

Drilling extends Wilclo South graphite deposit



ASX Code: AXE

Directors

Greg English
Chairman

Gerard Anderson
Managing Director

Tom Phillips AM
Director (Non-Executive)

Alice McCleary
Director (Non-Executive)

Company Secretary

Damien Connor

Shares on Issue

84.5 million

Unlisted Securities on Issue

2.3 million Performance Rights

Key focus

Campoona and Sugarloaf
Graphite Projects (Eyre
Peninsula, South Australia)
Magnesite (Leigh Creek).
Second tier projects cover
manganese, copper and gold.



Archer Exploration Limited
ABN 64 123 993 233
Level 1, 28 Greenhill Road
Wayville SA 5034

Telephone +61 8 8272 3288
Facsimile +61 8 8272 3888
www.archerexploration.com.au

Strong potential for resource expansion at Wilclo South

- Archer exploration owns Australia's largest JORC 2012 graphite resource and scout drilling has provided strong encouragement for future resource expansion
- 6 Reverse Circulation step out drill holes were completed for 519m at Wilclo South in December 2014
- The drilling extended the known Wilclo South mineralisation by 1.1 km - almost doubling the previously recorded strike length
- Scout drilling confirmed continuity of the graphite mineralisation and recorded mostly large flake graphite
- Wilclo South sits on a very prominent EM anomaly that extends for at least 11 kilometres and is Archer's single largest JORC 2012 resource

Archer owns largest JORC 2012 graphite resource with 8.55Mt @ 9.0 Cg% (5% lower cut- off grade). Wilclo South is an important deposit for Archer as it hosts high quality flake graphite and accounts for most of this resource with 6.38 Mt @ 8.8 Cg% (5% lower cut- off grade) – ref: ASX announcement 6 August 2014.

In December 2014 as part of a larger scout drilling programme, a number of step-out drill holes were completed south of the known Wilclo South graphite mineralisation.

The drilling at Wilclo South extended the drilled portion of the >11km long EM anomaly by 1.1 km and provided further evidence that the large flake characteristics of the graphite extends to at least this distance along the anomaly.

The deposit remains open to the north and south for several kilometres.

Drilling extends Wilclo South graphite deposit



Wilclo South

A total of 6 holes were drilled (Table 1, Figure 1) to identify if flake graphite extended to the south of the Wilclo South Resource area (strike of 1.4km). The drilling successfully intersected the same geological host rock sequences and flake bearing graphitic horizons. As expected, the higher grade (>10% Cg) intervals were repeated supporting the 1.1km extension of the mineralisation (Table 2).

Hole Id	Easting	Northing	Dip	Azimuth	Depth
WSRC14_001	634625	6314700	-60	270	31
WSRC14_002	634726	6314165	-60	270	136
WSRC14_003	634675	6314212	-60	270	121
WSRC14_004	634594	6314217	-60	270	61
WSRC14_005	634860	6313780	-60	270	85
WSRC14_006	634826	6313379	-60	270	85

Table 1. Collar locations of holes drilled at Wilclo South

Hole ID	From	To	Interval	Cg%	field description for flake size
WSRC14_001	5	7	2	4.1	fine-med
WSRC14_002	13	17	4	3.4	fine-med
WSRC14_002	55	57	2	5.8	fine-med
WSRC14_002	83	97	14	7.0	large
including	84	90	6	10.9	large
including	93	96	3	7.6	large
WSRC14_002	123	131	8	14.8	large
WSRC14_003	19	22	3	6.1	fine-med
WSRC14_003	71	80	9	12.3	large
including	72	78	6	16.5	large
WSRC14_003	87	89	2	9.7	large
WSRC14_003	92	103	11	7.8	large
including	93	97	4	14.2	large
WSRC14_004	50	53	3	1.4	large
WSRC14_005	54	60	6	4.9	fine-med
WSRC14_006	37	48	11	8.5	med-large
WSRC14_006	57	60	3	10.5	large
WSRC14_006	74	83	9	8.2	large

