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HIGHEST GRADE GRAPHITE RESOURCE IN AUSTRALIA - YALBRA

Highlights

- **Maiden very high grade Inferred graphite resource estimate for Yalbra to JORC Code reporting standards**

2.27 million tonnes @ 20.1% TGC

- **Buxton believes this to be the highest reported grade graphite resource in Australia**
- **Significant potential to expand resource along strike and at depth**
- **Preparations for follow-up resource expansion and metallurgical drilling program well advanced – POW submitted and preparation for heritage survey underway**

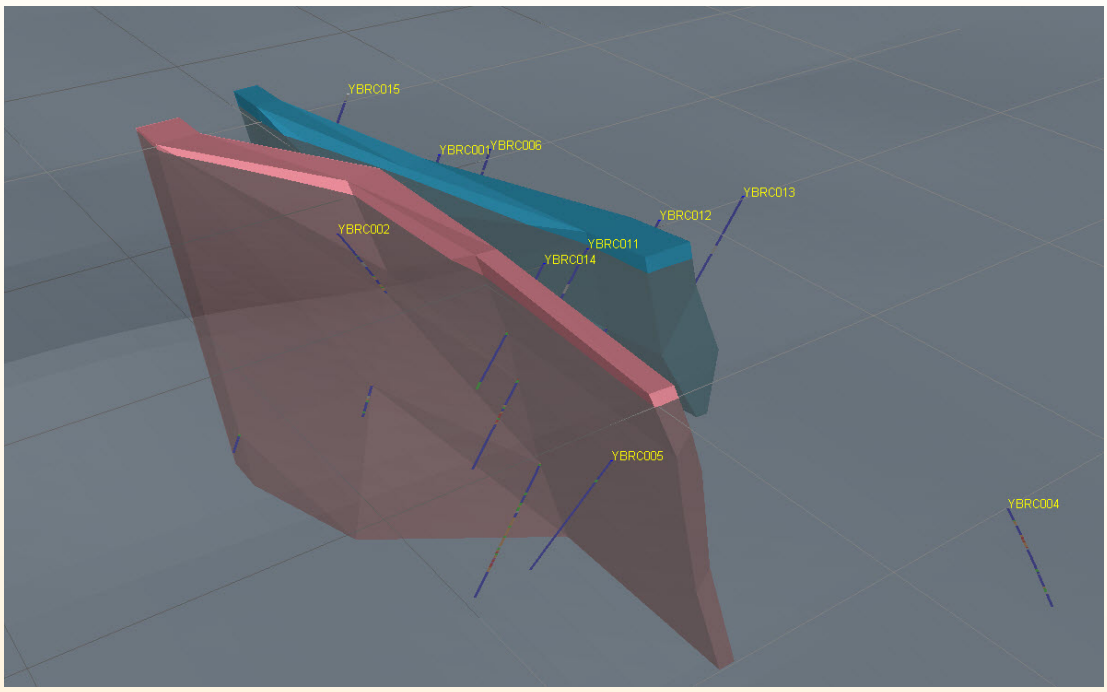


Figure 1. Graphite resource wireframes within the Main Zone at Yalbra – view is to the north-west. Grid spacing is 100m.

PO Box 9028
Subiaco WA 6008

Suite 1, First Floor
14-16 Rowland Street
Subiaco WA 6008

Tel: 08-9380 6063
Fax: 08-9381 4056

www.buxtonresources.com.au
info@buxtonresources.com.au

Summary

Buxton Resources Limited (ASX: BUX & BUXO) is very pleased to report the maiden JORC Code Reported Mineral Resource for the Main Zone at the Yalbra Graphite Project (Yalbra), located east of Gascoyne Junction in Western Australia (Figures 1, 2 & 3; Table 1).

The Company completed a total of 15 RC drill holes for a total of 1,674 metres at Yalbra in November 2013. Drilling within the Main Zone intersected substantial widths of very high grade graphite mineralisation across multiple parallel zones (Figure 2).

The graphite mineralisation in the Main Zone proved particularly consistent in grade and geological continuity which has allowed for a maiden JORC Code reported Mineral Resource to be estimated (Table 1; Figures 1 & 2).

