26 March 2014 ASX: AOH, FSE: A2O

KYLYLAHTI RESOURCE INCREASED

- **Copper in Resources exceeds pre-mining estimates 2 years after first production commenced**
- **Contained copper up 17% from June 2013 after mine depletion**
- **Copper equivalent metal up 20% from June 2013 after mine depletion**
- **Grades increasing at depth**

Altona Mining Limited ("Altona" or the "Company") is pleased to announce an increased Mineral Resource for the 100% owned Kylylahti underground mine at its Outokumpu Copper Project in Finland. This is the regular update of Mineral Resources that Altona undertakes in conjunction with annual and half year reporting. The Resource estimate for the Kylylahti mine is:

- ***8.8 million tonnes at 1.33% copper, 0.78 g/t gold and 0.54% zinc.***

- ***Contained metal in this resource is 117,480 tonnes of copper, 222,595 ounces of gold and 47,401 tonnes of zinc.***

- ***This equates to 161,000 tonnes of copper equivalent metal determined by using actual Net Smelter Return to estimate revenues from concentrate sales*.***

The previous estimate was reported on 29 August 2013 and is 7.7 million tonnes at 1.31% copper, 0.68g/t gold and 0.52% zinc for 100,670 tonnes of copper, 167,850 ounces of gold and 40,360 tonnes of zinc being 134,000 tonnes copper equivalent.

Resources are reported above a 0.4% copper lower cut-off grade and include mine depletion to 31 December 2013.

Reserve estimates based on this resource are in progress.

The Mineral Resource tonnage has increased by 15%, copper metal by 17% and copper equivalent metal by 20% compared to the 30 June 2013 estimate. The Kylylahti mine has 5% more resource tonnes, 12% more copper metal with 6% higher copper grade, compared to estimates before mining started despite the production of 18,000 tonnes of copper since production commenced in February 2012.

The longitudinal section (Figure 1) on page 4 highlights the potential for further depth extensions to the Kylylahti deposit.

** Formula reported at end of release.*

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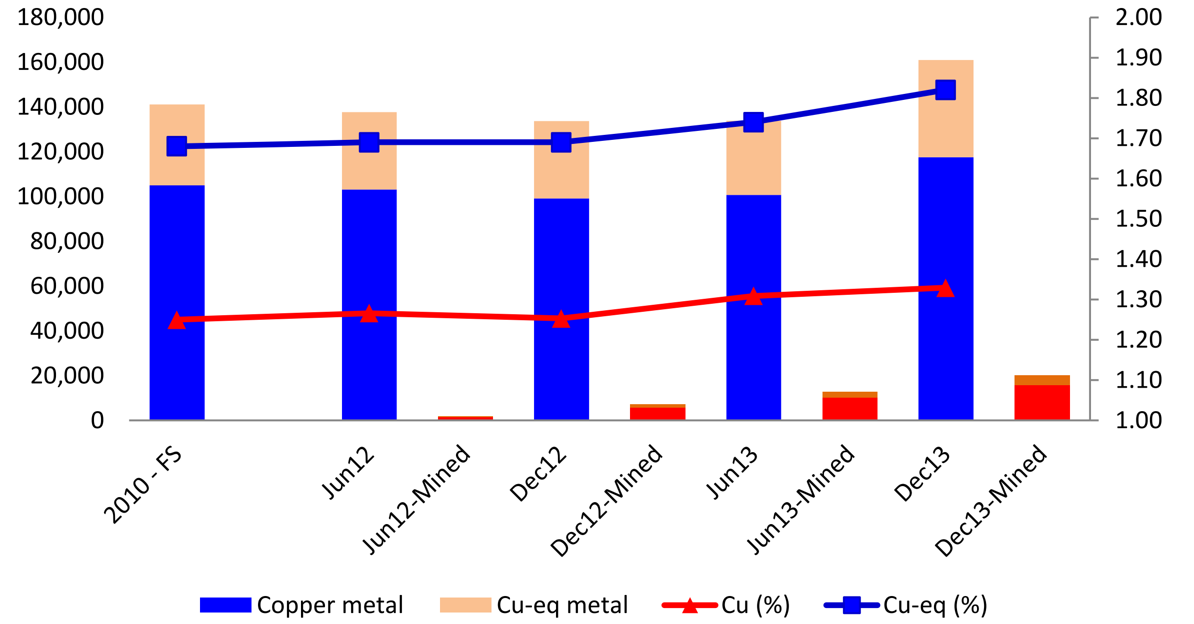
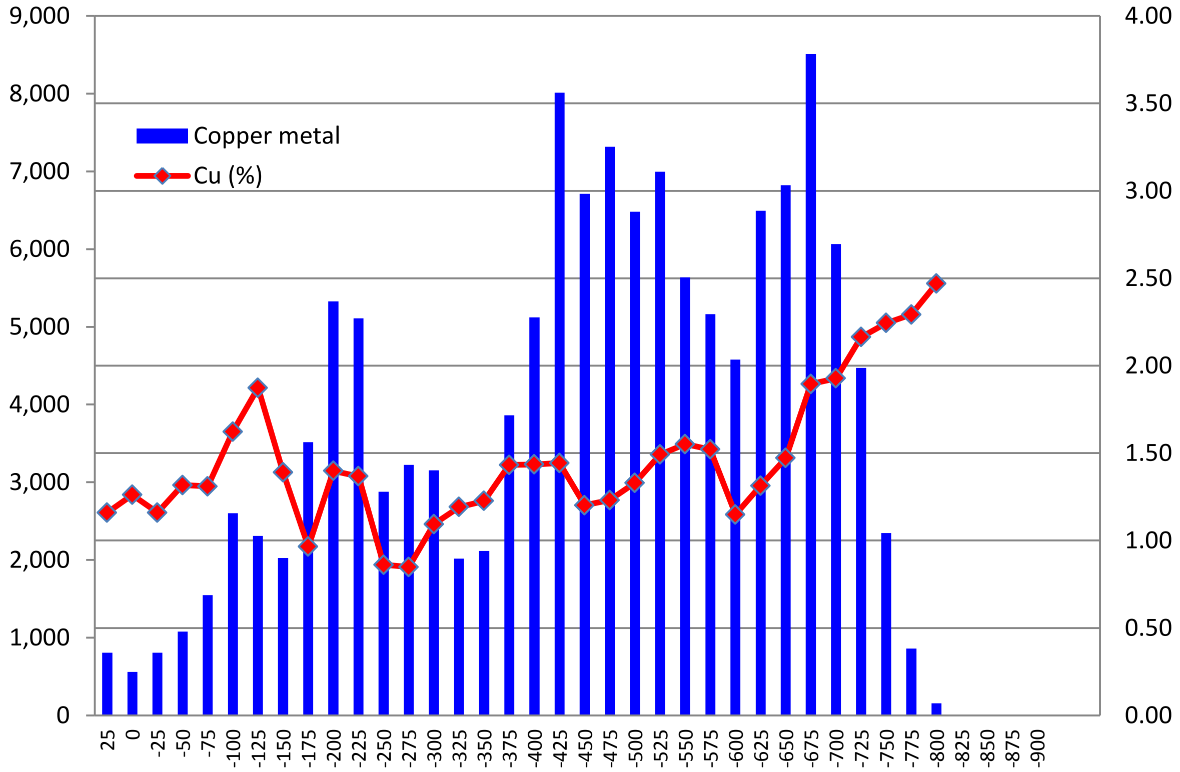
Mineral Resource Estimates since commencing production