Table 2. Wilclo South graphite assay intervals and field observations on the size of graphite present

Drilling extends Wilclo South graphite deposit

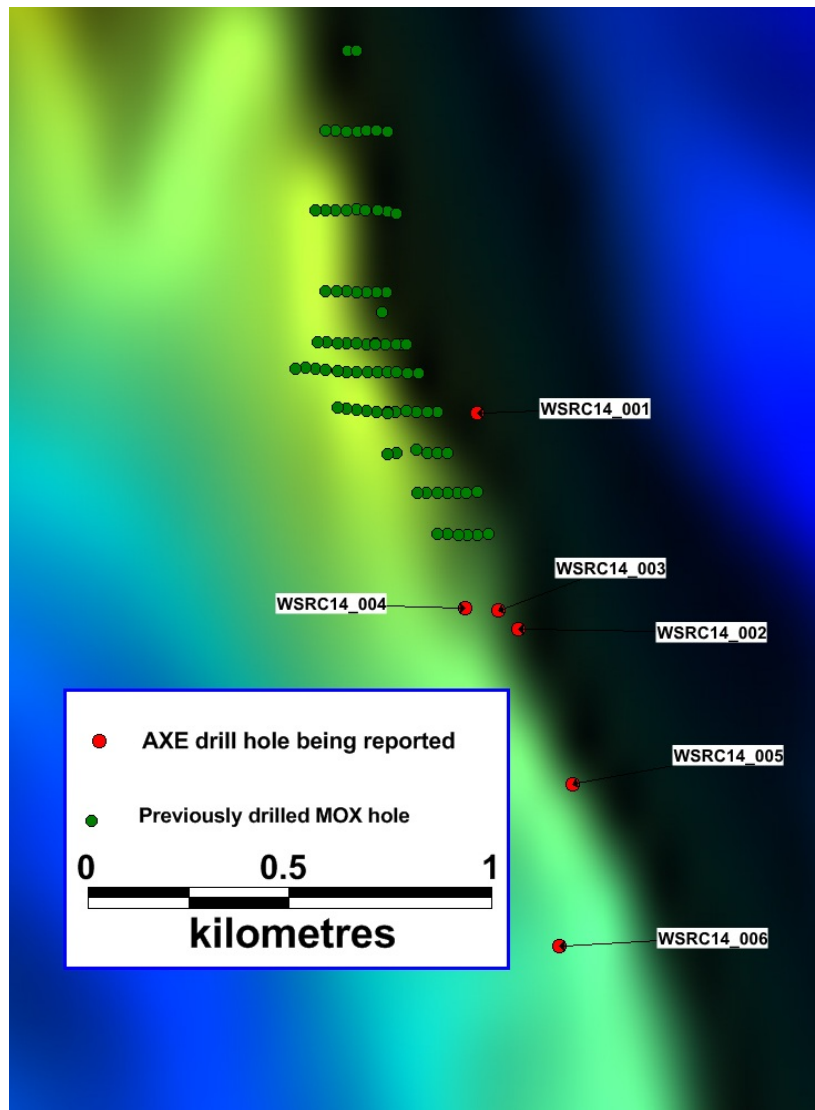


Figure 1. Location of holes drilled at Wilclo South

Drilling extends Wilclo South graphite deposit

About the Waddikee Tenement

Waddikee EL4662 is located between the townships of Cleve and Kimba on Central Eyre Peninsula (Figure 1). The 999km² tenement is situated immediately north of Archer's main graphite interests on EL4693 Wildhorse Plain.

Waddikee has a number of graphite prospects that have been evaluated using combinations of geophysics (airborne magnetic and electromagnetic surveys), rock chip sampling and detailed petrology. Wilclo South which has a strong EM anomaly has been the focus of most of the previous drilling campaigns and the most successful within this tenement to date.