Table 1. Yalbra Inferred Mineral Resource, February 2014

Classification	Tonnes (KT)	TGC %	Contained Graphite (Tonnes)
Inferred	2,270	20.1	454,600
Total	2,270	20.1	454,600

**Blocks reported using a 0% TGC lower cut-off grade.*

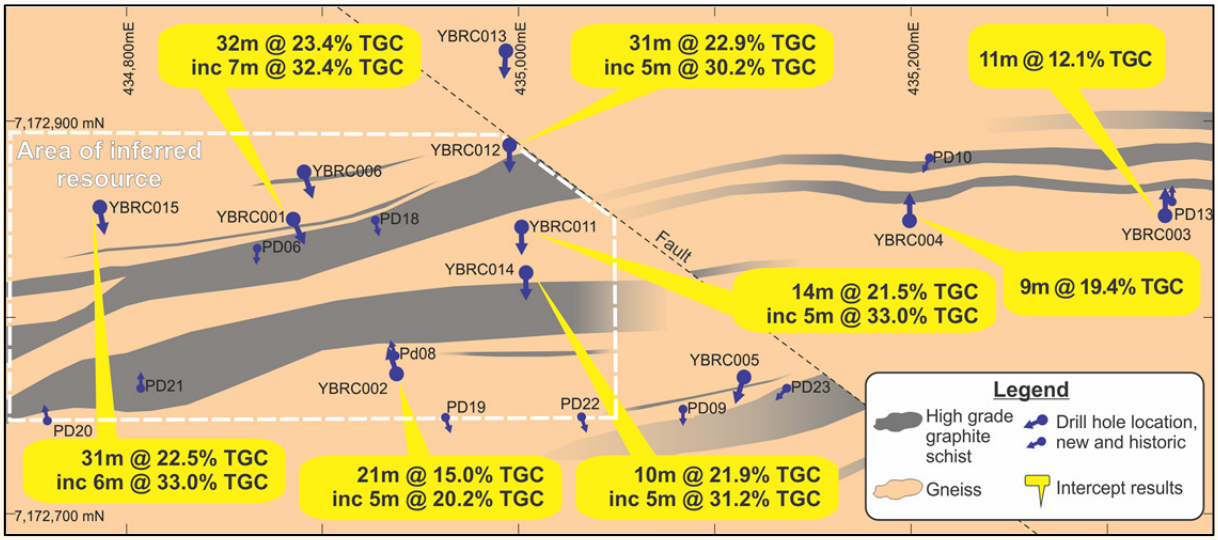


Figure 2. Map of Main Zone at Yalbra showing substantial intercepts of very high grade graphite, simplified geology and the area of the Inferred Mineral Resource.

Conclusion

The initial JORC Code Reported Mineral Resource estimate for the Yalbra graphite project has far exceeded the Company's expectations. Very high-grade graphite occurs within multiple zones over 500m strike length and is open at depth and along strike. A significant portion of graphite in petrographic samples was shown to have medium to coarse flakes.

The Company expects to be able to expand the JORC Code Mineral Resource with further drilling through 2014. In addition, Buxton is planning to conduct metallurgical test-work to determine potential product specifications once diamond drill-core samples have been obtained from the planned 2014 drilling program.