Copper metal in the Kylylahti mine mineral resource inventory. Copper metal in the resources is depleted by the production to 31 December 2013. Copper equivalent metal is gold, zinc and silver expressed as copper revenue; the calculation is explained on page 8.

Copper Metal with Depth



Copper metal (right hand scale) and grade (% on left hand scale) in the Kylylahti mine mineral resource inventory in 25 metre vertical levels (RL). Copper metal in the resources is depleted by production to 31 December 2013. Note the increase in copper grade from -600 metres RL. The decline in contained copper metal from -750 RL is a function of drilling density.

During the period 1 July 2013 to 31 December 2013, mining depleted the resource by 0.33 million tonnes at a grade of 1.66% copper. Additions to the resource have come from:

- Drilling at the lower limit of the deposit intersected mineralisation below previous drilling. The highlight of the campaign was an intercept of 108 metres at 2.4% copper including 58 metres at 4.2% copper reported on 26 November 2013.
- Delineation of hanging-wall gold-copper-nickel ore shoots.
- Delineation of the new nickel zone reported in the September 2013 Quarterly report.
- High grade underground definition drilling in the top most part of the Wombat zone.
- Improved geological understanding of deposit geometry, structure and continuity of high-grade zones.

The graph on the prior page shows the increase in copper metal per vertical metre below where the Wombat zone commences. It also highlights the marked increase in grade at depth from 600 metres deep (Figure 2). The mine decline is now some 583 metres below surface (Figure 1).

Now that the deposit has been exposed underground, has been mined for two years and has had close spaced drilling, it is clear that the Kylylahti deposit is different from what was expected at the Feasibility stage.

Semi-massive sulphides have proven to be more continuous than the pre-mining resource drilling indicated and disseminated sulphides have proven to be less extensive. In the pre-mining model some 75,000 tonnes of copper (70% of copper metal) was contained in semi-massive sulphides, whereas in this update some 80% of copper metal is contained in semi-massive sulphides.

Resource model reported by ore type

	Tonnes	Cu (%)	Au (g/t)	Zn (%)	Co (%)	Ni (%)
Semi-massive	4,174,359	2.31	0.80	0.81	0.34	0.13
Disseminated	4,665,686	0.45	0.77	0.29	0.15	0.31
TOTAL	**8,840,045**	**1.33**	**0.78**	**0.54**	**0.24**	**0.22**
Contained metal (tonnes)		**117,480**	**222,595 oz**	**47,401**	**21,350**	**19,680**

The grade of the semi-massive sulphides is higher than expected at 2.31% copper and 0.80g/t gold. Shoots of semi-massive sulphide are difficult to define in wide spaced drilling and accurate estimates require exposure by underground development and definition by close-spaced (grade control) drilling.

