and context in which it appears.

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sampling techniques* | • *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.* | Drill holes were drilled by slimline aircore (AC) and / or reverse circulation (RC) totalling 144 holes for 8,489m (8,392m AC and 97m RC).<br>Drill holes were drilled predominantly at a declination of 60° towards WNW on WNW-ESE sections. Drill hole spacing ~40m along variably spaced lines 40-320m).<br><br>Mineralisation is hosted within a graphitic schist unit.<br>There have been two major programs with one in 2017 and the other in 2023.<br>The 2017 program consisted of 1,697 assay samples collected of which 1,547 were drill samples and remaining 131 QA/QC: a rate of approximately 8.4% or 1 in 12 samples. Results from the QA/QC analysis were acceptable.<br>– Up to five certified carbon and sulphur standards, six TGC standards, blanks, sample preparation standards and field duplicates were used.<br>– Field duplicates were routinely collected and analysed.<br>– Blanks were routinely submitted.<br>The 2023 program consisted of 199 assay samples including those taken for QAQC.<br>All samples were predominantly collected at 1m intervals with lesser mineralised areas composited to 2m and 4m.<br>Sub samples of bulk composite samples were passed through an air-operated, three-tier riffle splitter to produce a ~3 kg analytical sample. |
| *Drilling techniques* | • *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | The holes were drilled using mostly Aircore method.<br>144 drill holes for 8,489m with 8,392m AC drilled and 97m RC drilled. AC drill bits are face sampling 85mm diameter, RC face sampling drill bit is 115mm in diameter.<br>Drill rods are 3m in length. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | AC and RC recovery is considered to be good.<br><br>After each one metre interval the driller would pause to ensure the sample stream was cleared, and after each rod (3m) the hole was cleared before sample collection recommenced. |
| *Logging* | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | All AC and RC cuttings / chips were logged at 1m intervals and representative keepsake chip trays made. All chip trays have been photographed.<br><br>Observed drill hole graphite intercepts were recorded at the time of drilling. |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | All analytical samples were three-tier riffle split. Twelve percent (188 samples) contained moisture and these samples were scoop speared to maximise representivity and sample quality.<br><br>The riffle splitter was air vibrated and air cleaned after each sample passed.<br><br>A field duplicate was taken at a rate of approximately 1-in-35 samples, exactly mirroring the original sample collection.<br><br>Unique sample identification numbers were given to all samples to ensure laboratory integrity and random placement of QA/QC samples throughout the batch.<br><br>Samples were dried (105°C), crushed to 3 mm (if required), and then pulverised in Cr steel bowls to 85% passing 75 microns. Grind checks were undertaken at a rate of 1-in-20.<br><br>There were no TGC samples will values greater than total carbon. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Quality of assay data and laboratory tests* | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | Total combustion using a carbon-sulphur analyser, determines carbon and sulphur.<br>A portion of the sample is dissolved in weak acid to liberate carbonate carbon. The residue is then dried at 420°C driving off organic carbon and then analysed by a carbon-sulphur analyser to give total graphitic or elemental carbon (TGC).<br>Standards, duplicates and blanks were inserted randomly throughout each batch.<br>Field duplicates show a 98.9% correlation for TGC and 99.2% correlation for C.<br>Standards and blanks show no bias and good precision. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | No twinned holes have been drilled at this stage of project.<br>No independent verification of sampling or assaying has been undertaken.<br>Data validation and documentation are recorded in Datamine macros to satisfy audit trails |
| *Location of data points* | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | All drill hole locations were surveyed with differential GPS.<br>All survey information is in DATUM GDA 94 Map Projection MGA (UTM) Zone 53 South. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve* | Drill holes were drilled on WNW-ESE traverses as shown on the attached map Figure 1. Spacing of drill holes along traverses was approximately 40m.<br>Zones of low graphite content were composited to 2 m and 4 m samples for assaying.<br>All visual graphite samples were assayed at 1 m intervals. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | |
| *Orientation of data in relation to geological structure* | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | Orientation of drill holes is appropriate for the orientation of the mineralised zones.<br>Holes were drilled at approximately 60° toward 300–320° based on regional mine, trench and outcrop mapping and electromagnetic (EM) data interpretation.<br>No material sampling orientation bias is expected |
| *Sample security* | • *The measures taken to ensure sample security.* | The sampling programme was managed by LML staff. No contractors were associated with sampling on holes KE01 to KE95 drilled in 2017. The remaining holes drilled in 2023 were managed by LML staff, with the drill rig managed by a geologist from Euro Exploration. Sample ledgers were recorded onsite and poly-weaves containing samples zip tied and delivered to the sample drying and preparation laboratory. At the laboratory, samples were received, receipted, secured before commencing preparation and analysis |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | No audits or reviews have been undertaken at this time. |

## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Database integrity* | • *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br>• *Data validation procedures* | 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 modelling software to visually inspect the field results including drillhole locations, survey information, geology and assay intervals. Each geological dataset is exported into comma delimited CSV format and imported into Datamine Studio RM, where records are validated. All corrections are undertaken at this stage before modelling is commenced. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *used.* | |
| *Site visits* | • *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>• *If no site visits have been undertaken indicate why this is the case.* | No site visits have been undertaken so far but there is a plan to visit in the near future. |
| *Geological interpretation* | • *Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.*<br>• *Nature of the data used and of any assumptions made.*<br>• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>• *The use of geology in guiding and controlling Mineral Resource estimation.*<br>• *The factors affecting continuity both of grade and geology.* | At the Kookaburra Gulley and Koppio prospects, LML has used two cut-offs for the domaining of the deposits, namely a 2% and 5% wireframe. The CP of KGE agrees with the approach of grade-based domains and has opted to build on this method by introducing more cut-offs. The significant variation in grade within the same schist lithological unit, even within geographically small areas, cannot be adequately described by constructing domains based on lithology alone. A more sophisticated approach is required that will prevent the smearing of high grade into low grade areas, and the dilution of high grade by low grade, during estimation.<br>A primary deterministic model (i.e., wireframe) has been used to constrain the grade domains, mostly above 0.7% TGC. Within the constraining wireframe, a total of 10 probabilistic grade domains have been developed on TGC grade for main areas of mineralisation.<br>The TGC grade cut-offs include 0, 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 10. This number was chosen as it adequately discretises the distribution of grade, provides a flexible approach to estimation and allows the implementation of domain contact analysis of soft, firm, and hard grade boundaries. During estimation, depending on the type of domain contact, there is sample sharing across the neighbouring contacts.<br>Each of the cut-offs were estimated into the model using Indicator Kriging (IK).<br>The volumes of each of the grade domains were tuned to match the declustered drill hole sample proportions by selecting the appropriate block probability. An acceptable difference between the proportions is <10% and ideally within 5%. This has been achieved in all cases.<br>The declustered sample proportions for each cut-off were generated by a Nearest Neighbour estimate of the TGC grade into a fine resolution block model.<br><br>An alternative model was considered for a domain that is interpreted to be sub-horizontal. The alternative model was generated using Conditional Simulation with the variogram and search orientation changed to match the dip a nearby domain of around 48°. This would approximate a series of fault stacked lenses dipping to the east. Given that almost all of the stratigraphy in the area is moderately to steeply dipping, this interpretation may seem plausible. However, this interpretation of TGC grade is a poor fit to other geological information available. Notably the marble units that are intersected in the ends of holes and the lack of visible graphite mineralisation in |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | the upper part of holes where steeply dipping lenses would be expected to intersect. The grade tonnage differences of both models is small and well within the range of Inferred Resource, therefore the alternative interpretation is not expected to have any material economic impact on the project. |
| *Dimensions* | • *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | The drilling covering the mineralised zones encompasses an area of ~800m across strike by ~1,200m along strike and around 100m vertically.<br>The mineralisation is open along strike to the northeast and southwest. |
| *Estimation and modelling techniques* | • *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*<br>• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>• *The assumptions made regarding recovery of by-* | All estimation was performed using Datamine software, using 2m length-weighted composite samples for TGC.<br>Estimation domains were produced for each of the main mineralisation areas using implicit modelling of TGC grade. A total of ten (10) domains were chosen as it adequately discretises the distribution of grade, provides a flexible approach to estimation and allows the implementation of domain contact analysis of soft, firm, and hard grade boundaries. The classes used are 0, 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 10% TGC.<br>Exploratory data analysis and variography was completed for TGC.<br>Potential for acid forming waste rock occurs primarily within sulphidic units and will be estimated in the next model update.<br>Variogram models were defined for TGC samples, and typically consisted of two nested structures and a nugget defined by the down-the-hole variogram. Exponential with practical range models were used as they provided the best fit to the sample data. Final variogram anisotropies were supported by knowledge gained from the geological interpretation of model.<br>TGC on 2m composite lengths were estimated using Ordinary Kriging. A parent block size of 20 x 20 x 2m was chosen based on the Indicated Resource drill spacing of 40x40m. Sub-blocks of sufficiently small enough size were used to model domain contacts. A 2m block size in the vertical dimension was chosen as this should be achievable with selective mining.<br>Densities for each of the weathering zones were assigned into the model based on 91 sample taken from drilling. |

