ARGOSY MINERALS LIMITED

ASX ANNOUNCEMENT

9 December 2015

# MAIDEN JORC RESOURCE FOR WEE MACGREGOR PROJECT

## *JORC Inferred Resource of 1.65Mt @ 1.6% Cu*

### HIGHLIGHTS

- *JORC 2012 compliant Mineral Resource estimate completed for Wee MacGregor Project in Queensland;*
    - *JORC Inferred Resource estimate of 1.65Mt @ 1.6% Cu, containing 25,818t of copper.*
    - *JORC Exploration Target range of 1.0 – 1.5 Mt @ 2.5 – 3.7% Cu.*
- *Resource is open along strike and at depth, and includes high grade zones from surface.*
- *Resource estimate completed within one month of JV farm-in agreement announced and exclusively using historical data.*
- *Only ~30% of the prospective geology of the Project is included within the Resource and Exploration Target area.*
- *Drilling planned for 2016 to target high grade zones and resource extensions with the intention of expanding the initial Inferred Resource and investigating near surface mineralised zones for potential open pit mining.*

*Note: the Exploration Target exists as an extension to the estimated open-ended Inferred Resource. The potential quantity and grade are conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.*

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Argosy Minerals Limited (ASX: AGY) ("the Company") is pleased to announce a maiden JORC 2012 compliant Mineral Resource estimate has been completed for the Wee MacGregor Project.

The estimated **Inferred Mineral Resource is 1.65 Million tonnes @ 1.6% Cu for 25,818 tonnes of contained copper**, using a 0.5% Cu cut-off grade (COG). An additional **Exploration Target** was estimated, with a range between **1.0 – 1.5 Mt @ 2.5 – 3.7% Cu** (using a 0.5% Cu COG) as a direct extension to the Inferred Resource.

**Table 1: Wee MacGregor Project, December 2015 Mineral Resource Estimate (at 0.5% Cu COG)**

| *Wee MacGregor - Inferred Resource Estimate* | | | |
|---|---|---|---|
| | ***Volume (m³)*** | ***Tonnage (tonnes)*** | ***Copper Grade (%)*** |
| *0.5 - 1.0% Cu* | *180,000* | *452,000* | *0.8* |
| *> 1.0% Cu* | *491,000* | *1,228,000* | *1.9* |
| ***TOTAL*** ***(at 0.5% Cu COG)*** | *672,000* | ***1,650,000*** | ***1.6*** |

***** *30,750 tonnes have been excluded from the total resource tonnage to account for historic underground workings.*



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Argosy announced the Farm-in Joint Venture Agreement with Mining International Pty Ltd in November 2015 to earn up to an 80% interest in the Wee MacGregor Copper-Gold Project located in the world class Mt Isa base metals province in north-west Queensland. The Wee MacGregor Project comprises three granted mining licences located approximately 60km southeast of Mt Isa with access via the sealed Barkly Highway.

The resource estimate is based on a combination of 1970's diamond drilling and the most recent drilling works conducted at the Project in 1991 comprising a 19 drill-hole RC program. The Mineral Resource estimate has been completed in accordance with the guidelines of the JORC Code (2012 edition) and a summary of the information used in the Wee MacGregor, December 2015 Mineral Resource estimate is provided in Appendix 1.

The resource estimate has been completed within one month of Argosy announcing the JV farm-in and has exclusively utilised the historical drilling data, which was limited to copper data only.

The Exploration Target estimate utilised data from 17 historic (circa 1970) diamond drill holes that represent direct extensions along strike and down dip of the estimated Inferred Resource mineralisation. Only high grade visual intercepts were sampled and assayed at the time, suggesting the possibility that additional mineralised material may exist exclusive of the Exploration Target.

**Table 2: Wee MacGregor Project, Exploration Target (at 0.5% Cu COG)**

| *Wee MacGregor – Exploration Target* | | |
|---|---|---|
| | ***Tonnage Range (tonnes)*** | ***Copper Grade Range (%)*** |
| ***TOTAL*** ***(at 0.5% Cu COG)*** | ***1,000,000 – 1,500,000*** | ***2.5 – 3.7*** |

The Company's near-term strategy to advance the Project is to conduct drilling to target high grade zones and resource extensions along strike and down dip, with the intention of expanding the maiden Inferred Resource and also increasing the confidence, validity and definition of the Exploration Target. The Company will also carry out drilling to investigate near surface mineralised zones to consider the viability of a potential small-scale open pit mining operation, given the Project has existing granted mining licences and environmental authorities, and strong evidence of high grade residual and extensional mineralisation in close proximity to established infrastructure and service providers.

Argosy Director, Jerko Zuvela said the completion of the Mineral Resource estimate for the Wee MacGregor Project represented a very positive milestone for the Company.

"*The completion of the Mineral Resource and Exploration Target estimates, completed so quickly following the JV farm-in announcement, was a high priority and were better than expected. We will now aim to prove the Project is robust and are excited about further development of the Project,*" Mr Zuvela said.

The Company will continue working to identify and review other new projects or asset acquisition opportunities, to enhance its project portfolio and increase the overall value