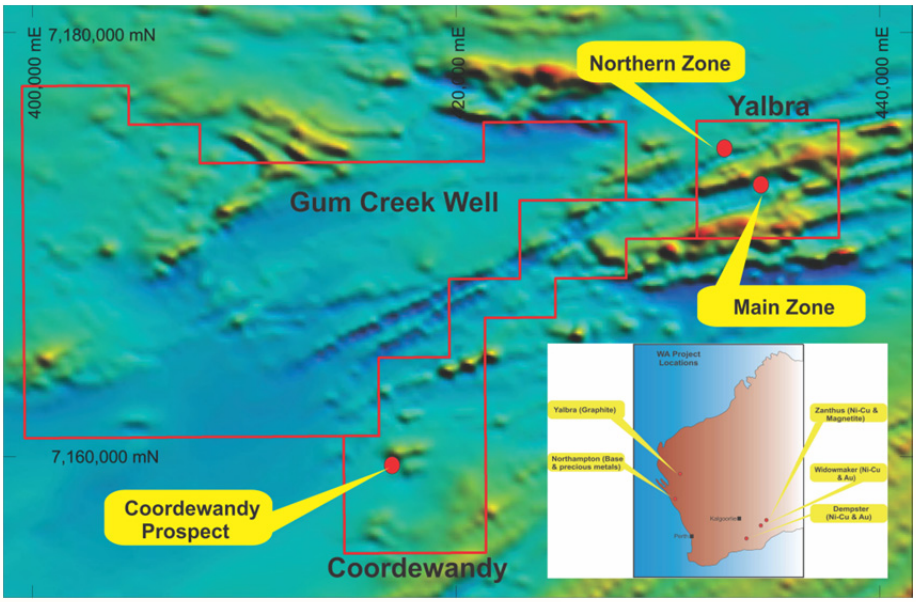


Figure 3. Location and tenure position – Yalbra Graphite Project

Yalbra Graphite Project Mineral Resource Estimate

CSA Global Pty Ltd (CSA) was commissioned by Buxton Resources Limited (Buxton) to carry out a Mineral Resource estimate for the Yalbra Graphite Deposit, which is located 280 km east of Carnarvon, Western Australia.

CSA estimated a Mineral Resource for Yalbra as presented in Table 1. The Mineral Resource was classified as Inferred according to the JORC Code (2012 Edition), and the Mineral Resource is deemed to have reasonable prospects for eventual economic extraction.

The Yalbra Graphite deposit is hosted within multiple bands of graphitic schist of Archean age (greater than 2,500 million years). The geology strikes East-West, and the schist units are steeply dipping, variably to the north and south at depth. Buxton mapped the outcrop geology in 2013 and developed a geological model upon which they planned the 2013 drilling program. The geological mapping showed geological continuity of the graphitic schists.

Buxton drilled 15 RC holes (1,674m) in 2013, with 11 holes targeting the Main Zone (this Mineral Resource) and 4 holes targeting the Northern Zone, as discussed in the market announcement dated 13th January 2014. The drill holes are located on nominally 100m spaced Easting sections, with three lines of drilling targeting the Main Zone. Samples were taken every one metre, with a field duplicate sample taken every 20th sample. All 1m samples were rotary split at the drill rig cyclone, with the sample 50:50 riffle split to produce a sample of nominal 2kg weight, and dispatched for assaying. Sample recoveries were recorded and no recovery problems were noted.

All collar surveying was completed using a handheld GPS to MGA94 / Z50S grid. Downhole surveys were completed using a Reflex EZ-Trak multi shot survey tool with measurements at 30m intervals. The orientation of the drill holes compared to the strike and dip of the geological units hosting mineralisation is not expected to introduce sampling bias.

Drill hole samples were assayed at Genalysis Intertek laboratory in Perth, W.A., with an analysis of Total Graphitic Carbon (TGC) provided per sample as a percentage of the total sample mass using an ELTRA analyser. Industry standard QA/QC procedures were employed by Buxton and the analytical laboratory during the sampling and analytical programs, and results were deemed to be satisfactory.

Buxton contracted CSA Global Pty Ltd (CSA), a leading geological, mining and management consulting company to prepare a Mineral Resource estimate for Yalbra, based upon the 2013 drilling results. Buxton provided CSA with a geological interpretation of the graphitic mineralisation, based upon a nominal lower cut-off grade of 7% TGC and from this, CSA prepared a 3D geological model for the two main graphitic domains. Both domains show reasonable prospects for eventual economic extraction, based upon their width of mineralisation, tenor of grade and shallow depth of mineralisation. The geological domains were extended along strike to the east and west approximately 50m, following the strike of the geological mapping. The domains were terminated to the east at a NW striking fault approximately 80m to the east of the drilling. A 'top of fresh rock' weathering profile was modelled based upon geological observation of the drill sample chips, resulting in a weathered profile and fresh rock profile added to the block model. Interpreted graphite mineralisation is currently open at depth and along strike.

TGC (%) sample grades were interpolated into the mineralisation domains of a block model (block dimensions 50m (E) x 10m (N) x 25m (Z)) using Ordinary Kriging, with Inverse Distance Squared used as a check estimate. Top cuts were not applied to the sample data. Density values were assigned to the block model according to the weathering profile, with a value of 2.2 t/m^3 applied to the weathered profile, and 2.6 t/m^3 to the fresh rock profile. The bulk density values assigned to the block model are assumed values, based upon density values reported for other graphite Mineral Resources hosted in similar geological settings within Australia and Africa.

The resultant grade-tonnage block model was validated by comparing interpolated block grades with adjacent drill hole sample grades, using visual inspection of cross sections, comparison of mean block grades versus mean sample grades per domain, and swath plots.