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<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
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*products.*

- *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*
- *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
- *Any assumptions behind modelling of selective mining units.*
- *Any assumptions about correlation between variables.*
- *Description of how the geological interpretation was used to control the resource estimates.*
- *Discussion of basis for using or not using grade cutting or capping.*
- *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*

</td><td>

For grade estimates, a three-pass search strategy was employed with a search ellipsoid orientated to the major, semi-major and minor directions of the variogram models. The number of samples used in the estimate was optimised using Kriging Neighbourhood Analysis for various drill spacings and showed that Kriging Efficiency plateaus at a maximum of 9/10 samples per estimate. Local declustering was achieved by limiting the maximum number of samples per drillhole such that an estimate required a minimum of 2 drillholes for an estimate. Search dimensions were empirically constructed and guided by available drill hole spacing.

<table>
<tr><th colspan="4">TGC Grade Estimation Search Strategy</th></tr>
<tr><th>Pass</th><th>Search</th><th>Min / Max Samples</th><th>Max Samples per Drillhole</th></tr>
<tr><td>1st</td><td>160x80x20m</td><td>Min = 5 Max = 9</td><td>2</td></tr>
<tr><td>2nd</td><td>240x120x30m</td><td>Min = 5 Max = 9</td><td>2</td></tr>
<tr><td>3rd</td><td>320x160x40m</td><td>Min = 3 Max = 9</td><td>2</td></tr>
</table>

No top cuts were applied to samples prior to estimation as it was not required.

Estimates were run using macros and scripts that served as an audit trail for the estimation performed.

There were no assumptions made about the correlation between estimated elements.

Estimates were exhaustively validated using several techniques.

Significant emphasis was placed on visual validation of the estimates. Typically, the approach was to iteratively validate an initial estimate, then adjust or fine-tune estimation parameters where required, and re-run the estimation, until such time the visual validation was judged to be satisfactory. Composite samples and block estimates were loaded using a common legend, and the data dynamically sliced to ensure that the block estimates were supported by the surrounding samples.

The amount of smoothing incurred during the estimation was checked. The performance of the current Kriging parameters using a minimum of 5 samples, maximum of 9 samples, and 2 samples per drillhole was assessed by comparing the theoretical change of support (using the Discrete Gaussian Change of Support Model) to the actual change of support incurred in the estimate.

Traditional comparisons of declustered composite samples to block estimates using statistics and histograms were performed for all estimates. Swathe plots were used to compare the declustered sample averages to the block estimate averages for slices in the north, east and vertical directions across the deposit. All results were satisfactory.

