ASX Release **24th October 2014**

BUXTON SIGNIFICANTLY EXPANDS GRAPHITE RESOURCE AT YALBRA

Highlights

- **Tonnage almost doubled in updated resource estimate for Yalbra:**

  4.0 million tonnes @ 16.2% TGC (Inferred)

  650,000 tonnes contained graphite

- **Buxton believes this to be the highest reported grade JORC graphite resource in Australia**

- **Significant potential to expand resource along strike and at depth**

- **Metallurgical program underway with results (due Q4 2014) planned to feed into Scoping Study due to start in early 2015**

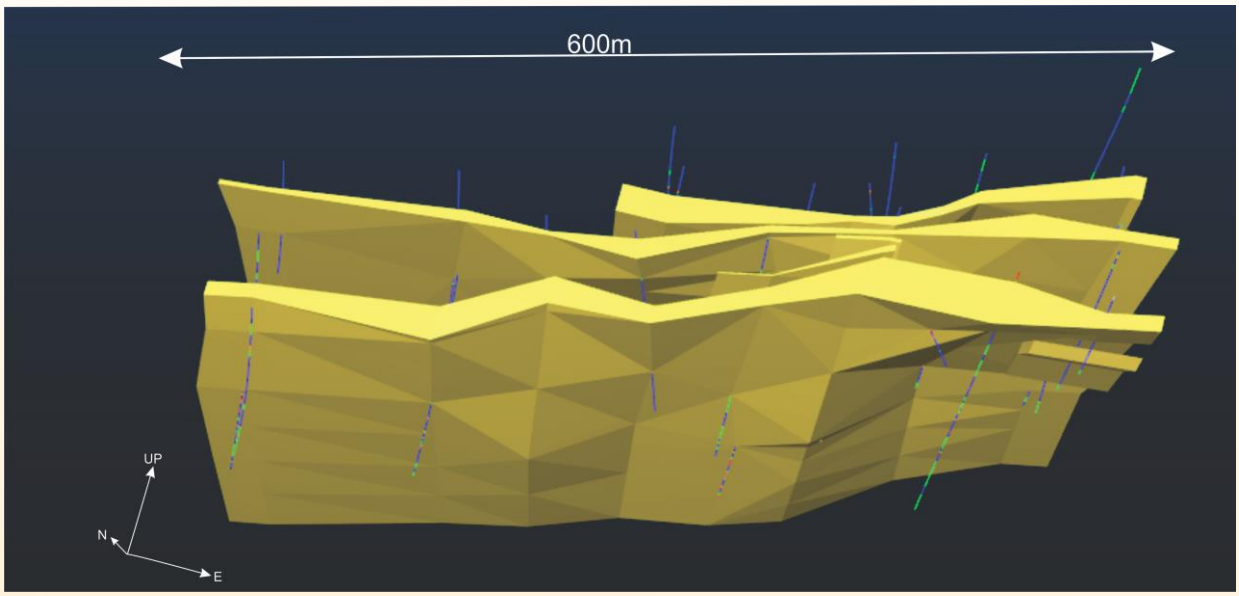

Figure 1. Graphite resource wireframes within the Main Zone at Yalbra.

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Summary

Buxton Resources Limited (ASX: BUX & BUXO) ("Buxton" or "the Company") is very pleased to report an updated Mineral Resource estimate, reported in accordance with the JORC (2012) Code, for the Main Zone at the Yalbra Graphite Project (Yalbra) (85-100% owned), located east of Gascoyne Junction in Western Australia (Figures 1 & 2; Table 1).

In July 2014, the Company completed its second drilling program at the Yalbra Graphite Project which is showing considerable potential. Drilling within the Main Zone intersected substantial widths of very high grade graphite mineralisation across multiple parallel zones and extended graphite mineralisation approximately 200m to the west.

Buxton Resources Chairman, Seamus Cornelius said, "Buxton commenced exploration at the Yalbra Graphite Project in 2013. Since that time we have completed two drilling programs and defined what we believe to be the highest reported grade JORC graphite Mineral Resource in Australia.

This remains a very exciting time for the Company given the potential to expand the resource along strike and at depth. We are about to embark on the key steps to realising value which includes a focus on metallurgical test-work, scoping studies, further resource expansion and pursuing a path to commercialisation."