Initial petrographic studies show that significant portions of medium and coarse flake graphite occur in the samples. Observations show that graphite flakes generally range from 100 to 500 microns long and in some cases reach over 1mm in length.

The Mineral Resource has been classified as Inferred according to the JORC Code (2012 Edition). The Inferred classification was based upon an assessment of geological understanding of the deposit, drill hole spacing, number of drill holes per drill section, QA/QC of drill hole sampling and chemical analyses of the samples, and quality assurance of drill hole collars, down hole surveys and topographic DTM. The tonnage and grade of the Mineral Resource were estimated on the basis of limited geological evidence and sampling, with geological evidence sufficient to imply but not verify geological and grade continuity. The Mineral Resource was reported without application of a lower cut-off grade. The block model grade distribution is quite smooth at this early stage of the project and any reporting cut-off grade used would be subjective.

About Buxton's Projects

Zanthus Ni-Cu Project (100% Interest)

The Zanthus Ni-Cu Project is located 60km along strike from Sirius Resources' (ASX: SIR) Nova-Bollinger Ni-Cu discovery in the emerging Fraser Range Nickel Province, Western Australia. The project covers an area of 367km^2. Gravity and VTEM, ground EM and surface geochemistry data was gathered over an area of 137km^2 that may contain similar mafic – ultramafic intrusive rocks to those that host the Nova-Bollinger deposit. A 3,000m RC drilling program is planned to commence Q1 2014.

Yalbra Graphite Project (85% - 100% Interest)

The Yalbra Graphite Project is located 250km North West of Meekatharra and 280km East of Carnarvon, Western Australia, and comprises the Yalbra, Gum Creek Well and Coordewandy tenements, which together cover an area of 473km^2. Buxton's maiden RC drilling program completed in late 2013 shows significant intersections of very high grade graphite. The project has a JORC Code reported Inferred Mineral Resource at the Main Zone of 2.27Mt @ 20.1% TGC.

Dempster Project (90% – 100% Interest)

Buxton has acquired a significant ground position now totaling 1,365km^2 that is prospective for magmatic nickel-copper and separately orogenic gold deposits at Dempster within the Albany Fraser Orogen. The project straddles the interpreted boundary of the Archaean Yilgarn Craton and the Proterozoic Albany Fraser Orogen and has a similar tectonic position to the Tropicana Gold Deposit. Historical work at the Dempster Project identified significant nickel surface calcrete anomalies. The Prickle prospect, was drilled and shown to be underlain by a mafic-ultramafic rock package including gabbros and dunites. Peak results were 0.25% Ni and 348ppm Cu at the base of a RAB hole.

Widowmaker Ni-Cu Project (100% Interest)

The Widowmaker Ni-Cu Project is located approximately 22km along strike from Sirius Resources' (ASX: SIR) Nova-Bollinger Ni-Cu discovery in the emerging Fraser Range Nickel Province, Western Australia. The project covers an area of 225km^2, and over 20km of potential strike of the gneiss units that host "the Eye" mafic – ultramafic intrusive that contains the Nova-Bollinger deposit. Recent surface geochemistry has highlighted an anomaly over ~3km of strike with an association that includes Ni-Cu-Co-Cr-As.

Northampton Base Metals Project (100% Interest)

The Northampton project area is located 477km North of Perth, along the Northwest Coastal Highway between Geraldton (in the South) and Ajana (in the North). The main target commodities in this project are Cu, Pb, Zn, and Au. The principal target style is structurally controlled polymetallic sulphide veins and pods.

ASX Code – BUX, BUXO	Market Cap. @ 25.5cps - $13.9m
Issued shares – 54.5m	Cash - $2.3m (at 31 Dec. 2013)

For further information regarding Buxton Resources Limited please contact:

Anthony Maslin

Managing Director

amaslin@buxtonresources.com.au

Competent Persons

The information in this report that relates to exploration results, exploration targets and geology is based on information compiled and/or reviewed by Dr Julian Stephens, Member of the Australian Institute of Geoscientists and Non-Executive Director for Buxton Resources Limited. Dr Stephens has sufficient experience which is relevant to the activity being 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 and consents to the inclusion in this report of the matters reviewed by him in the form and context in which they appear.