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<tr><td>Moisture</td><td>

- *Whether the tonnages are estimated on a dry basis or*

</td><td>Tonnages are estimated on a dry basis.</td></tr>
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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *with natural moisture, and the method of determination of the moisture content.* | |
| *Cut-off parameters* | • *The basis of the adopted cut-off grade(s) or quality parameters applied.* | The cut-off for the reporting of graphite mineral resources is Total Graphitic Carbon (TGC) > 2%.<br>The cut-off is based on open pit mining with the economic parameters of a long-term view of commodity price, expected metallurgical recoveries, and typical processing costs of product recovered by flotation concentration. Some of these factors have been inferred from the work at the nearby Kookaburra Gully prospect. |
| *Mining factors or assumptions* | • *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.* | The KGE resource will be mined through conventional drill and blast open pit methods.<br>A minimum mining width of 2m was considered when interpreting the mineralisation boundaries, however not explicitly applied as mining methods are open to re-optimization. This minimum mining width is consistent with the equipment and grade control block out methods currently in use at other graphite operations. The vertical dimension of the block model is consistent with selective mining on 2m flitches with waste blocks modelled on 8m benches. Selective mining units were not defined or corrected for in the mineral resource estimate.<br>Open pit optimisation was run on the mineral resource using mining costs, processing costs, geotechnical parameters, and long-term prices for consideration to assess Reasonable Prospects for Eventual Economic Extraction (RPEEE). |
| *Metallurgical factors or assumptions* | • *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction* | Graphite test work has been conducted on the Kookaburra Gully deposit ~4km along strike to the northeast. It is reasonable to conclude that Kookaburra Gully SW Extended should behave in a similar way metallurgically.<br>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. 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. |

| Criteria | JORC Code explanation | Commentary |
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| | *to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.* | |
| *Environmental factors or assumptions* | • *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions* | Detailed assessment of community and environmental factors, including groundwater modelling and flora and fauna surveys, has been undertaken at Kookaburra Gully, with a detailed assessment documented in AGL's Mining Lease Proposal (refer LML website). It is reasonable to conclude that similar studies will occur at KGE as the project advances. |

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<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>made.</td><td></td></tr>
<tr><td>Bulk density</td><td>• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.<br>• The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.<br>• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>A total of 91 density samples are available for KGE. The data was flagged against the weathering wireframes used to build the waste model.<br><br>There are 18 samples in the fresh rock, 55 in the saprock or transitional zone, 18 in the saprolite or oxide zone, and no samples in soil. Data was collected using the Pre-Saturation and Archimedes methods.<br><br>Given the paucity of data in each of the zones and the wide spacing between the data points, it was decided to apply an average value to fresh rock and then factor this value for each zone.<br><br><table><tr><th>Zone</th><th>Density Value</th><th>Factor</th></tr><tr><td>Fresh Rock</td><td>2.78</td><td></td></tr><tr><td>Saprock / Transitional</td><td>2.65</td><td>0.91</td></tr><tr><td>Saprolite / Oxide</td><td>2.50</td><td>0.87</td></tr><tr><td>Soil</td><td>2.00</td><td>0.69</td></tr></table></td></tr>
<tr><td>Classification</td><td>• The basis for the classification of the Mineral Resources into varying confidence categories.<br>• Whether appropriate account has been taken of all relevant factors (ie relative confidence</td><td>The mineral resource has been considered for classification into Measured, Indicated, and Inferred resource categories based on the metrics of expected variation and proposed mining rate, confidence in geological continuity, drillhole spacing, nature and quality of bulk density estimates, drill hole assay QAQC, drillhole survey status quality, and estimation quality.</td></tr>
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| Criteria | JORC Code explanation | Commentary |
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| | *in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*<br>• *Whether the result appropriately reflects the Competent Person's view of the deposit.* | The graphite domains in the schist units do range in continuity from a "pinch and swell", lens-like geometry to broader zones of mineralisation. The continuity generally decreases with increasing cut-off. Some continuity can be inferred on widely spaced 160m sections from the results of the EM surveys.<br><br>The QAQC for drill hole assays is adequate and the sample assays are of sufficiently high quality for consideration across all three resource classification categories.<br><br>Density estimates are a key consideration in the classification scheme as it affects the tonnage estimates. For an Inferred resource, an average assigned density based on domain is deemed acceptable, whilst Indicated resources are strongly recommended to be supported by at least some locally estimated densities. In the case of a Measured resource, only local density estimates are considered acceptable.<br><br>The quality of the estimates as determined from the Kriging neighbourhood analysis, as well as exhaustive validation of the model and checks on smoothing, have also played a key part in informing the classification of the resource.<br><br>The expected variation (relevant confidence) of the graphite resource tonnage and grade on an annual basis has been considered in the classification, assessed using an uncertainty model generated using Conditional Simulation techniques and discussed in the Relative Accuracy and Confidence section of this table.<br><br>The resource has been classified on an open pit mining basis using a notional mining rate of 500 to 750ktpa based on internal studies.<br><br>The mineral resource classification scheme is summarised below. An expected variation of ±13% means that in 9 out 10 years, the estimates will be within 13% of actual. |