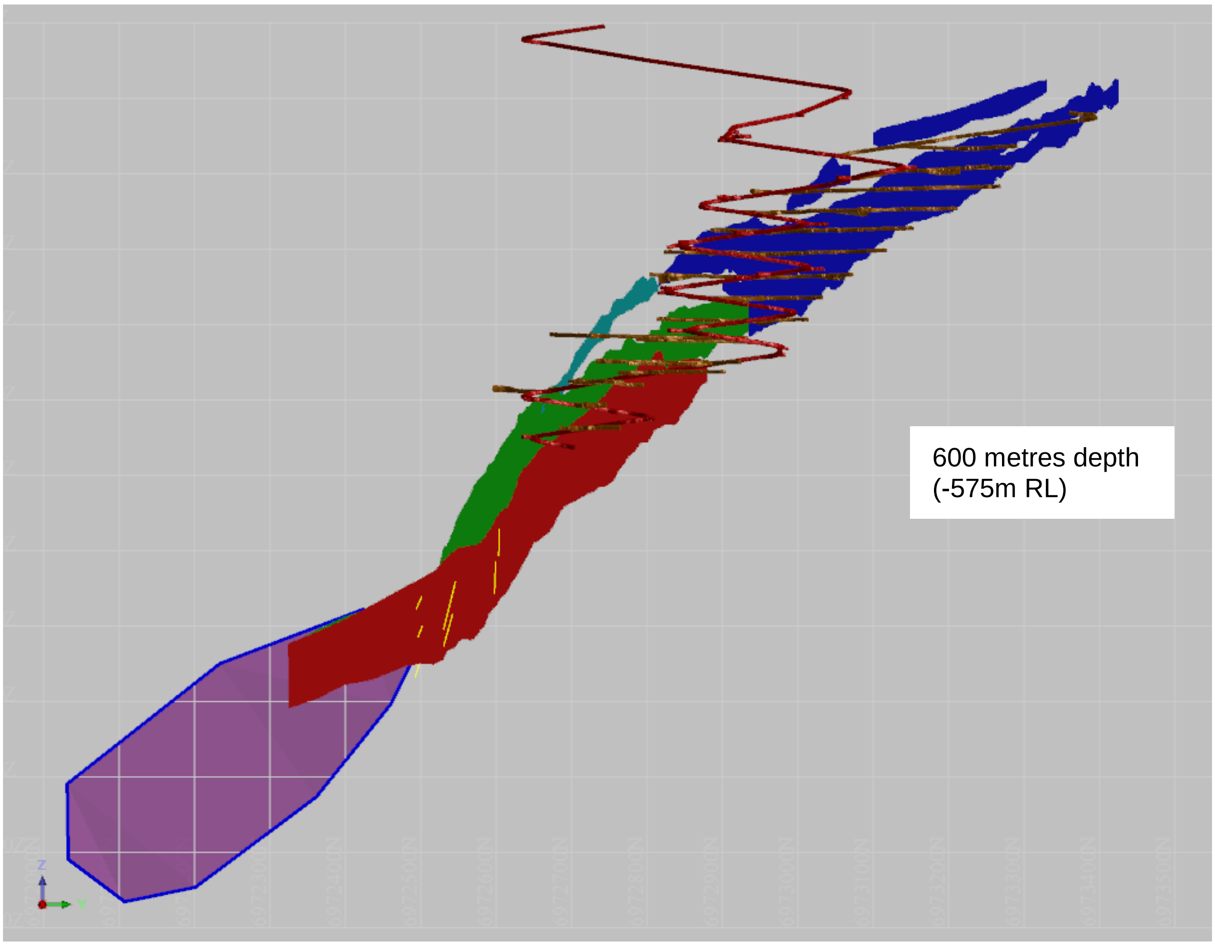
Underground drilling has revised the geological interpretation of the deposit. Previously mineralisation was interpreted as two distinct zones, the Wallaby and Wombat zones. Recent drilling has shown that the Wombat zone contains at least two separate semi-massive sulphide zones. These have been named the Wombat zone and the Gap zone. Figure 3 illustrates relationship of these two zones.

These zones are a result of a fold or thrust that repeats mineralisation. The Gap zone sits in the expected position on a footwall of black schist, however Wombat is offset into the footwall within the host altered ultramafic rocks. There is typically a 5-20 metre gap between the Wombat and the Gap zone. Current drilling shows that these two parallel ‘shoots’ extend from 300 metres deep to the lower limit of drilling at approximately 850 metres depth.

This newly understood structural complexity in the deposit was not predicted and is difficult to resolve with wide spaced drilling. Similar structural complexity was encountered at the lower limit of recent drilling at the base of the deposit. Similar features are also seen in the area where the Wallaby zone ends and the Gap zone begins. A detailed evaluation of the geological and structural model will be completed before determining if drilling at the base of the deposit should commence in the near term or alternatively await the opportunity to drill from deeper mine development.