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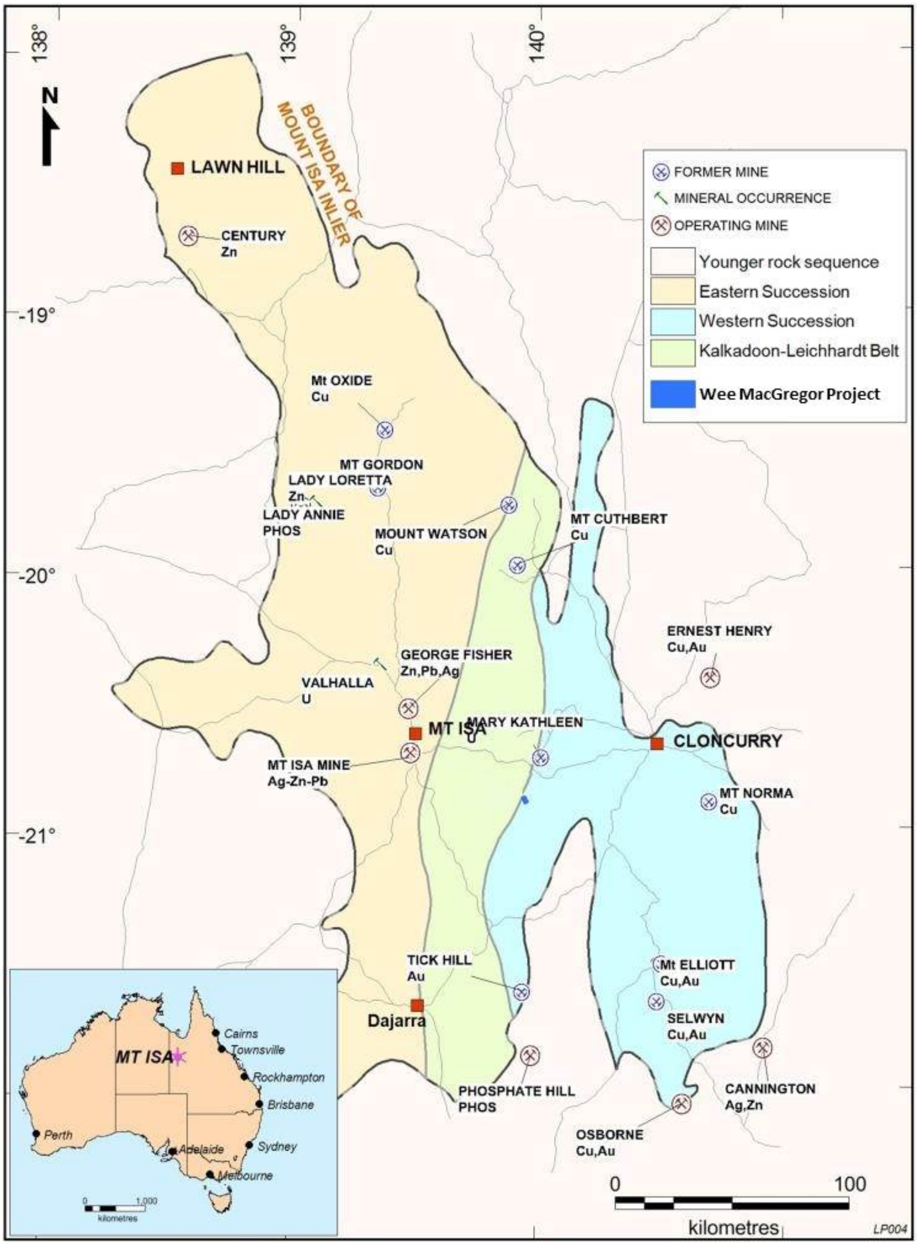
proposition of AGY. The Company is working to ensure it is best placed to deliver value and upside potential for all its shareholders.

## SUPPORTING INFORMATION SUMMARY

### Location

The deposit is located between Mount Isa and Cloncurry approximately 60km from Mount Isa in the highly prospective world class Mount Isa base metals province of north western Queensland, Figure 1. Access is by sealed road along the Barkly Highway and the unsealed Fountain Springs Road.

**Figure 1: Wee MacGregor Location**



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**Tenure**

The Wee MacGregor project is subject to a farm-in joint venture between Argosy Minerals (ASX:AGY) and Mining International Pty Ltd, a fully owned subsidiary of Cape Lambert Resources (ASX:CFE), where 80% of the project will be earnt subject to required expenditure in the ground.

The project includes tenements - ML2504, ML90098 and ML2773, all of which are granted mining licences and are in good standing, refer Figure 2.

The Wee MacGregor Project Resource and Exploration Target are within tenements ML2504 and ML90098 only.

**Geology**

The Wee MacGregor Project lies across the boundary between the Kalkadoon-Leichhardt Belt and the Eastern Fold Belt of the Mt Isa Inlier. The Mt Isa Inlier is interpreted to have developed over two major tectono-stratigraphic cycles. The basement comprises remnants from the first cycle, metamorphosed to amphibolite facies during the 1900-1970 Ma Barramundi Orogeny (Foster and Austin, 2008). The basement is unconformably overlain by a series of three volcano-sedimentary sequences interpreted to have been deposited in an intra-continental rift setting, intruded by syn-tectonic granite batholiths, and later deformed and metamorphosed by the 1600-1500Ma Isan Orogeny (Foster and Austin, 2008).

The depositional architecture of the cover sequences was controlled by major north-south structures which penetrated the lower crust and accommodated east-west extension (Blenkinsop et al., 2008).

Major structures in the project area include the crustal scale Fountain Range and Pilgrim faults. The Pilgrim Fault is interpreted as a steeply east dipping thrust, representing the most westward thrusting of the Eastern Fold Belt. The Fountain Range Fault is interpreted as a steeply west dipping fault, possibly with a significant strike-slip component.

Mafic (dolerite/gabbro?) sills and or dykes have intruded the entire area, quite often along faults / fractures and at contacts between stratigraphic units, over multiple periods spanning from pre-Barramundi to 1100Ma.

Two main types of copper mineralisation have been identified in the Project area:

1. Shear-hosted lodes at intersection of mafic intrusives and/or north-north west trending shears. Examples include Wee McGregor and Lady Ethleen; and
2. Fault/shear-hosted lodes at intersection of lithological contacts and minor north-east trending faults. Examples include Rosebud.

Oxide minerals have been reported to extend to 100m below surface, with the extent of the transition zone unknown. Sulphide zones have largely remained untested. Primary copper mineralisation is predominantly chalcopyrite, altering to chalcocite with iron oxides and minor digenite and covellite in the transition/supergene zone, thence to predominantly malachite with lesser azurite and tenorite in the oxide zone.