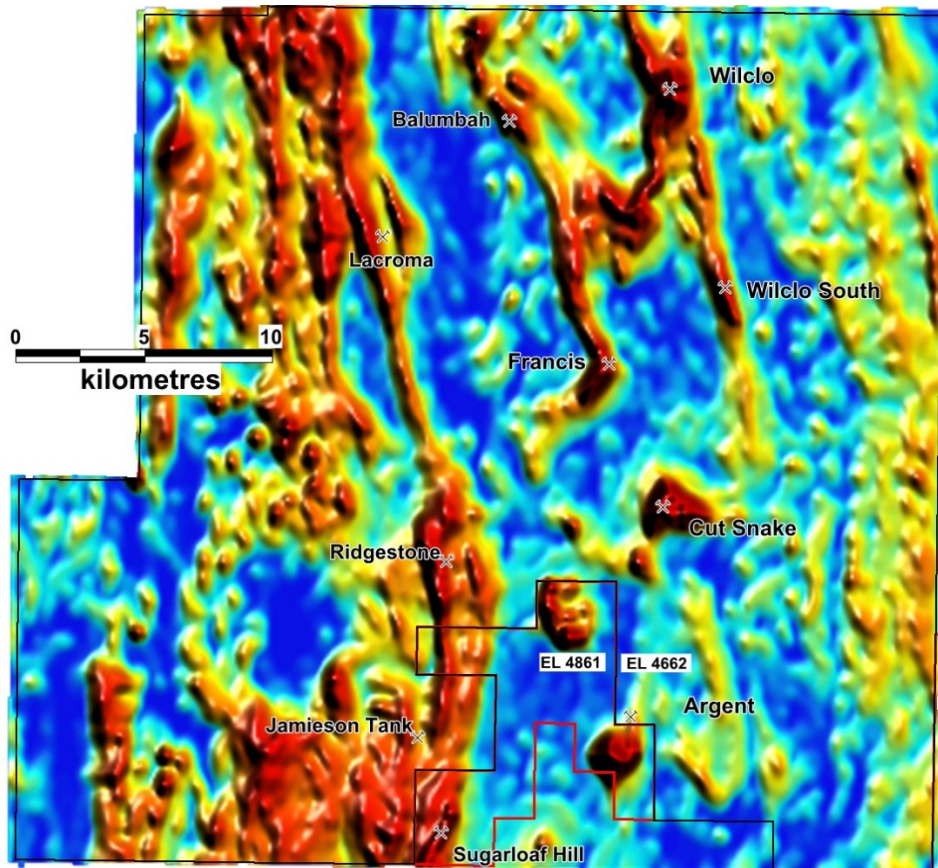


Figure 1. Key graphite prospects on Waddikee EL4622 and EL 4861

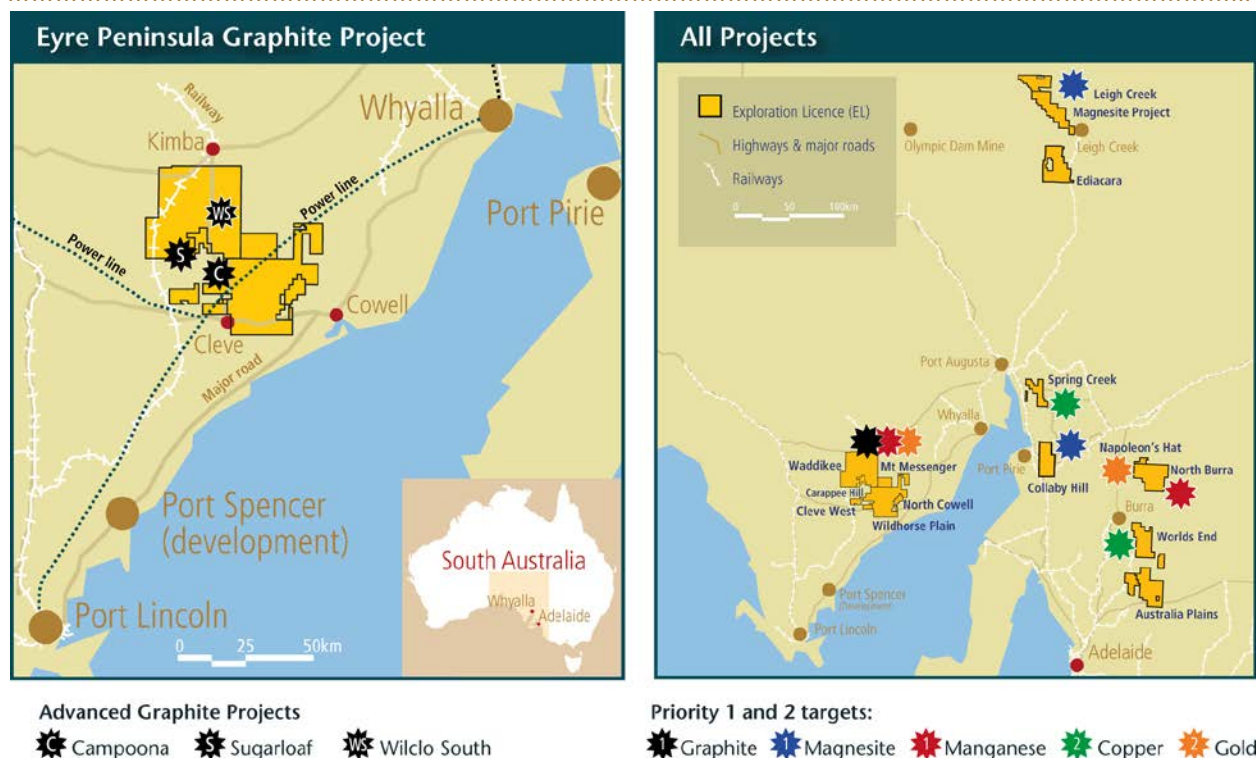
For further information please contact:

Mr Greg English
Chairman
Archer Exploration Limited
Tel: (08) 8205 3343

Mr Gerard Anderson
Managing Director
Archer Exploration Limited
Tel: (08) 8272 3288

About Archer

Archer Exploration Limited is an Australian Stock Exchange listed company with 100% ownership of 17 tenements all in South Australia. Archer's flagship project is the Eyre Peninsula Project which is located within reach of established and major developing infrastructure. Archer plans to submit a Mining Lease Proposal to the South Australian Government for approval in the second quarter of calendar 2015.



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The Archer exploration results reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr. Wade Bollenhagen, Exploration Manager of Archer Exploration Limited. Mr. Bollenhagen is a Member of the Australasian Institute of Mining and Metallurgy who has more than eighteen years experience in the field of activity being reported. Mr. Bollenhagen has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that 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" relating to the reporting of Exploration Results. Mr. Bollenhagen consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

The information in this report that relates to the Campoona Shaft and Central Campoona JORC 2012 Mineral Resource estimation has been prepared by Mr B. Knell who is a Member of the AusIMM and peer reviewed by Dr. C Gee who is also a Member of the AusIMM (CP). Mr Knell is a full time employee of Mining Plus Pty Ltd and Dr. Gee is a full time employee of Mining Plus Pty Ltd., both have more than five years' experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Knell has consented in writing to the inclusion in this announcement of the Mineral Resource estimation information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2012.

Table 9 – JORC code explanation and commentary

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	- Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	- The Waddikee tenement EM targets were sampled by reverse circulation (RC) holes. - Sampling is guided by Archer's protocols and QA/QC procedures - RC samples are collected by a riffle splitter using a face sampling hammer diameter approximately 140 mm. - All samples were sent ALS laboratory in Adelaide for preparation and forwarded to Brisbane for LECO C-IR18 analyses. - All samples are crushed using LM2 mill to -4 mm and pulverised to nominal 80% passing -75 µm.
Drilling Techniques	Drill type (e.g. core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	RC holes were drilled in a direction so as to hit the mineralisation orthogonally. Face sample hammers were used and all samples collected dry and riffle split after passing through the cyclone.
Drill Sample Recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - 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.	- The RC rig sampling systems are routinely cleaned to minimize the opportunity for contamination; drilling methods are focused on sample quality. - The selection of RC drilling company, having a water drilling background enables far greater control on any water present in the system.