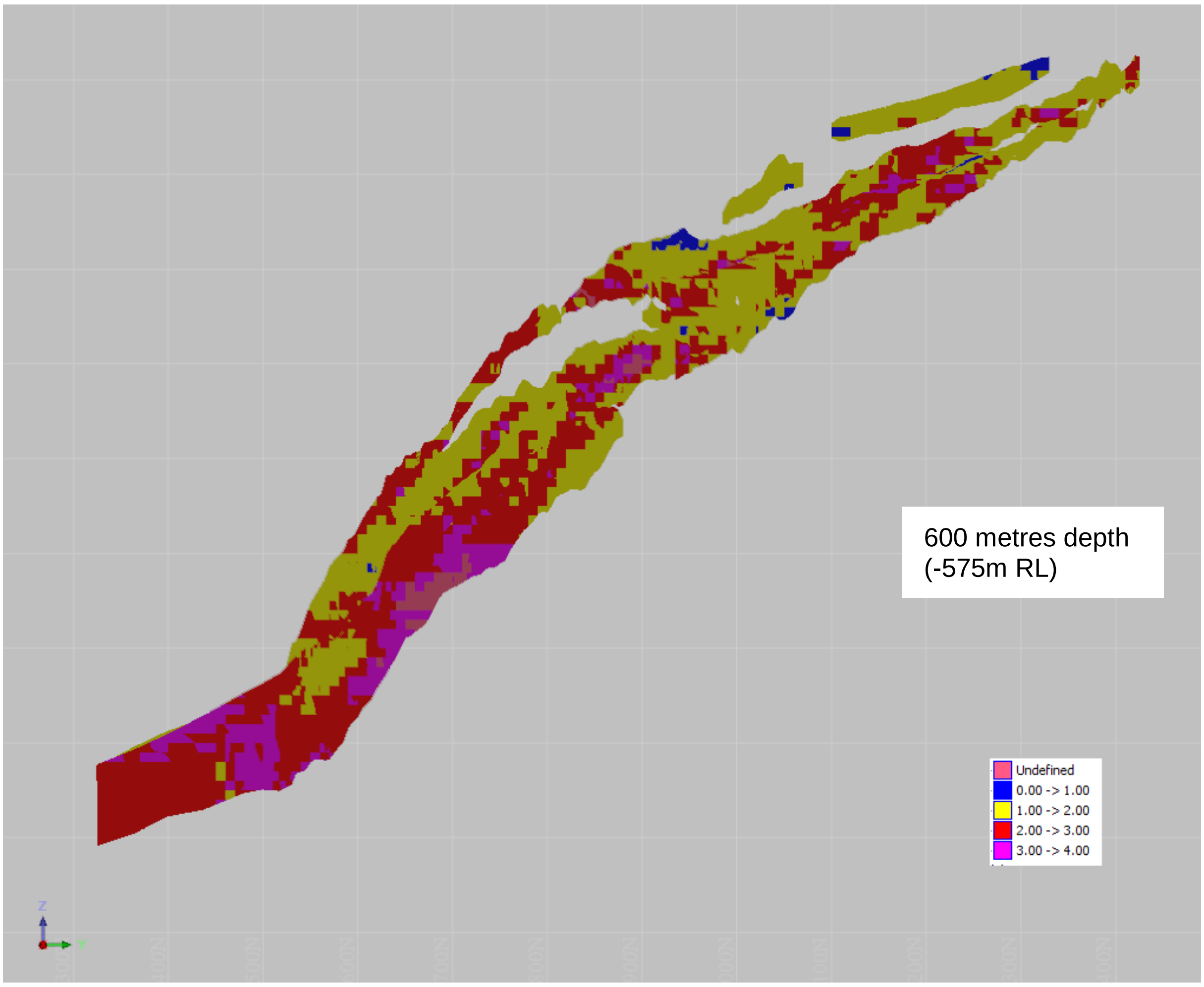
The wider resource estimate for the Outokumpu area is 17.9 million tonnes at 0.97% copper.

Figure 1



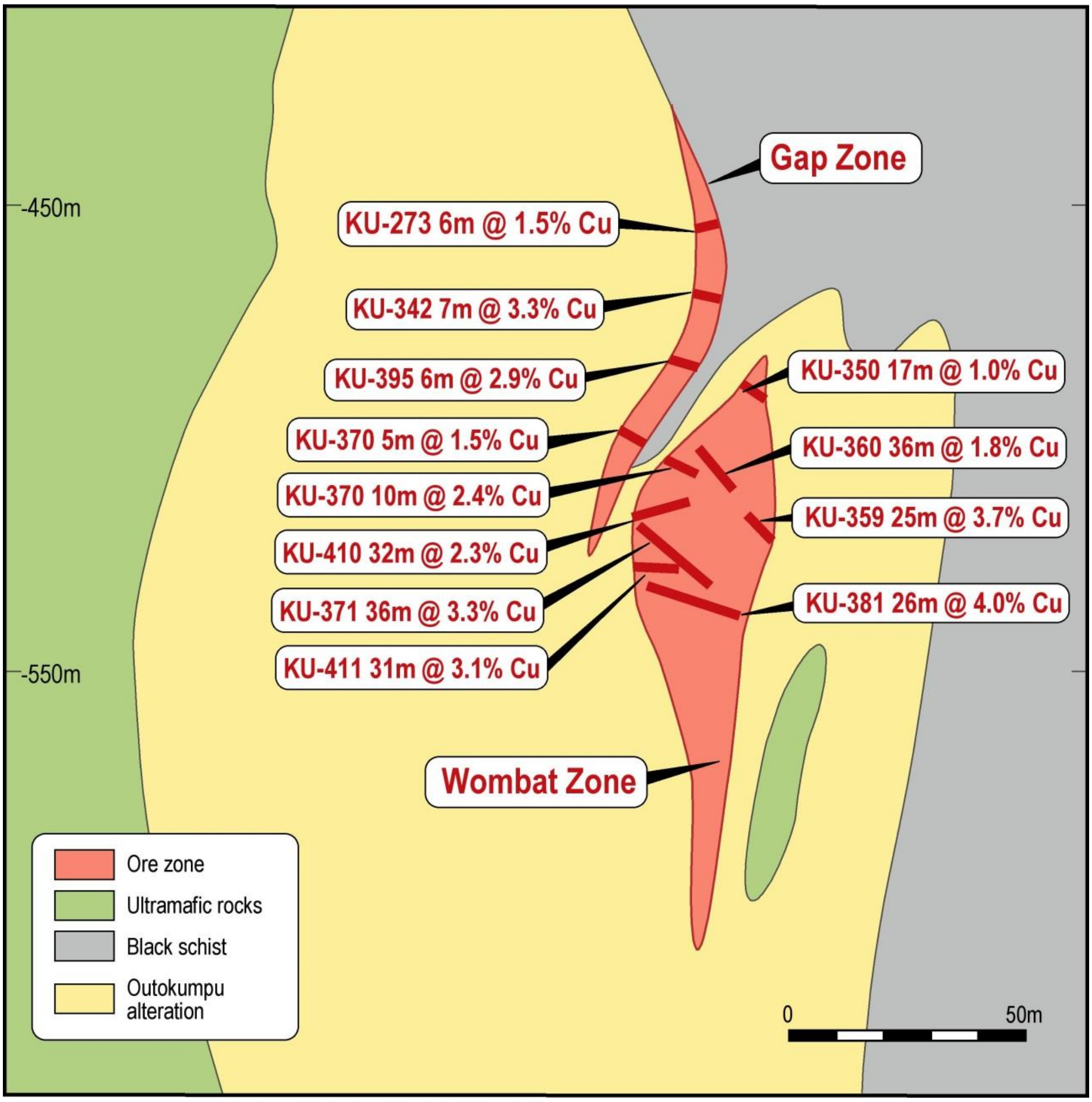
Longitudinal section looking west of the Kylylahti mine showing decline development and drill drive, drilling results intercepts (yellow) and the outline of currently defined reserves.
Blue is the upper Wallaby zone which is largely mined out.
Red is the Wombat zone.
Green is a newly defined zone (Gap zone) in the hanging wall of Wombat zone. See Figure 3 cross section for an illustration of the relative geometry of these zones.
The target zone for further extensions to the Kylylahti deposit is shown in purple.
The grid is 100 metres square.