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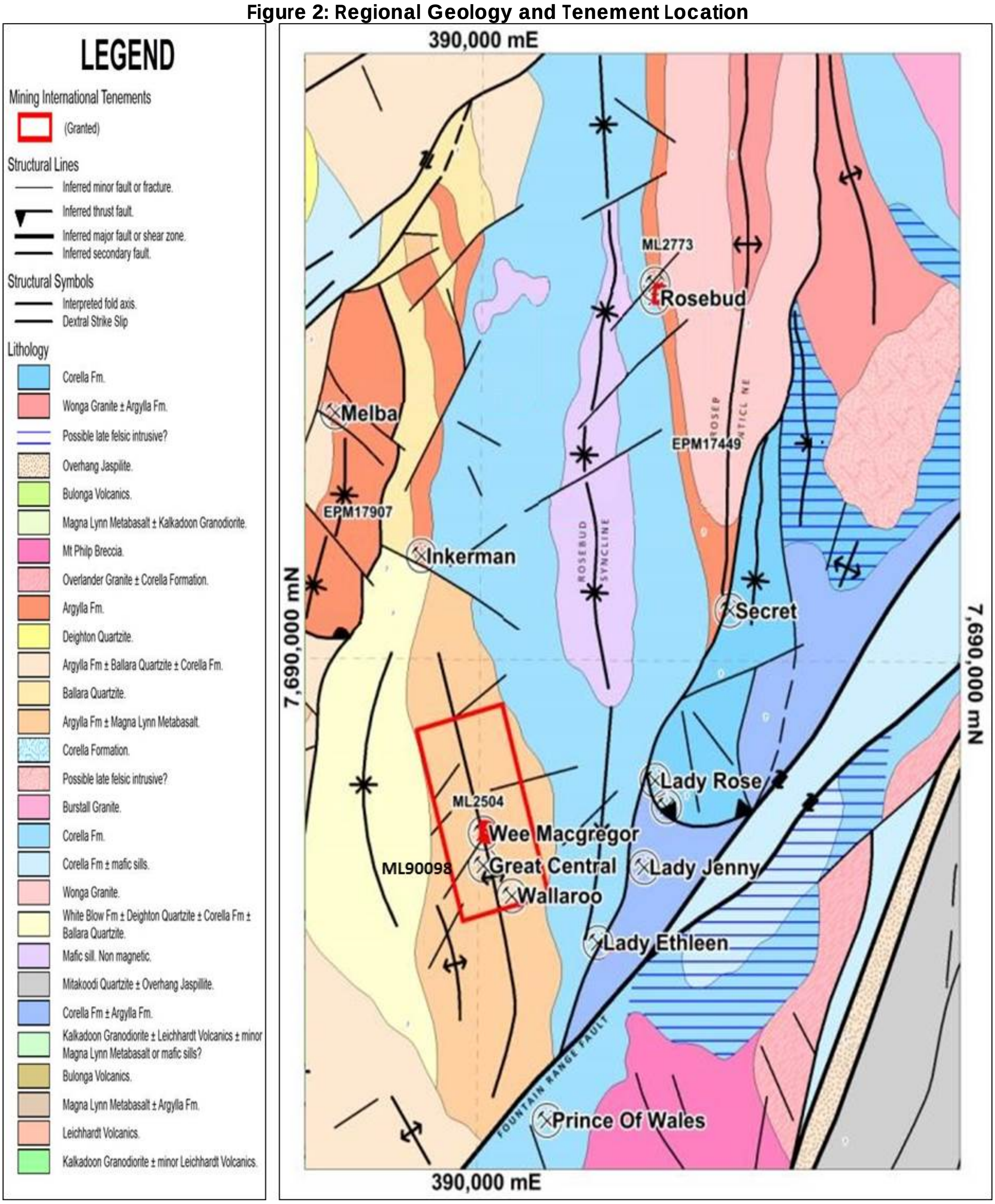
**Figure 2: Regional Geology and Tenement Location**




## Drilling and Sampling

All of the drillhole data is from two main data sets drilled during the early 1970's and 1991 by Eastern Copper Mines and Brancote respectively. All of the ECM holes were diamond holes with samples of varying intervals and sampling only within visually determined high grade



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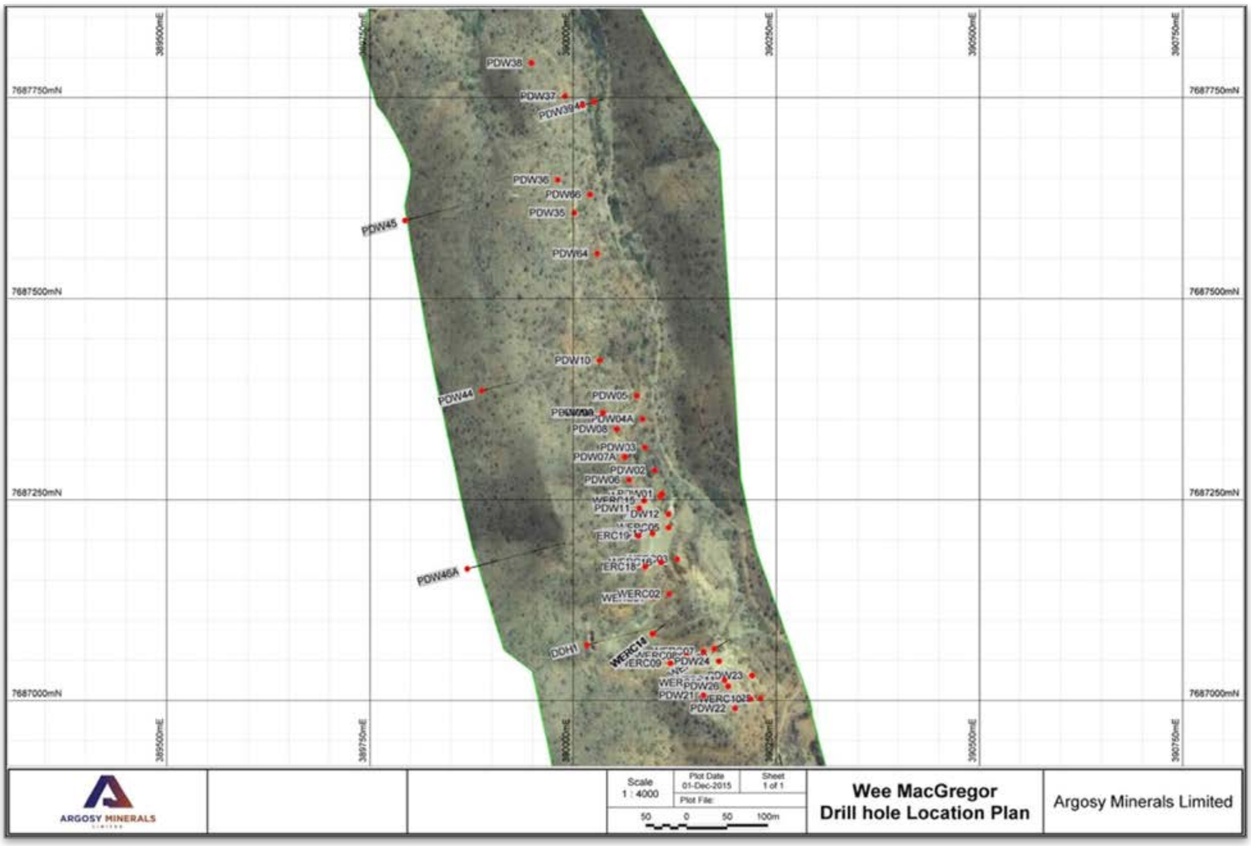
mineralisation. The Brancote holes were all Reverse Circulation (RC) and sampled on 1m intervals.