Criteria	JORC Code Explanation	Commentary
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. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. - The total length and percentage of the relevant intersections logged.	- Geological logging is completed for all holes and representative across the deposit. - Logged data is both qualitative and quantitative depending on field being logged. - All drill holes are logged.
Sub-Sampling Techniques and Sample Preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. - For all sample types, the nature, quality and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - 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. - Whether sample sizes are appropriate to the grain size of the material being sampled.	- All RC samples are split using a riffle splitter mounted under the cyclone, RC samples are drilled dry. - Approximately 80% of samples were not submitted for assay due to the waste nature of the material (fresh pegmatite or amphibolite), all other graphitic intervals were submitted for analyses. - Sample preparation at the ALS laboratory involves the original sample being dried at 80° for up to 24 hours and weighed on submission to laboratory. Crushing to nominal –4 mm. Sample is split to less than 2 kg through linear splitter and excess retained. Sample splits are weighed at a frequency of 1/20 and entered into the job results file. Pulverising is completed using LM2 mill to 90% passing –75 µm. The pulverised residue is shipped to ALS in Brisbane for LECO analysis. - Duplicate analysis has been completed and identified no issues with sampling representatively. - A 0.1g sample is leached with dilute hydrochloric acid to remove Inorganic carbon. After filtering, washing and drying, the remaining sample residue is roasted at 425°C to remove organic carbon. The roasted residue is analysed for Carbon (graphitic –Cg%) - High temperature LECO furnace with infra-red detection.
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. - 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. - Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	- Standards are inserted at approximately a 10% frequency rate. In addition, field duplicates, laboratory duplicates and blanks are collectively inserted at a rate of 10% - QAQC data analysis has been completed to industry standards. Field duplicates results are good.

Criteria	JORC Code Explanation	Commentary
Verification of Sampling and Assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	- No drill hole twins exist in this pass of drilling. - Primary data are captured on paper in the field and then re-entered into spreadsheet format by the supervising geologist, to then be loaded into the company's database. - No adjustments are made to any assay data.
Location of Data Points	- Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. - Specification of the grid system used. - Quality and adequacy of topographic control.	- MGA94 Zone 53 grid coordinate system is used. - All holes have had their surface locations surveyed for Northing, Easting and RL, using a hand held GPS with an accuracy of $\pm 5\text{m}$. - No down hole surveys were conducted due to the exploratory nature of the drilling.
Data Spacing and Distribution	- Data spacing for reporting of Exploration Results. - 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 estimation procedure(s) and classifications applied. - Whether sample compositing has been applied.	- Drill hole spacings are not regularised, holes were drilled to determine the presence of flake graphite from EM data. - Data spacing and distribution are not sufficient to establish the degree of geological and grade continuity. - No compositing has been applied to exploration data.
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. - 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.	All holes have been orientated towards an azimuth so as to be able intersect the graphitic mineralisation in a perpendicular manner.
Sample Security	The measures taken to ensure sample security.	- All samples were under Company supervision from the rig to the Adelaide ALS laboratory. - All residual sample material is stored securely in sealed bags.
Audits or Reviews	The results of any audits or reviews of sampling techniques and data.	None undertaken.
Mineral Tenement and Land Tenure Status	- Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. - The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	- Tenement status confirmed on SARIG. - Results being reported are from EL 4662. - The tenements are in good standing with no known impediments.

Criteria	JORC Code Explanation	Commentary
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	- The tenement has had historic exploration conducted over it by companies including Shell, BHP, Aberfoyle, Kerr McGee and Monax Mining Pty Ltd. - The tenement was historically explored for manganese, gold and graphite.
Geology	Deposit type, geological setting and style of mineralisation.	- The graphite occurs within the Hutchison Group sequence on the eastern Eyre Peninsula in South Australia. High-grade regional metamorphism to upper amphibolite and lower granulite facies has produced flake graphite between intrusive pegmatites and amphibolites.. - The purpose of the drilling was to confirm the presence and continuation of the graphite to the South of the Wilclo South orebody. - Flake graphite intersected in drilling is believed to be a result of the pressure and heating caused by intrusions of amphibolite on a sequence of gneiss and pegmatites.. Diamond drilling has not been undertaken to prove this.