Figure 2



Screen snapshot of a longitudinal section looking west of the Kylylahti mine showing copper grade distribution in the Resource block model.
Note the high grades are from 500-600 metres depth (see page 2)
Grid is 100 metres square.

Figure 3



Cross-sectional view showing the Gap and the Wombat zones.

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About Altona

Altona Mining Limited is a copper producer in Finland and has a major copper development project in Australia.

The Company's Outokumpu Project in south-east Finland commenced production in early 2012. The project comprises the 600,000 tonnes per annum Kylylahti underground decline mine and the Luikonlahti mill. The annual production rate averages 9,000 tonnes of copper, 9,000 ounces of gold and 1,600 tonnes of zinc with potential to expand production under consideration. Regional resources are hosted in 2 closed mines and 4 unmined resources, all within 30 kilometres of the Luikonlahti mill. Finland is a Eurozone country and has a long history of mining, an attractive corporate tax regime (20%) and no royalties.

Altona's other core asset is the Roseby Copper Project near Mt Isa in Queensland and is one of Australia's largest undeveloped copper projects. The first development envisaged is the 7 million tonnes per annum Little Eva open pit copper-gold mine and concentrator. Little Eva's proposed annual production[1] is 38,800 tonnes of copper and 17,000 ounces of gold for a minimum of 11 years. A Definitive Feasibility Study has been completed and the project is fully permitted. Altona is engaged in discussions with potential partners to enable the funding of this major development.

Altona Mining is listed on the Australian Securities Exchange and the Frankfurt Stock Exchange.

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[1]*Refer to the ASX release 'Cost Review Delivers Major Upgrade to Little Eva' dated 13 March 2014 which outlines information in relation to this production target and forecast financial information derived from this production target. The release is available to be viewed at www.altonamining.com or www.asx.com.au. The Company confirms that all the material assumptions underpinning the production target and the forecast financial information derived from the production target referred to in the above-mentioned release continue to apply and have not materially changed.*

JORC 2012 and Competent Persons Statement

The Company has reported Resources and Reserves according to the 2012 edition of the JORC Code and a full “Table 1” is appended.

A full resource report has not been included as Kylylahti is an operating mine with extensive prior disclosure. These estimates reported here are Altona’s annual resource and reserve review.

Prior disclosure comprises ASX releases associated with the 2010 Definitive Feasibility Study (Resource; 23/10/2010 and Reserve; 2/8/2010) reported under JORC 2004, an update on 23 July 2012 reported under JORC 2004 and updates on 9 April 2013 and 29 August 2013 reported under JORC 2012.