Holes were drilled on a nominal 40m x 20m grid oriented along the strike of the known mineralisation, refer Figure 3.

No data exists as to the drilling details, twin-hole programs, etc.

**Figure 3: Wee MacGregor Project, Drillhole Location Plan**




## Analysis

Only Cu ppm was analysed and reported. No data is available on the assay technique used, sampling methodology, sample splitting or QA/QC conducted on the samples. Data was received as is in a series of spreadsheets contained in the data set from CFE. Twinning of some historic holes will be conducted as part of the first phase of drilling planned for 2016.

## Estimation

The mineralised material was interpreted on a sectional basis using grade as a soft boundary. Samples that fell below the soft cut-off value of 0.5% Cu but were within the interpreted mineralised zone were retained as part of the mineralisation. The interpretation was guided by the location of historic underground workings, surface outcrop and the downhole copper values. The interpreted mineralisation was domained within a single solid



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wireframe in three dimensions to ensure appropriate wireframe connections between sections. A digital terrain model of the surface was used to limit the mineralisation in the vertical direction.

A prototype block model was constructed using parent cells of 40m x 10m x 1m orientated with the longest length parallel with the mineralised strike. Sub-cells were allowed down to 2m x 1.25m x 0.25m and the maximum cell size in the mineralised zone was set to 10m x 2.5m x 0.5m to allow for appropriate resolution.

Drillhole data was composited into 1m intervals and used to estimate copper values (in ppm) into the cells of the volume model using an inverse distance squared method deemed suitable for this level of estimation. Three phases of interpolation were used to enable all cells to be filled:

- Primary search: 100m X 50m x 5m (64.9% estimated)
- Secondary search: 200m x 100m x 15m (96.8% estimated)
- Tertiary search: 300m x 200m x 20m (100% estimated)

Maximum extrapolation of data is 75m down dip and 15m beyond the last drilled section along strike, refer Figures 4 & 5. This was allowed in some of the deeper parts of the mineralised body because of the presence of historic underground workings in the area and the average grade of material that was mined being 6.2% Cu. This, along with the fit with the interpreted mineralised structure, demonstrates the mineralisation exists in the area. Holes will be planned to intersect this mineralisation in the next phase of drilling. A total of 15% of the resource falls into the extrapolated category.