Table 1. Yalbra Inferred Mineral Resource, October 2014

Classification	Tonnes (KT)	TGC %	Contained Graphite (Tonnes)
Inferred	4,022	16.17	650,000
Total	4,022	16.17	650,000

**Blocks reported using a 4% TGC lower cut-off grade.*

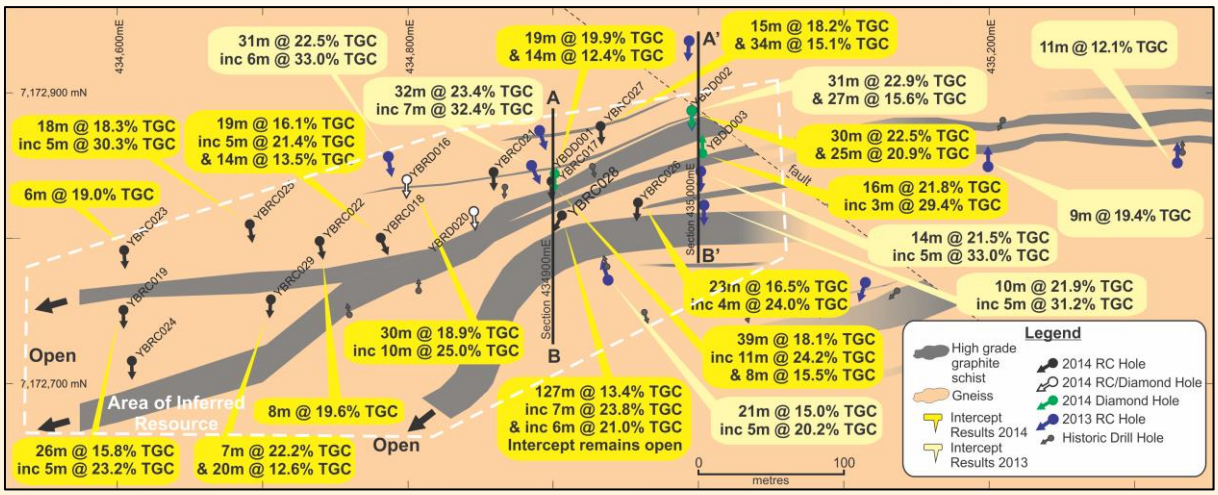

Figure 2. Map of Main Zone at Yalbra showing intercepts of very high grade graphite, simplified geology and the area of the updated Inferred Mineral Resource.

Conclusion

The initial JORC (2012) Code Reported Mineral Resource estimate for the Yalbra graphite project has been expanded significantly. Very high-grade graphite occurs within multiple zones over greater than 600m of strike length and is open at depth and along strike. A significant portion of graphite in petrographic samples is shown to have medium to coarse flakes.

Buxton is focusing on completing its metallurgical test-work program to determine potential product specifications and marketability of the concentrate. A further drilling program targeting upgrading a portion of the resource to Indicated category, in addition to extending mineralisation to the west is planned to commence once favourable metallurgical results have been received.

Summary of Mineral Resource Estimate and Reporting Criteria

Buxton commissioned CSA Global Pty Ltd ("CSA") to prepare a Mineral Resource estimate for the Yalbra Graphite Project, located 280 km east of Carnarvon in Western Australia. The Mineral Resource estimate is presented in Table .

Table 2: Mineral Resource Estimate, Yalbra Graphite Project.

JORC Classification	Tonnes (KT)	TGC (%)	Tonnes Graphite
Measured	-	-	-
Indicated	-	-	-
Sub-total	-	-	-
Inferred	4,022	16.17	650,000
Total	4,022	16.17	650,000

*****_The resource is quoted for blocks with a grade of greater than 4% Total Graphitic Carbon._

The Yalbra Graphite deposit is hosted within multiple bands of graphitic schist of Archaean age. The geology strikes east-west, and the schist units are generally steeply south dipping. Buxton mapped the outcrop geology in 2013 and developed a geological model which was used to plan the 2013 and 2014 drilling programs. Geological mapping showed geological continuity of the graphitic schists.

Buxton drilled 15 reverse circulation ("RC") holes for 1,674 m in 2013. The drill holes are located on 100 m spaced easting sections, with three lines of drilling targeting the Main Zone. CSA completed a Mineral Resource estimate based on these results in February 2014.

Buxton then completed two metallurgical holes in October 2013 followed by 12 RC holes for 1,751 m and 3 diamond holes for 419.2 m in 2014.