1. *Mineral Resources*: The Kylylahti Mineral Resource Estimate that is reported in this ASX Release is based on information compiled by Mr Jari Juurela, MSc, MAusIMM, Manager of Geology for Altona’s Finnish operations. He is a full time employee of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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 Juurela consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

2. *Responsibility for entire release*: Information in this ASX Release that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Alistair Cowden BSc (Hons), PhD, MAusIMM, MAIG, Managing Director of Altona who is a full time employee of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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’. Dr Alistair Cowden consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

3. *Copper Equivalence: When used, copper equivalence refers to copper in concentrate, not resources or reserves, or drill results. The copper equivalent grade is calculated by factoring the copper grade by Revenue from all products (Cu, Au, Zn, Ag)/ Revenue from copper.*

Table 1: Kylylahti Resource Estimate - December 2013

	Tonnes (m)	Cu (%)	Au (g/t)	Zn (%)	Co (%)	Ni (%)
Measured	1.2	1.19	0.48	0.56	0.22	0.19
Indicated	7.2	1.35	0.77	0.53	0.24	0.23
Inferred	0.5	1.38	1.71	0.54	0.27	0.24
TOTAL	**8.8**	**1.33**	**0.78**	**0.54**	**0.24**	**0.22**
Metal Tonnes		117,480	222,600oz	47,400	21,350	19,680

Table 2: Kylylahti Resource Estimate - July 2013 (Superseded, provided for comparative purposes only)

	Tonnes (m)	Cu (%)	Au (g/t)	Zn (%)	Co (%)	Ni (%)
Measured	1.4	1.22	0.56	0.55	0.23	0.20
Indicated	5.4	1.44	0.72	0.54	0.25	0.20
Inferred	0.9	0.64	0.59	0.36	0.17	0.25
TOTAL	**7.7**	**1.31**	**0.68**	**0.52**	**0.23**	**0.21**
Metal Tonnes		100,670	167,850oz	40,360	18,000	15,900

Table 3: Outokumpu Resources, December 2013

Deposit	Classification	Tonnes (m)	Cu (%)	Au (g/t)	Zn (%)	Co (%)	Ni (%)
Kylylahti	Measured	1.2	1.19	0.48	0.56	0.22	0.19
	Indicated	7.2	1.35	0.77	0.53	0.24	0.23
	Inferred	0.5	1.38	1.71	0.54	0.27	0.24
	TOTAL	**8.8**	**1.33**	**0.78**	**0.54**	**0.24**	**0.22**
Saramäki	Inferred	3.40	0.71	-	0.63	0.09	0.05
Vuonos	Inferred	0.76	1.76	-	1.33	0.14	-
Hautalampi	Measured	1.03	0.47	-	0.06	0.13	0.47
	Indicated	1.23	0.30	-	0.07	0.11	0.42
	Inferred	0.90	0.30	-	0.10	0.10	0.40
	Total	**3.16**	**0.36**	**-**	**0.07**	**0.11**	**0.43**
Riihilahti	Indicated	0.14	1.69	-	-	0.04	0.16
Valkeisenranta	Indicated	1.54	0.29	-	-	0.03	0.71
Särkiniemi	Indicated	0.10	0.35	-	-	0.05	0.70
TOTAL		**17.94**	**0.97**	**0.39**	**0.45**	**0.16**	**0.26**

See Vulcan ASX Release of 16 November 2009 for JORC 2004 compliance for deposits other than Kylylahti. This release can be found on the Finland Resource and Reserve estimates page of Altona's website: www.altonamining.com. There has been no annual review of the Outokumpu area resources other than Kylylahti. Estimation for all of these deposits under the 2012 version of the JORC code is underway.

JORC Table 1

The table below is a description of the assessment and reporting criteria used in the Kylylahti Resource and Reserve Estimation that reflects those presented in Table 1 of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012).

Criteria	Commentary
Sampling Techniques and Data	
Sampling techniques	• The deposit is sampled using diamond drillholes and face samples of the underground development. • Diamond drilling before 2011 has been cut or sawn to half core and quarter core, which has been sent for assaying. 45% of the diamond core drilled after 2011 has been cut to half core before submitting to assaying and 55% has been assayed as full core. • Face sampling lines have been laid out horizontally and perpendicular to ore contacts. Samples have been collected as chip samples using rock hammers at predominantly 1 metre intervals. Sample breaks match geological contacts. • Diamond holes and face samples are picked up for collar location and downhole surveyed with relevant instrument. Underground diamond drilling is designed in a nominal 20 x 20 metre grid to intersect mineralisation at the best available angle. Logging and sampling of the diamond holes and face samples are undertaken in accordance with Altona's protocols. QAQC samples are inserted for both diamond sample and face sample batches as per Altona's protocols. Protocols follow industry best practice. • Determination of mineralisation and representativeness is based on the visual amounts of sulphides and lithological contrasts • All samples are crushed, split and pulverized to produce a 100-250g subsample for base metal assaying by acid digestion and a 25g subsample for fire assay for gold.
Drilling techniques	• Diamond drilling is used to define the Kylylahti Resources. About 93,000 metres was drilled before production (prior to 2011) and about 48,240 metres have been drilled after that. Drilling after 2011 has been carried out to infill to the required density before development and also for stope grade control. • Face samples are collected using a rock hammer from horizontal lines perpendicular to ore zones. 512 faces with 2,785 metres of sampling have been collected.
Drill sample recovery	• Core losses are recorded as intervals on the core logging sheets. Core recovery is regarded to be high in Kylylahti drilling and exceeds 99%. • Face sample chips are collected and a representative amount is recovered to assaying. The quality of sampling and representivity is systematically monitored using QQ-plot comparisons against diamond core data. • Diamond core samples are used to achieve good recovery data for