Criteria	JORC Code Explanation	Commentary						
Drillhole Information	- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: - Easting and northing of the drill hole collar - Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - Dip and azimuth of the hole - Downhole length and interception depth - Hole length - If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Hole ID	Easting	Northing	RL	Depth	Dip	Azimuth
		WSRC14_001	634625	6314700	305	31	-60	270
		WSRC14_002	634726	6314165	324	136	-60	270
		WSRC14_003	634675	6314212	321	120	-60	270
		WSRC14_004	634594	6314217	312.9	61	-60	270
		WSRC14_005	634860	6313780	318	85	-60	270
		WSRC14_006	634826	6313379	310.6	85	-60	270
Data Aggregation Methods	- In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. - Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. - The assumptions used for any reporting of metal equivalent values should be clearly stated.	- No high-grade cuts were necessary. - Aggregating was made for intervals that reported over 2%TGC (Carbon-graphitic %). The purpose of this is to report intervals that may be significant to future metallurgical work. There is no implication about economic significance. - Intervals reporting above 10%Cg are intended to highlight a significant higher grade component of graphite, there is no implication of economic significance. - No equivalents were used.						

Relationship Between Mineralisation Widths and Intercept Lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	• All RC holes have been orientated towards an azimuth so as to be able intersect the graphitic mineralisation perpendicularly, because of the exploration nature and drilling style it is not known if this has occurred, true widths are not known.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• See main body of report.
Balanced Reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• The reporting is considered to be balanced, material considered as waste ie not containing graphite was not assayed.
Other Substantive Exploration Data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• Nothing material to report.
Further Work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Additional metallurgical work may be performed on drill samples, as they were drilled to determine if flake graphite extended beyond the Wilclo South resource. • The main body of the report discusses the possible extensions to Wilclo South.
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. • Data validation procedures used.	• Drill hole coordinates were down loaded from the handheld GPS and plotted to identify errors. Drill sections were produced to match collar dips and azimuths. • Data reviewed against geology and sampling databases.
Site Visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• Competent person was on site for part of the drilling.

Geological Interpretation	- Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. - Nature of the data used and of any assumptions made. - The effect, if any, of alternative interpretations on Mineral Resource estimation. - The use of geology in guiding and controlling Mineral Resource estimation. - The factors affecting continuity both of grade and geology.	- As many of the holes drilled are isolated sections, little inference about geological continuity can be made. - At Wilclo South the primary amphibolite unit (defined in the Wilclo South Resource) was intersected in the broad spaced drill holes. It is the intersection of this marker unit that provides confidence in the mineralisation extending from the North into this area where the wide spaced holes were drilled. - No resource interpretations are made in this release.
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.	Not Applicable to the reporting of exploration drill results.
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 & parameters. - The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. - The assumptions made regarding recovery of by-products. - Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulfur for AMD 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 drillhole data, and use of reconciliation data if available.	Not Applicable to the reporting of exploration drill results.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Not Applicable to the reporting of exploration drill results.
Cut-off Parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Not Applicable to the reporting of exploration drill results.

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.	Not Applicable to the reporting of exploration drill results.
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 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.	Not Applicable to the reporting of exploration drill results.
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 made.	Not Applicable to the reporting of exploration drill results.
Bulk Density	- 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. - The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. - Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Not Applicable to the reporting of exploration drill results.

Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• Not Applicable to the reporting of exploration drill results.
Audits or Reviews	• The results of any audits or reviews of Mineral Resource estimates.	• Not Applicable to the reporting of exploration drill results.
Discussion of Relative Accuracy/ Confidence	• 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. • 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. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• Not Applicable to the reporting of exploration drill results.