Buxton commissioned CSA to prepare an updated Mineral Resource estimate for Yalbra based on the 2014 drilling results. Buxton provided CSA with a geological interpretation of the graphitic mineralisation, based upon a nominal lower cut-off grade of 7% TGC. Using this information, CSA prepared a 3D model of the mineralisation. A total of 6 lodes were modelled. Three of these lodes show reasonable prospects for eventual economic extraction, based upon their width of mineralisation, tenor of grade and shallow depth of mineralisation. The remaining three lodes were narrow and based on limited assay results and have been excluded from the Mineral Resource estimate. The lodes were extended along strike to the east and west approximately 25 m, following the strike of the geological mapping. The lodes were projected down-dip 100 m

from the base of drilling. The northernmost lode was terminated to the east at a north-west striking fault approximately 10 m to the east of the drilling. Graphite mineralisation is currently open at depth and along strike.

CSA also prepared a 3D Model of the Saprolite and Fresh rock based on interpretations supplied by Buxton. This allowed bulk density to be assigned to the block model based on oxidation status.

TGC (%) sample grades were interpolated into the mineralisation domains of a block model (block dimensions 12.5 m (E) x 10 m (N) x 12.5 m (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 oxidation status, with a value of 2.17 t/m^3, 2.33 t/m^3 and 2.50 t/m^3 applied to the Saprolite, Saprock and fresh rock respectively. The bulk density values assigned to the block model are mean domain values determined from gravimetric density data.

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 100–500 microns and in some cases reach over 1 mm.

The Mineral Resource has been classified as Inferred in accordance with 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 digital terrain model. 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.

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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 Mineral Resources is based on, and fairly represents, information compiled by Mr David Williams, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Williams is employed by CSA Global Pty Ltd, an independent consulting company. Mr Williams 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 as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Williams consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix 1: JORC Table 1

Section 1: Sampling Techniques and Data

Criteria	Drilling Commentary
Sampling Techniques	Reverse Circulation (RC) drilling was employed to generate 1 m 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 or, for low or non-mineralised samples, multiple metres, and 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 50 m spaced sections across the Yalbra prospect. A total of 3,425 m of 5 and 3/4 inch RC drilling, 419.2 m of diamond drilling and 305.5 m of RC/diamond tail drilling has been completed at 2 prospects. Drill holes were generally drilled at -55 degree dip to the south. Several drill holes 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 1 m intervals were cone (rotary) split at the drill rig cyclone, producing a 4–5 kg analysis sample and a 20 kg bulk. Each 1 m mineralised sample was then 50:50 riffle split to produce an analysis sample of 2–2.5 kg. Non-mineralised analysis samples were prepared as multiple metres (generally 4m composite) 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 QA/QC measures averaged approximately 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 resource estimation. The laboratory procedures are considered to be appropriate for reporting TGC according to industry best practice. Company QA/QC samples were employed at 5-8% of total samples analysed. The results of the company-inserted and laboratory-inserted standards, blanks and sample

Criteria	Drilling Commentary
	repeats demonstrate that the accuracy and precision of TGC results is acceptable.
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 surface surveying was completed using a handheld GPS to MGA94 / Zone 50 South grid system, to an accuracy of approximately 5 m. All down-hole surveying was carried out using a Reflex Ez-Trak multi-shot survey tool at 30m intervals down hole. Point surface data was derived from Real Time Kinematic (RTK) GPS equipment. The point data file into Datamine and a digital terrain model (DTM) surface was created using those points. This DTM was used as a control during the creation of the block model supporting the Mineral Resource estimate.
Data spacing & distribution	Drill spacing at this point of the exploration program is irregular; however the drill pattern approximates 50 m along-strike by 20-100 m down-dip throughout the Mineral Resource area. Data has been composited to 1 m.
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	CSA conducted a field review of the sampling techniques and data collection methods. It was considered by CSA that these aspects were acceptable for the resource estimation.

Section 2: Reporting of Exploration Results

Criteria	Drilling Commentary
Mineral tenement & land tenure status	Buxton Resources owns an 85% interest in the E09/1985 (Yalbra) tenement, with Montezuma Mining Company (ASX: MZM) 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 prorate 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 the exploration program that generated data that was used in this Mineral Resource estimate.
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.