Criteria	Commentary
	estimation. Diamond core is reconstructed and oriented to continuous core and length of the core is measured and checked against metre marks of the drillers. Face sample quality and recovery is continuously monitored with geostatistical tools against the diamond core data. • Recovery of the diamond core and face samples are regarded as good and there is no indication of bias from the sample losses in the dataset.
Logging	• All diamond core is geologically logged. Geological logging contains all the required detail for defining geological and ore boundaries and is appropriate for resource estimation. • About 25% of the diamond core is geotechnically logged. • All face samples are geologically logged. Geological logging contains all the required detail for defining geological and ore boundaries and is appropriate for resource estimation. • Logging of the diamond core records geological unit, lithology, texture, grain size, sulphides and sulphide textures. All core is photographed. • Logging of the face samples records geological unit and lithology.
Sub-sampling techniques and sample preparation	• Exploration diamond core is sampled by generating half or quarter core. • Underground grade control core was submitted as full core samples (55% of the holes) or half core samples (45% of the holes) prior July 2013. • Face sampling comprises rock chip samples. Full samples are sent for assaying. • Diamond core sample preparation is done by crushing the whole sample, splitting the sample by rifle splitter to 1,000g and pulverising the 1,000g subsample. • Face sample preparation is done by crushing the whole sample, splitting by riffle splitter to a subsample size of 150g and then pulverizing the whole subsample. • Industry best practice procedures are followed in the sample preparation for diamond core and face samples. • Core duplicates and check assay repeats are systematically assayed to ensure the quality of sampling and subsampling. • Duplicate face sample lines have been collected to ensure the quality of the face sampling. • Certified reference materials and blank samples are inserted into diamond core and face sample batches. • QAQC samples are inserted on a 1:10 ratio. • Core duplicates and duplicate face sample lines are taken to monitor the representativity of sampling. Underground development has mined several drillholes and intersected drillholes have been used to monitor representativeness of sampling • Sample sizes are considered to be appropriate for the Kylylahti style of ore.
Quality of assay data and laboratory tests	• Underground diamond drilling is assayed using aqua regia digestion for base metals. Exploration drilling from the surface has been assayed using four acid digestion, aqua regia digestion and XRF methods. Face samples are assayed using an aqua regia digestion method. Gold assaying is done by fire assay.

Criteria	Commentary
	• Fire assay is a total method for gold assaying and is accepted worldwide as the most appropriate method for gold assay. • Aqua regia digestion is a partial method for nickel and a total method for other base metals. For the style of Kylylahti copper-zinc-gold mineralisation this method is considered to be appropriate. • The four acid digest is a total extraction method. • No geophysical tools were used for any element analysis used in the resource estimate. • Certified Reference Materials, blanks and duplicates are inserted in sample batches as per Altona's QAQC procedures. Duplicates are inserted in a 1:20 ratio and standards and blanks are inserted in a 1:20 ratio. • QAQC samples are monitored on a batch-by-batch basis and samples in each failed batch are reassayed. QAQC performance is also monitored and reported on a monthly basis; no biases and inaccuracies have been observed.
Verification of sampling and assaying	• Significant intercepts have been visually verified by a Competent Person and Senior Geologist. No independent verification was undertaken. • A few of the surface exploration holes have been twinned from the underground infill drilling campaigns. Many of the surface exploration drillholes and underground infill holes have been checked by the face sampling. Twinned holes and faces are usually within expected limit of variations. • Primary data is collected on the logging sheets in Excel format. Primary data is stored and archived to Altona's server and imported to an industry standard SQL database by the database geologist using data entry procedures and database import tools. Data is visually checked and validated prior to import and additional validation is carried out upon entry to the database. • No adjustment has been made to the assay data.
Location of data points	• Collar surveys for surface drill holes are dominantly done by a DGPS instrument with an accuracy of 10-50cm. Underground collars are picked up by a surveyor using tacheometre instrument with an accuracy of 10cm. Face samples are located using underground pickups of the face cuts. The accuracy of face sample collar locations is 50cm. • Gyro, Devico, Maxibor and Dip measurements are used for downhole surveying. All the recent drilling is surveyed using gyro and bulk of the holes used for estimation are gyro, devico or maxibor downhole surveyed. Short underground holes less than 50 metres are surveyed for dip and azimuth at collar point. The competent person considers downhole survey quality to exceed requirements for modelled resource classifications. • The Finnish national grid system with zone 4 (Finnish KKJ - zone 4) is used for all the resource work. • Collar locations points for surface holes are measured using DGPS instrument. Kylylahti is underground mine which does not have surface exposure. Topography DTM accuracy is irrelevant for underground mining purposes.