The information in this Report that relates to in-situ Mineral Resources is based on information compiled by David Williams of CSA Global Pty Ltd. David Williams takes overall responsibility for the Report. He is a Member of the Australasian Institute of Mining and Metallurgy, and a Member of the Australian Institute of Geoscientists and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012 Edition). David Williams consents to the inclusion of such information in this Report in the form and context in which it appears.

Appendix: JORC code tables and commentary

Section 1

Criteria	Drilling Commentary
Sampling Techniques	Reverse circulation drilling was employed to generate 1m samples, split 1:8 at the rig to provide a bulk sample and an assay sample. Mineralised samples were submitted as single metre split samples, for low or non-mineralised samples, multiple metre, composite spear samples were generated from the bulk samples. Duplicate samples were taken on average every 20th sample (both split and composites) to provide checks on sample representivity.
Drilling Techniques	Drilling was planned on nominal 100m-spaced sections across the Yalbra prospect. A total of 1,674m of 5 and 3/4 inch reverse circulation drilling has been completed at 2 prospects. Drill holes were generally drilled at -55 degree dip on azimuths deemed appropriate to perpendicularly cross-cut mineralisation zones. Several drillholes were drilled to scissor the mineralisation (drilled at opposing azimuths) in an attempt to determine the dip of the mineralisation bands.
Drill Sample Recovery	The RC bulk sample recovery was routinely examined for representivity. The analysis laboratory records received sample weights, and the company retrieved this data for analysis. It is not believed that any bias has occurred due to loss or gain of sample.
Logging	100% of the drill holes were geologically logged by qualified and experienced geologists, recording relevant data to a set template to metre intervals. All logging included lithological features, mineral assemblages, mineralisation percentages and basic graphite flake characteristics, all qualitative by nature. All data was codified to a set company codes system. This offers sufficient detail for the purposes of interpretation and further studies.
Sub-sampling techniques and sample preparation	All 1m intervals were cone (rotary) split at the drill rig cyclone, producing a 4-5kg analysis sample and a 20kg bulk bulk. Each 1m mineralised sample was then 50:50 riffle split to produce an analysis sample or 2-2.5kg. Non-mineralised analysis samples were prepared as mulitple metre (generally 4m composites) spear samples. Sample preparation is consistent with industry best practice. Field QC procedures involved the use of certified reference material assay standards, blanks and duplicates for company QC measures, and laboratory standards, replicate assaying and barren washes for laboratory QC measures. The insertion rate of each of these QAQC measures averaged better than 1:20. The sample size is deemed appropriate for the material and analysis method.
Quality of assay data and laboratory tests	The samples were analysed at Genalysis Intertek in Perth, Australia. Sample preparation included drying, crushing, splitting and pulverizing. A split of the sample was analysed using an ELTRA analyser to determine total graphitic carbon content (TGC). The detection limits and precision for the TGC analyses are considered to be adequate for the purpose of any resource

	estimations in the future. The laboratory procedures are considered to be appropriate for reporting TGC according to industry best practice. Company QAQC samples were employed at 5-8% of total samples analysed. The results of the company-inserted and laboratory-inserted standards, blanks and sample repeats demonstrate the accuracy and precision of TGC results are satisfactory
Verification of sampling & assaying	Significant mineralisation intersections were verified by alternative company personnel. No twin holes were drilled. All data was collected initially on paper logging sheets, codified to the Company's templates. This data was hand entered to spread sheets and validated by Company geologists. This data was then imported to a Microsoft Access Database, and then validated using MapInfo software. No adjustments to assay data have been made.
Location of data points	All XYZ surveying was completed using a handheld GPS to MGA94 / Zone 50 South grid system, to an accuracy of approximately 5m. All down-hole surveying was carried out using a Reflex Ez-Trak multi-shot survey tool at 30m intervals down hole. Topographical control is sufficient for the stage of exploration.
Data spacing & distribution	Drill spacing at this point of the exploration program is irregular, however drill-holes have been planned to accommodate a 100m spaced future drill program. No Mineral Resource estimation is considered at this time. No data compositing has occurred.
Orientation of data in relation to geological structure	The orientation of the drilling is not expected to introduce sampling bias.
Sample security	Samples were packaged and stored in secure storage from the time of gathering through to submission. Laboratory best practice methods were employed by the laboratory upon receipt.
Audits or reviews	No audits of the sampling techniques and data were carried out due to the early stage of exploration. It is considered by the Company that industry best practice methods have been employed at all stages of the exploration.