Criteria	Drilling Commentary
Drill hole information	Not relevant for the reporting of Mineral Resource estimates. Drilling intersections were previously reported on 5th August and 21st August 2014.
Data aggregation methods	Not relevant for the reporting of Mineral Resource estimates. Drilling intersections were previously reported on 5th August and 21st August 2014.
Relationship between mineralisation widths & intercept lengths	The majority of the drilling has been completed at an angle of -55° to the south. There are also some north-dipping holes. The mineralisation generally dips steeply to the south but is locally near vertical or steeply north-dipping.
Diagrams	Relevant diagrams are presented in the body of this report, and in previous market releases 5th and 21st August 2014.
Balanced reporting	Not relevant for the reporting of Mineral Resource estimates. Drilling intersections were previously reported on 5th August and 21st August 2014.
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. Diagrams highlighting the areas of possible extensions have been included in the body of the announcement.

Section 3: Estimation and Reporting of Mineral Resources

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. CSA Global completed additional checks for overlapping samples and sample intervals that extend beyond the hole depth. No issues were detected.
Site visits	A site visit was undertaken by a representative of the CP for Mineral Resources. The CP intends to visit the 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 and diamond drill samples. 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 north-west striking fault cuts the geological and grade continuity at the eastern end of the resource.

Criteria	Commentary
Dimensions	The current Mineral Resource has a maximum strike extent of 450 m, a plan width varying between 3m and 20m, and a depth extent of 250 m below surface. The mineralisation modelled crops out 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 TGC, based upon eight drill sections lines spaced 50–100 m apart. Six mineralisation domains were interpreted across the three sections. The domains were linked to form 3D wireframe solids using surface mapping as a guide. A model of fresh rock and Saprolite was created using lithological logging codes. Only drill holes completed in 2013 and 2014 were used to interpolate grade into the block model, 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. Ordinary kriging was used to interpolate block grades with inverse distance used for validation. The search ellipse was aligned along strike and down dip of the domains, with radii of 50 m, and with a minimum of 8 and maximum of 32 samples used per block estimate. Dynamic anisotropy was adopted whereby the search ellipse was rotated according to the geometry of the mineralisation. 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 (a soft boundary was applied). The vast majority of samples were 1m in length. Compositing was completed to 1 m. No historical mining has taken place hence reconciliation was not possible. 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 12.5 m(E) by 1 0m (N) by 12.5 m (Z), compared to a nominal 50 m drill hole spacing (E). 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. The CP had the model peer reviewed by another resource geologist not involved in the

Criteria	Commentary
	project, who critically checked each stage of the project, and found no fatal flaws. A comparison of the Mineral Resource estimate with the only previous Mineral Resource estimate shows that tonnage has increased by 78% while TGC grade has decreased by 20%. There has been an increase in total contained graphite by 43%. Broadly, the Mineral Resource estimation methodology remains similar between the two models. The differences can largely be explained largely by the completion of strike-extension drilling to the west of the project area, which is generally lower grade than the eastern resource area. The February 2014 mineralisation interpretation extended from 434,775 m E through 435,025 m E while the September mineralisation interpretation extended from 434,575 m E through 435,025 m E. There has also been a change in structural interpretation. The February 2014 model was based on a steep north-dipping interpretation while the September 2014 model was based on a south-dipping interpretation.
Moisture	Tonnages are estimated on a dry basis.
Cut-off parameters	The Mineral Resource is reported above a 4% TGC cut-off grade, which was adopted following a review of more advanced graphite projects in Australia.
Mining factors or assumptions	The project is at an early stage of geological investigation; however, the Mineral Resource has a minimum plan width of 3 m for all domains. No assumption has been made regarding mining method.
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. Additional petrography and metallurgical test work is required to better define likely product specifications.
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 gravimetric density data. Density values of 2.17 t/m^3, 2.33 t/m^3 and 2.50 t/m^3 were applied to the Saprolite, Saprock and fresh rock respectively.
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, QA/QC of drill hole sampling and chemical analyses of the samples, and QA of drill hole collars, down hole surveys and the topographic DTMs. All relevant factors were considered when considering the classification level.

Criteria	Commentary
	Metallurgical testwork results were not available at time of preparation of the Mineral Resource estimate, inhibiting potential higher classification levels being assigned. 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. Geological and grade continuity between drill holes is implied but not verified. The CP considers that the main factors that could affect the accuracy of the Mineral Resource estimate are poorer than expected grade or geological continuity and current lack of information related to likely product specifications.