**Figure 4: Maximum extrapolation distance**

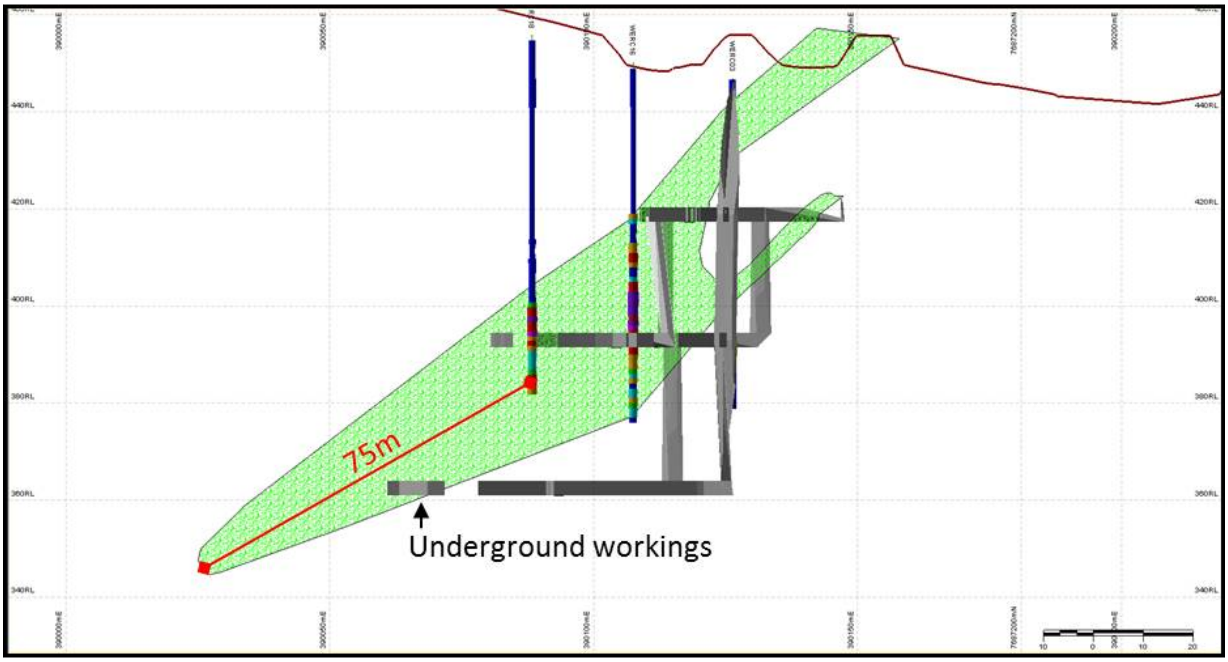




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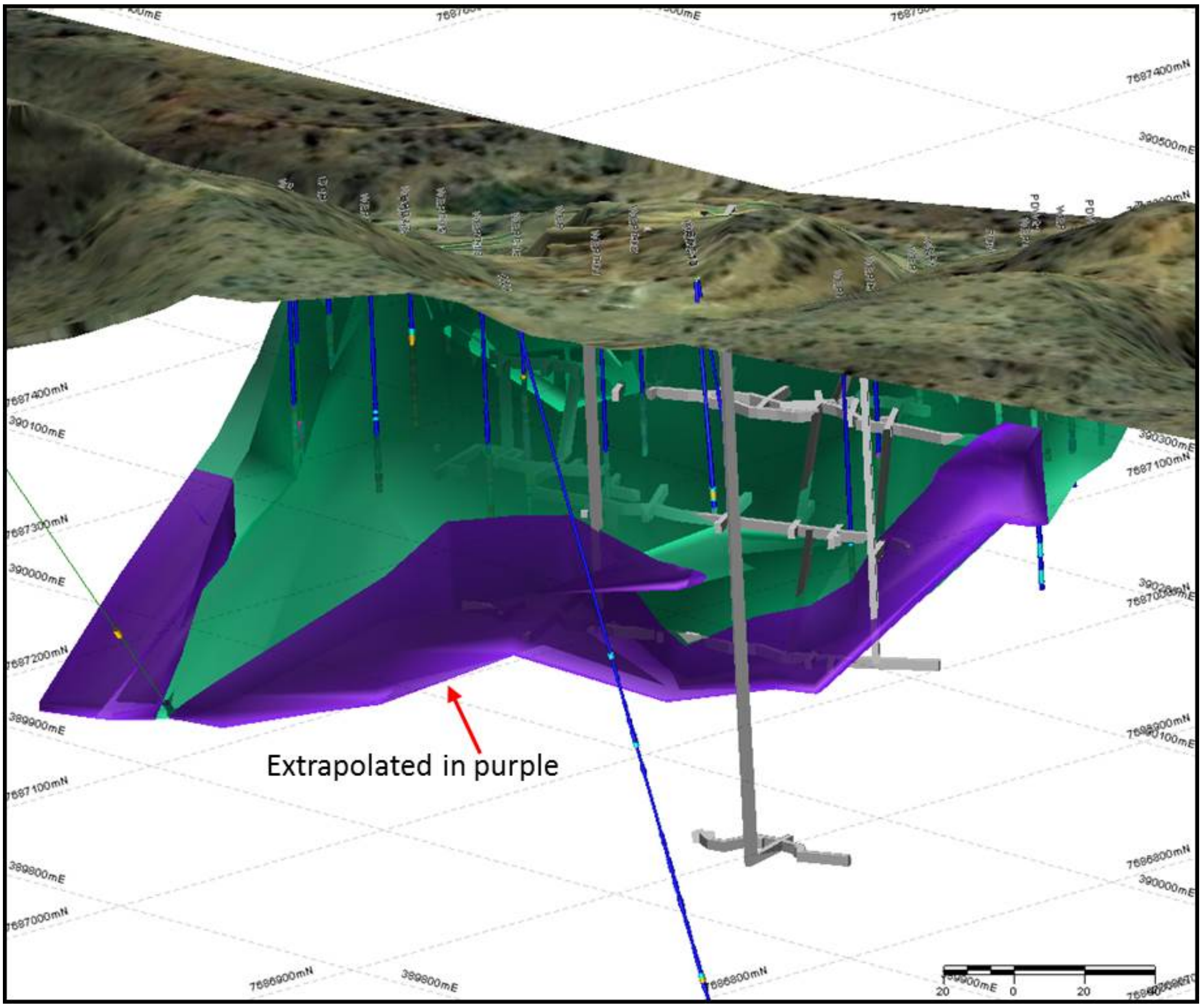
**Figure 5: Isometric view of extrapolated data**




The resource was reported using a dry average bulk density of 2.5 to calculate tonnage. This is aligned with the average density used in the local area for similar deposits in similar geological environments and is considered reasonable based on the mineralogical composition. Bulk density test work will be conducted as part of future programs.

Given the historical nature of the data and lack of details around the data, the estimate is considered to have a moderate to low level of accuracy and has been classified as inferred for this reason. Visual validation however suggests the overall result to be a robust inferred level estimate, refer Figure 6.





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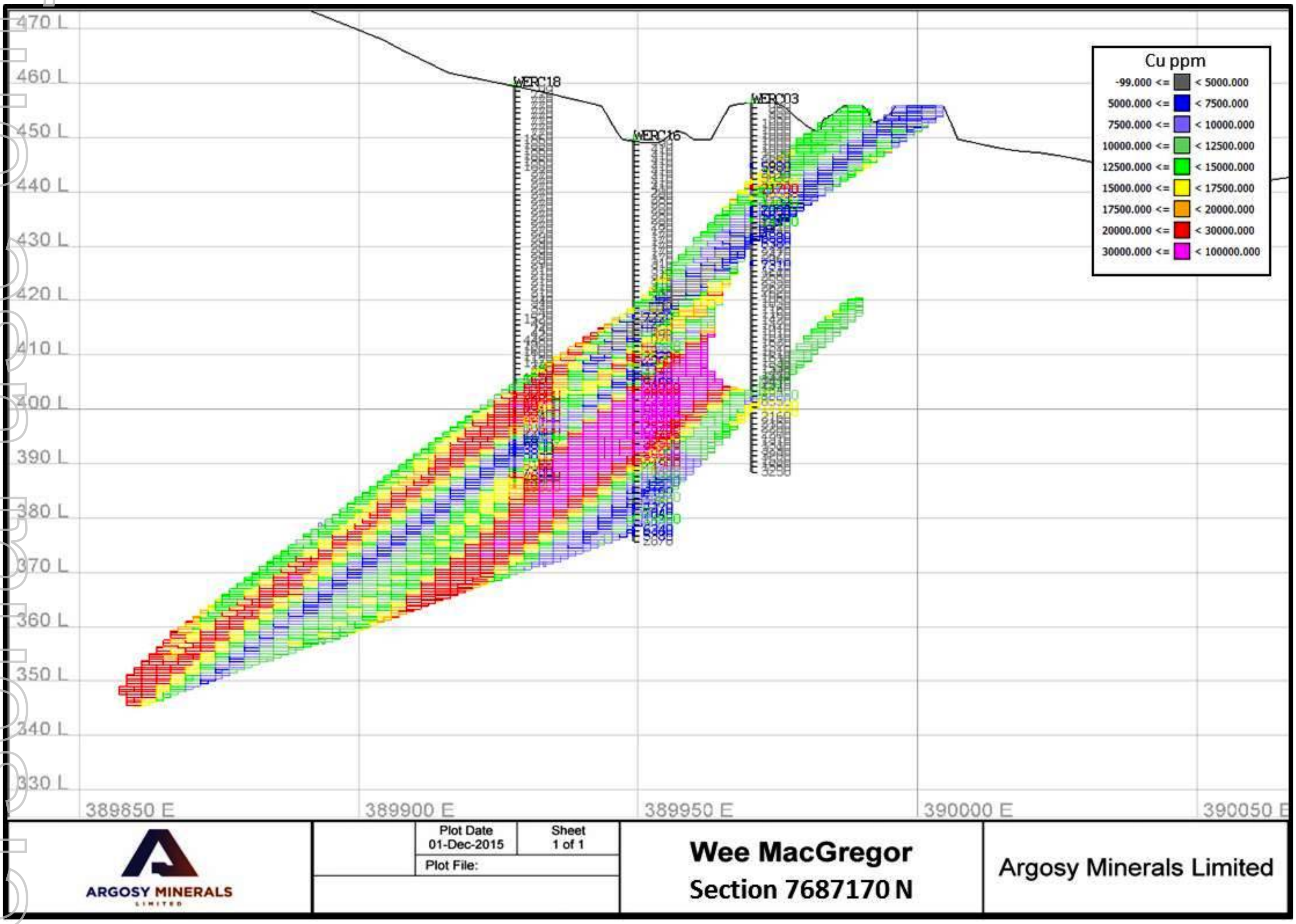
Figure 6: Wee MacGregor Project, Cross-Section