Section 2

Criteria	Drilling Commentary
Mineral tenement & land tenure status	Buxton Resources owns an 85% interest in the E09/1985 (Yalbra) tenement, with Montezuma Mining Company holding the remaining 15% interest. Montezuma will retain a 15% free carried interest up to a decision to mine, then will elect to either contribute on a prorata basis, or dilute to a 1% gross revenue royalty.
	The tenement is in good standing and there are no known significant impediments to exploration or mining in the area.
Exploration done by other parties	No other parties were involved in this exploration program.
Geology	The Yalbra area is located proximal to the boundary of the Yilgarn Block and the Gascoyne Province where Archaean rocks have undergone deformation and metamorphism during Lower Proterozoic orogenesis. The Archaean rock types comprise gneisses, amphibolites, granofels, quartzites and iron formations. The Yalbra mineralisation is characterised as multiple, very high grade bands of graphite schist hosted within gneissic rocks of intermediate composition.
Drill hole information	Refer to Table 1 within text.
Data aggregation methods	No top cuts have been applied. A nominal 10% Total Graphitic Carbon lower cut-off has been applied in the determination of significant intercepts. High grade intercepts within broader low grade intervals have been separated as "including" results. No metal equivalent values are used in this report.
Relationship between mineralisation widths & intercept lengths	Due to the steep dip (-80 to vertical) of the mineralisation bands, and restrictions on the dip that drilling machinery can operate under (i.e. minimum -55 dip) downhole mineralisation widths are longer than true widths.
Diagrams	Figures in text
Balanced reporting	Representative reporting of low and high grades has been effected within this report.
Other substantive exploration data	Additional mineralogical and graphite flake size and deportment information is provided in the text.
Further work	Further work programs are planned and include diamond and RC drilling, in addition to mineralogical and metallurgical test work. The planning is not sufficiently advanced to report at this stage.

Section 3

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

Criteria	Commentary
Database integrity	In-house validation of internally generated (i.e. geological logging) and third party digital data (i.e. laboratory supplied assay data) includes original vs database checks, software validation, visual validation via data plotting and other means of validation.
Site visits	No site visit has been undertaken by the CP for Mineral Resources. It is proposed for the CP to visit site before the Mineral Resource receives a higher classification level.
Geological interpretation	The CP is confident in the geological interpretation, although there are some uncertainties regarding the structural variability at depth. The geological interpretation is based upon surface mapping and information obtained from RC drill samples. The sensitivity of the Mineral Resource was tested by alternative linking of domains along strike, with similar results in grade – tonnage distribution. The linking of interpreted TGC domains along strike was guided by the strike of the surface mapping. Geological continuity is observed in the surface mapping, with historical trenches demonstrating graphitic mineralisation. The mineralisation in some domains is cut off at depth as revealed by the assays in RC samples, with a structural control anticipated, to be tested by diamond drilling. A NW – SE striking fault cuts the geological and grade continuity at the eastern end of the resource.
Dimensions	The current Mineral Resource has a maximum strike extent of 250m, a plan width varying between 3m and 20m, and a depth extent of 180m below surface. The Mineral Resource outcrops at surface along its' entire strike length.
Estimation and modelling techniques	The interpretation of the mineralisation domains were based upon a nominal 7% lower cut-off grade of total graphitic carbon (TGC), based upon three drill section lines spaced 100m apart. Two mineralisation domains were interpreted across the three sections. The domains were linked to form two 3D wireframe solids using surface mapping as a guide. A weathering profile was interpreted based upon the lithological logs of the RC chips, demarcating between fresh and saprolitic rock. Only the RC drill holes drilled in 2013 were used to interpolate grade into the Mineral Resource, with the historical drill hole data not used due to lack of quality control information regarding sample assays. The drill hole samples were flagged as being located within or outside of the mineralisation wireframes, and above or below the weathering DTM. A statistical analysis of the data was carried out, with histograms of the TGC results per domain recorded, with other basic statistical information. No high grade capping (top cuts) were used based upon an assessment of the distribution of sample grades within the mineralisation domains. Geological modelling and grade interpolation was carried out using Datamine software. The search ellipse was aligned along strike and down dip of the domains, with radii of 150m, and with a minimum of 4 and maximum of 16 samples used per block estimate. Each of the mineralisation domains were treated as a hard envelope during grade interpolation. The weathering surface was not referred to during the grade interpolation. All drill samples were 1m in length and compositing was not required. The final grade interpolation was one of four iterations, with the other three testing grade interpolation strategies, and an earlier geological interpretation where some of the domains were linked in 3D in another interpretation. A review of each iteration resulted in changes made to the estimation parameters until the CP was satisfied the parameters for the final model were appropriate. No historical mining has taken place to verify the model against. No by-products are anticipated to be produced during mining. No deleterious elements were modelled. The size of the blocks in the block model were 50m(E) by 10m (N) by 25m (Z), compared to a 100m drill hole spacing (easting). The project is at a very early stage of development and choice of appropriate SMU was not a point of consideration. Only TGC was interpolated, with no other variables to correlate against. The geological interpretation acted as a hard boundary for the grade interpolation such that sample grades within one domain were not used to interpolate blocks in an adjacent domain. The model was validated by comparing the mean TGC grades of the blocks against the mean TGC grades of the samples, per domain. The block model was sliced in easting and RL sections and the interpolated block grades cross checked against the sample grades. A trend plot was generated on easting, northing and RL sections to test the trends of variability of sample grades against block grades, although the limited amount of sample data meant that this was a weak validation took at the present stage of the project. The CP had the model peer reviewed by another resource geologist not involved in the project, who critically checked each stage of the project, and found no fatal flaws. No reconciliation data was available because no mining has taken place to date.
Moisture	Tonnages are estimated on a dry basis.
Cut-off parameters	The Mineral Resource is reported above a 0% TGC cut-off grade. The block grade distribution is quite smooth at this stage of the project and any reporting cut-off grade used would be subjective.
Mining factors or assumptions	The project is at a very early stage of geological investigation, however, the Mineral Resource has a minimum plan width of 3m for all domains. It is assumed that any future mining will be open cut.
Metallurgical factors or assumptions	Initial petrographic studies show that significant portions of medium and coarse flake graphite occur in the samples. Observations show that graphite flakes generally range from 100 to 500 microns long and in some cases reach over 1mm in length