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
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<tr><th>Category</th><th>Annual Expected Variation</th><th>Geological Confidence</th><th>Drill Spacing</th><th>Data Quality</th><th>Density</th><th>Survey Status Quality</th></tr>
<tr><td>Measured</td><td>±9%</td><td>Very High</td><td>20x40m</td><td>High</td><td>Local estimate</td><td>High</td></tr>
<tr><td>Indicated</td><td>±13%</td><td>High</td><td>50x50m</td><td>High</td><td>Local estimate + assigned</td><td>High</td></tr>
<tr><td>Inferred</td><td>±25-30%*</td><td>Moderate</td><td>100x60m</td><td>Moderate to High</td><td>Assigned</td><td>Moderate to low</td></tr>
</table>
*Note: While the range for Inferred has been expressed here on an annual basis, it is better practise to apply this range to all the Inferred in the deposit as a whole.<br><br>The Competent Person has been satisfied that appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity in the classification of the mineral resource, and that result reflects the Competent Person’s view of the deposit.
</td></tr>
<tr><td>Audits or reviews</td><td>• The results of any audits or reviews of Mineral Resource estimates.</td><td>No audits have been undertaken.</td></tr>
<tr><td>Discussion of relative accuracy/ confidence</td><td>• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</td><td>The key factors that affect the relative confidence and accuracy of tonnage and grade estimates are geological variability, drill spacing and annual mining rate. All three of these factors were assessed and evaluated by looking at a range of drill spacings and production rates.<br><br>Conditional Simulation techniques were used to characterise the full space of uncertainty in the graphite mineral resource by evaluating drill spacings from 10 x 20m up to 80 x 160m and production rates ranging from 125ktpa up to 3mtpa. Fifty (50) unique models with 5x10x2m blocks were developed for each scenario thereby providing a basis to quantify the accuracy and precision of the resource estimates. The uncertainty models developed using conditional simulation are a measure of the local uncertainty for a mining volume of 500 to 750ktpa to a block support of 20x20x2m as well the global uncertainty of the deposit as a whole.<br><br>Tabulated below is the average expected variation for graphite resources at a 90% confidence interval in the tonnage and grade estimates above a cut-off of 2% TGC within the defined resource classification volumes, for a mining rate of 500 to 750 ktpa. An expected variation of ±13% means that in 9 out 10 years, the estimates will be within 13% of actual.</td></tr>
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| | • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*<br>• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | |

| Resource Category | Tonnes | TGC % |
|---|---|---|
| Measured | ±9% | ± 7% |
| Indicated | ±13% | ± 10% |
| Inferred | ±25-30%* | ± 15% |

Note on the variation of Inferred Resource. The figures in the above table are those that were actually derived from the work for 500-750ktpa. This level of granularity (i.e., yearly) should generally not be applied to Inferred as it should be a global measure across the model as a whole.

No production data is available for comparison.