## Classification

All of the estimated resource has been classified in the lowest confidence category of inferred due to the age of and limited nature of the data set, lack of QA/QC information, analysis methodology, and lack of accurate survey / topography information. The resource status is however supported by the existence of the historical mine, consistency between different drilling phases and types, and mapped surface mineralisation. The likelihood of eventual economic extraction is high based on the preliminary financial assessment conducted in order to establish an appropriate cut-off grade.

## Mining

It is assumed that surficial oxide material will be mined by open cut where suitable with the remaining material to be accessed with underground methods. Mining methods and scale will be established as part of future scoping study level works.



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## Metallurgy

Although the resource would seem suitable for conventional copper oxide and sulphide processing options, the current expectations are to utilise some newly developed chemical processing technology to leach copper (and other valuable metals) from both oxide and sulphide material sources. A copper sulphide concentrate would then be produced from the subsequent solution and on sold into a smelter.

## Cut-off Grade

A 0.5% Cu cut-off grade has been used for reporting of this resource. This grade was based on the resultant mineralised body averages and results of preliminary financial assessments used to indicate likely mineable grades for the anticipated scale of this deposit.

**Competent Person's Statement**

The information in this report that relates to Mineral Resources and Exploration Results is based on information compiled by Mr Olaf Frederickson. Mr Frederickson is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are 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 (the "JORC Code"). Mr Frederickson is a consultant to Argosy Minerals Limited. Mr Frederickson consents to the inclusion in the report of the Mineral Resources in the form and context in which they appear. Mr Frederickson holds shares in Argosy Minerals Ltd.

**Exploration Targets**

This report comments on and discusses the Wee MacGregor Project exploration in terms of target size and type. The information relating to Exploration Targets should not be misunderstood or misconstrued as an estimate of Mineral Resources or Ore Reserves. The potential quantity and quality of material discussed as Exploration Targets is conceptual in nature since there has been insufficient work completed to define them as Mineral Resources or Ore Reserves. It is uncertain if further exploration work will result in the determination of a Mineral Resource or Ore Reserve.

**Forward Looking Statements**

Certain statements in this document are or maybe "forward-looking statements" and represent Argosy's intentions, projections, expectations or beliefs concerning among other things, future exploration activities. The projections, estimates and beliefs contained in such forward looking statements necessarily involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Argosy, and which may cause Argosy's actual performance in future periods to differ materially from any express or implied estimates or projections. Nothing in this document is a promise or representation as to the future. Statements or assumptions in this document as to future matters may prove to be incorrect and differences may be material. Argosy does not make any representation or warranty as to the accuracy of such statements or assumptions.

**ENDS**

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**Table 3: Wee MacGregor Project Mineral Resource Drill Hole Summary**