Criteria	Commentary
Environmental factors or assumptions	At this early stage of exploration and resource definition, no environmental studies have been undertaken. Within the resource area at Yalbra topography is of low relief with several ephemeral streams cross cutting the area. Geological logging has noted the presence of a low percentage of pyrite in several rock units. This will require quantification and determination of impact on acid rock drainage at a later date.
Bulk density	The bulk density values assigned to the block model by weathering profile are assumed values, based upon density values reported for other graphite Mineral Resources hosted in similar geological settings within Australia and Africa. A density value of 2.2 t/m3 was assigned to the weathered rock profile, and 2.6 t/m3 to the fresh rock profile.
Classification	The Mineral Resource is entirely classified as Inferred, based upon an assessment of geological understanding of the deposit, drill hole spacing, number of drill holes per drill section, QAQC of drill hole sampling and chemical analyses of the samples, and quality assurance of drill hole collars, down hole surveys and topographic DTM. All relevant factors were considered when considering the classification level. The Inferred classification appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	The Mineral Resource was peer reviewed by a colleague of the CP who found no fatal flaws. There have been no higher level reviews or audits conducted.
Discussion of relative accuracy/ confidence	The Mineral Resource is classified as Inferred, being the lowest classification level allowed under JORC, and this reflects the relative accuracy of the Mineral Resource. The Mineral Resource is a local estimate and relies upon domaining of drill hole sample data, thereby excluding a large proportion of drill hole samples from the grade and tonnage distribution of the block model. An Inferred Mineral Resource of 2.27MT @ 20.1% TGC is reported. Geological and grade continuity between drill holes is implied but not verified. The mineralisation domains were constrained by 3D wireframe solids encapsulating mineralisation above a nominal cut-off grade of 7% TGC. A block model was constructed and drill hole sample grades for TGC (%) were interpolated into the mineralisation domains coded within the block model. Two weathering profiles were stamped onto the model, and density values of 2.2 t/m3 and 2.6 t/m3 were assigned to the weathered and fresh rock profiles respectively. Blocks constrained within the mineralisation domains were selected and the accumulated tonnage and volume weighted average grades for TGC (%) were recorded and reported. No mining has taken place at the project and therefore no production data is available to compare with the Mineral Resource.