| BHID | DEPTH | NORTH | EAST | RL | DIP | AZI |
|---|---|---|---|---|---|---|
| PDW01 | 16.46 | 7,687,257.25 | 390,109.40 | 445.9 | -90 | 0 |
| PDW02 | 16.46 | 7,687,286.46 | 390,100.15 | 443.73 | -90 | 0 |
| PDW03 | 85.04 | 7,687,314.92 | 390,088.33 | 444.75 | -90 | 0 |
| PDW04A | 24.69 | 7,687,350.40 | 390,085.37 | 445.68 | -90 | 0 |
| PDW05 | 70.84 | 7,687,379.24 | 390,078.35 | 446.17 | -90 | 0 |
| PDW06 | 37.03 | 7,687,274.63 | 390,068.74 | 454.48 | -90 | 0 |
| PDW07A | 78.33 | 7,687,303.09 | 390,063.57 | 453.31 | -90 | 0 |
| PDW08 | 41.15 | 7,687,337.84 | 390,053.58 | 454.9 | -90 | 0 |
| PDW09A | 81.5 | 7,687,358.16 | 390,036.58 | 459.36 | -90 | 0 |
| PDW10 | 72.82 | 7,687,423.22 | 390,032.51 | 450.27 | -90 | 0 |
| PDW11 | 93.88 | 7,687,239.15 | 390,081.30 | 454.52 | -90 | 0 |
| PDW12 | 34.29 | 7,687,232.12 | 390,117.16 | 443.62 | -90 | 0 |
| PDW21 | 63.86 | 7,687,006.26 | 390,160.41 | 477.04 | -90 | 0 |
| PDW22 | 71.32 | 7,686,990.01 | 390,199.22 | 475.71 | -90 | 0 |
| PDW23 | 43.89 | 7,687,031.04 | 390,220.29 | 457.14 | -90 | 0 |
| PDW24 | 54.86 | 7,687,048.78 | 390,179.26 | 454.71 | -90 | 0 |
| PDW25 | 57.61 | 7,687,002.57 | 390,230.64 | 462.07 | -90 | 0 |
| PDW26 | 57.61 | 7,687,017.73 | 390,190.72 | 466.4 | -90 | 0 |
| PDW36 | 67.06 | 7,687,647.59 | 389,981.13 | 465.75 | -90 | 0 |
| PDW37 | 54.86 | 7,687,751.46 | 389,990.01 | 451.6 | -90 | 0 |
| PDW38 | 87.78 | 7,687,792.86 | 389,948.60 | 463.08 | -90 | 0 |
| PDW44 | 177.39 | 7,687,385.52 | 389,887.62 | 503.38 | -75 | 75 |
| PDW45 | 149.35 | 7,687,597.05 | 389,793.37 | 462.99 | -60 | 75 |
| PDW46A | 195.07 | 7,687,164.07 | 389,869.72 | 491 | -50 | 75 |
| PDW64 | 31.09 | 7,687,555.92 | 390,029.55 | 448.4696 | -90 | 0 |
| PDW66 | 16.46 | 7,687,629.49 | 390,020.69 | 446.009 | -90 | 0 |
| WERC01 | 79 | 7,687,127.63 | 390,099.33 | 459.1 | -90 | 0 |
| WERC02 | 81 | 7,687,132.73 | 390,118.32 | 459.16 | -90 | 0 |
| WERC03 | 68 | 7,687,176.00 | 390,128.00 | 456.38 | -90 | 0 |
| WERC04 | 42 | 7,687,254.41 | 390,106.93 | 446.33 | -90 | 0 |
| WERC05 | 65 | 7,687,215.41 | 390,117.44 | 444.97 | -90 | 0 |
| WERC06 | 44 | 7,687,064.41 | 390,173.67 | 448.4 | -60 | 73.5 |
| WERC07 | 55 | 7,687,061.08 | 390,160.45 | 448.9 | -90 | 0 |
| WERC08 | 81 | 7,687,055.70 | 390,139.62 | 451.9 | -90 | 0 |
| WERC09 | 87 | 7,687,046.39 | 390,119.70 | 454.25 | -90 | 0 |
| WERC10 | 51 | 7,687,001.78 | 390,218.31 | 466.18 | -90 | 0 |
| WERC11 | 66 | 7,687,025.28 | 390,186.18 | 463.28 | -90 | 0 |
| WERC12 | 93 | 7,687,022.03 | 390,169.45 | 468.21 | -90 | 0 |
| WERC13 | 92 | 7,687,083.42 | 390,098.55 | 459.72 | -60 | 66.5 |
| WERC14 | 94 | 7,687,083.02 | 390,097.47 | 459.64 | -80 | 66.5 |
| WERC15 | 71 | 7,687,248.76 | 390,087.38 | 449.55 | -90 | 0 |
| WERC16 | 74 | 7,687,172.22 | 390,108.14 | 449.64 | -90 | 0 |
| WERC17 | 54 | 7,687,208.05 | 390,097.71 | 449.6 | -90 | 0 |
| WERC18 | 74 | 7,687,166.54 | 390,088.65 | 459.5 | -90 | 0 |
| WERC19 | 75 | 7,687,205.23 | 390,080.41 | 459.6 | -90 | 0 |
| DDH1 | 252 | 7,687,069.00 | 390,017.00 | 476.71 | -70 | 75 |



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**Appendix 1: JORC Code (2012 Edition), Table 1 report.**

# JORC Code, 2012 Edition – Table 1 report

## Section 1 Sampling Techniques and Data

| 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.* | • A combination of Reverse Circulation Drilling (RC) and Diamond Drilling (DD) techniques were used to obtain sample for analysis.<br>• RC drilling was sampled over 1m intervals and DD was sampled at random intervals based on observed mineralisation. Only visually high grade mineralized intervals were sampled.<br>• All drilling is historic with the RC program being the most recent, completed in 1991.<br>• No information available on sample size, sample splitting, core size, core handling or assay techniques etc available. |
| *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).* | • 19 RC holes (Brancote 1991), 28 DD holes (Eastern Copper Mines ~ 1970), 1 DDH hole (unknown).<br>• Core size, orientation etc unknown, hammer type unknown. |
| *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* | • Historic data, methods unknown. |



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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *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.* | |
| *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.* | • RC data geologically logged with host rock description, quartz veining, presence of sulphides etc.<br>• Qualitative in nature |
| *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.* | • Information unknown due to not being available in the historic data files. |
| *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* | • Information unknown due to not being available in the historic data files. |



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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *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.* | |
| *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 verification information available.<br>• Twinning of holes will be conducted during the first phase of drilling planned for 2016.<br>• Data available as a series of excel tables.<br>• No adjustment done on 1m RC samples.<br>• Diamond samples of varying length were composited into 1m intervals for estimation. |
| *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.* | • East, North and RL coordinates were assumed as provided in the digital data.<br>• Four collars that were found in the field were recorded with GPS and used for cross reference with historic digital data. All holes were found to be within acceptable error margins of the GPS in the X and Y dimensions.<br>• Topographic data was as provided. (1 second DEM (SRTM))<br>• Collars were adjusted to match DTM where required.<br>• Overall DTM data appears reasonable when viewed in 3D. |
| *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 estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | • Drill hole data spacing was drilled on a nominal 40m (along strike) and 20m (across strike) square grid.<br>• The grid is aligned along strike at a bearing of ~345°.<br>• Data spacing is sufficient for at least an inferred level resource estimate.<br>• DD samples were composited from varying lengths into 1m intervals.<br>• RC holes were unchanged. |
| *Orientation* | • *Whether the orientation of sampling achieves unbiased sampling of* | • Drill holes were orientated appropriately to intersect the interpreted |



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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *of data in relation to geological structure* | *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.* | shear hosted mineralisation striking at ~345° and dipping ~40° towards the south west. |
| *Sample security* | • *The measures taken to ensure sample security.* | • Information unknown due to its historical nature. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • Information unknown due to its historical nature. |

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *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.*<br>• *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.* | • The Wee MacGregor Project is contained within two granted Mining Licences; ML2504 and ML90098 held by Mining International Pty Ltd.<br>• Argosy Minerals limited have a farm-in joint venture agreement with Mining International whereby they will earn up to an 80% interest in the tenements with expenditure.<br>• There are existing Environmental Authorities over both licences.<br>• The tenure is in good standing. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • As the project is a historical mine, exploration and mining works have been conducted at different times since 1904. Mining was originally undertaken by MacGregor Cloncurry Copper Mines Pty Ltd and continued until 1920. Intermittent small scale production occurred by Edna May Mines between 1962 and 1971 after which Eastern Copper Mines attempted in situ leaching from 1974 to 1975. In 1977, leaching |



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|---|---|---|
| | | was re-established until 1979 when all operations ceased. Brancote completed an RC exploration program in 1991 which is the data being used today for this estimate. No further drilling has been carried out in the project although several reconnaissance visits have occurred in recent years with instances of soil sampling and rock chip collection being undertaken. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • Shear hosted Cu, Au, Ag, Co mineralisation within amphibolite schist and quartz feldspar porphyry / quartzite host rocks. Cross cutting quartz filled joints, shears and fractures. |
| *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:*<br>o *easting and northing of the drill hole collar*<br>o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>o *dip and azimuth of the hole*<br>o *down hole length and interception depth*<br>o *hole length.*<br>• *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.* | • See attached table. |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *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.* | • No data aggregation undertaken.<br>• Diamond drilling data composited from varying intersection lengths into 1m intervals. |



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|---|---|---|
| | • *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | • Intercept lengths of vertical drill holes does not represent true width of the mineralised body. The mineralisation is dipping at ~ 40° towards the south west. |
| *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 attached Figures. |
| *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.* | • See tables of drill hole data. |
| *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.* | • Numerous soil samples and rock chips have been undertaken in the project area. None of this quantitative data has been used in the estimation of the inferred resource or the determination of the exploration target range. |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Further work will consist of drilling to validate existing historic data, infill and extend quantitatively the known mineralisation, and serve to identify areas of shallow oxide mineralisation suitable for near term exploitation. |



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## 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 used.* | • No information available. Digital data used as supplied after visual verification and validation in 3 dimensions and in spreadsheet form. |
| *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.* | • Numerous site visits have been undertaken by the CP with observation of historic operations, some mapping and rock chip sampling of surface outcrop and general reconnaissance of the deposit location. |
| *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.* | • Confidence in the general interpretation of the mineralised deposit is high and supported by the observed outcrop, consistency between different phases and styles of drilling, location of historic underground workings etc.<br>• Data used is a combination of historic RC samples and DD samples.<br>• Some of the older diamond drilling only sampled the visually identified high grade zones (~5% Cu). The interpreted mineralisation therefore is likely thicker than the interpretation suggests although the general location of the mineralisation is not expected to change.<br>• Grade was the primary guiding factor in the interpretation. |
| *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 interpretation along strike is from 7,687,000 mN to 7,687,840 mN (830m rotated to 345 bearing), plan width of ~180m (40 degree dip towards the south west; true width of ~250m), and vertical depth of ~140m. |
| *Estimation and modelling* | • *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* | • Cu ppm is the only element estimated.<br>• Samples composited to 1m intervals.<br>• No top cap applied. No high enough grade samples in the data base |



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|---|---|---|
| *techniques* | *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-products.*<br>• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*<br>• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>• *Any assumptions behind modelling of selective mining units.*<br>• *Any assumptions about correlation between variables.*<br>• *Description of how the geological interpretation was used to control the resource estimates.*<br>• *Discussion of basis for using or not using grade cutting or capping.*<br>• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | to unfairly bias the estimation.<br>• A single mineralized wireframe solid was used and filled with cells.<br>• The block model was cut to exclude the historic shafts and drives of underground workings.<br>• Maximum extrapolation of data is 75m down dip and 15m past the last drill section along strike. This was allowed because of the presence of historic underground workings in the area and the average grade of material mined being 6.2% Cu. This, along with wider spaced sampling and the fit with the interpreted mineralised structure, demonstrates the mineralisation exists in the area. Holes will be planned to intersect this mineralisation in the next phase of drilling.<br>• Drill spacing on a nominal 40m x 20m square grid orientated along strike of the mineralized body.<br>• Block model parent cells are 20 x 10 x 1 with sub cells down to 2 x 1.25 x 0.25. Maximum cell size in the mineralized zone of 10 x 2.5 x 0.5.<br>• Inverse Distance squared used as the interpolation method.<br>• Three stage interpolation used with first search of 100 x 50 x 1, second search of 200 x 100 x 15 and third search of 300 x 200 x 20.<br>• Discretisation of 3 x 3 x 1.<br>• Minimum samples of 4 and maximum of 10 required to fill cells.<br>• Estimated model grades were visually checked in 3 dimensions against original sample data and composited data. |
| *Moisture* | • *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | • A dry average bulk density of 2.5 was used to calculate tonnage. |
| *Cut-off* | • *The basis of the adopted cut-off grade(s) or quality parameters applied.* | • A cut-off grade of 0.5% Cu was used in the reporting of the resource estimate and exploration target. The value was based on resultant |



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| *parameters* | | mineralized averages and results of preliminary financial assessments used to indicate likely mineable grades. |
| *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.* | • It is assumed that surficial oxide material will be mined by open cut where practical with the remaining material being accessed with underground methods. |
| *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.* | • Current expectations are to utilise some newly developed chemical technology to leach copper from both oxide and sulphide sources and produce a copper sulphide concentrate for on-sale into a smelter. |
| *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.* | • All material included in the inferred resource is considered to be minable under the current environmental authority.<br>• Additional feasibility studies, metallurgical trials and infill definition work will be required prior to mining and will address any environmental impact should mining proceed. |



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| *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.*<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.* | • The bulk density is assumed as 2.5. This is the average used in the district by current and recent operations in similar geological settings and with similar host geology. |
| *Classification* | • *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 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 mineral resource is classified as inferred. This is based on the historical nature of the data. The resource status is supported by the existence of the historical mine, the consistency of different drilling phases and the mapped surface mineralisation.<br>• The result appropriately reflects the CP's view of the deposit although validation, infill and extension drilling is required to better define the resource. |
| *Audits or reviews* | • *The results of any audits or reviews of Mineral Resource estimates.* | • No audits or reviews of this estimate have been undertaken at this time. |
| *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.*<br>• *The statement should specify whether it relates to global or local* | • The estimate is considered to have a moderate to low level of accuracy and has been classified as inferred for this reason. Validation drilling planned for 2016 will provide sufficient current data for an update / upgrade of the resource.<br>• Given the historical nature of the data, the consistency between different stages of drilling, the location of underground workings and the mineralized surface expressions, the estimate, albeit preliminary may be considered robust as an inferred resource.<br>• The estimate is local and no tonnages suggested can be used for |



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|---|---|---|
| | *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.* | additional technical and economic evaluations at this stage. |



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