Criteria	Commentary
Data spacing and distribution	• The Wallaby, the Wallaby-Wombat Gap and Upper part of the Wombat orebodies are diamond drilled to a minimum of 20 metres x 20 metres spacing in the plane of the ore and down to 570 metres vertical depth from a combination of underground definition drilling and surface drilling. Below 570 metres vertical depth drilling is more sparse. Resource classification reflects this. • Face sampling covers about 75% of available ore faces in the Wallaby orebody down to 400 metres vertical depth. Sampling is done on 4 metres ore cuts on 25-30 metres development levels. • Resources below 570 metres depth are drilled on a 40 metres x 40 metres grid. • Data spacing is considered sufficient to define geological and grade continuity for grade control purposes, Mineral Resources and Ore Reserves (above 570 metres depth) and sufficient for Mineral Resources and Ore Reserves (below 570 metres depth). • Samples are composited downhole to 2 metres for estimation purposes.
Orientation of data in relation to geological structure	• Face samples are collected wherever possible perpendicular to the orebody and are regarded as having the correct orientation to produce a representative sample. • Underground diamond drilling is completed in fans from the drilling positions in the footwall or hangingwall of the orebody. Orebody intersection angles are predominantly orthogonal to mineralisation and are suitable for collecting unbiased samples. • Exploration diamond drilling is collared from surface. Deeper diamond holes from the surface that intersect a subvertical orebody are drilled with moderate to poor drilling angles for the ore contacts. No major biases are seen from the exploration drilling after the upper orebody has been redrilled with better orientation from underground drill cuddies. Minor variations seen at redrilling are mainly positive with higher grade and thicker intersections in the new drilling.
Sample security	• A chain of custody is maintained for the Kylylahti samples. • Diamond core is drilled by an underground drilling contractor. The drilling contractor delivers core from underground drilling sites to Altona's logging facilities close to the mine site. Core is logged in Altona's logging facilities by full-time Altona employees and collected samples are delivered by full-time Altona employees to global laboratory. • Face samples are collected by Altona's geologists who are full-time employees. Samplers deliver core from underground drives to Altona's logging facilities close to the mine site. Samples are prepared by full-time Altona employees in the sample preparation room of the logging facility and subsamples are delivered by full-time Altona employees to the onsite laboratory. Assaying is performed by Altona's full-time employees at the laboratory.
Audits or reviews	• A detailed internal audit was completed in August 2013. • The initial estimations for the Definitive Feasibility Study were undertaken by Optiro with subsequent updates by Altona. This estimate was audited by Snowden. An external audits by Optiro of Altona's estimation methodology have been commissioned and is in progress. Sampling

Criteria	Commentary
	techniques have not changed since the study. The Competent Person(s) has reviewed both the sampling technique and database and considers both to be at required levels. Altona's senior resource geologist based in Australia has completed an internal audit of the Kylylahti estimate.
Estimation and Reporting of Mineral Resources	
Database integrity	• Primary data is collected in the logging sheets in Excel format. Primary data is stored and archived to Altona's server and imported to an industry-standard SQL database by the database geologist following data entry procedures and database import tools. • Data is visually checked and validated prior to imports and additional validation is done on entry to the database using validation rules.
Site visits	• The Competent Person works at the mine site and regularly visits underground development drives. The Competent Person has also viewed a large amount of the underground diamond core. Mapping of the underground drives and logging of the core has heavily enhanced the geological and structural understanding of the deposit.
Geological interpretation	• Confidence in the geological interpretation is increased by underground mining and mapping. Confidence in the interpretation is considered to be good. • No assumptions are made regarding the data; all geological interpretations are based on observation. • No alternative interpretation has emerged. • Mineralisation contacts are highly visual geological markers. Geological logging and mapping has been used as an indicator of the mineralisation contacts. • Alteration and structure exert a control upon the grade and geology. Geology is very visual on the underground development and can easily be mapped to assist with interpreting geological and structural features in conjunction with drill information.
Dimensions	• The Kylylahti Mineral Resource is 1,000 metres long (along strike), 3-50 metres wide and extends over 800 vertical metres (70 metres to over 800 metres vertical depth). The deposit remains open at depth.
Estimation and modelling techniques	• Resource model has been updated above the level 900 metres below surface (-800 mRL) • Ordinary Krieging was used as a resource estimation method as it was considered to be best estimation method for the Kylylahti style of deposit. Previous Kylylahti estimates have also been completed using Ordinary Krieging. • Estimation was carried out using Surpac 6.3 for the estimation and Supervisor 7.04 for geostatistics. • Drillhole sample data was coded using domain wireframes for ore zones and rock codes for main rock types. • Sample data was composited to two metres downhole lengths using a best fit-method. A minor amount of small composite lengths were created by the process with negligible effects upon estimation. • Composites were declustered using a 10 x 5 x 10 metres cell declustering method.

Criteria	Commentary
	• Extreme outliers of sample population were topcut based on statistical analysis (grade histograms, log probability plots and examination of CV's). Topcuts were applied to copper (10% in the massive copper domain), gold (2.5g/t in the disseminated copper and 15g/t in the hangingwall gold-lenses) and zinc (3.5% in the massive copper and zinc disseminated copper domain, 2.0% in the disseminated copper domain and 2.0% in the hangingwall gold lenses). Other elements did not require any topcutting. • Directional variograms were modelled using normal score transformation for the massive and disseminated copper domains for gold, cobalt, copper, nickel, zinc and sulphur. Back-transformed variograms were used in the estimation. Grade continuities showed good agreement with known geology. Modelled variograms had about 100 metres variogram ranges in the principal direction, 40 metres ranges in the intermediate direction and about 25 metres ranges in the minor direction, with low nuggets of 10-20%. • The block model was constructed using 5.0 x 10.0 x 10.0 metres parent block sizes with standard subcelling to 0.625 x 1.25 x 1.25 metres. • The deposit and various variables were modelled in a number of domains: massive copper, disseminated copper, cobalt, hangingwall gold. • Ordinary Krieging (OK) estimation was used to estimate gold, cobalt, copper, nickel, zinc and sulphur grades into parent blocks for all the domains. • Two estimation passes were carried out for all the domains. Search distances of 100 metres x 50 metres x 33 metres, with minimum of 8 and a maximum of 24 samples were applied in first pass search and 300 metres x 150 metres x 100 metres, with minimum of 6 and a maximum of 14 samples were applied in the second pass search for the blocks not informed in the first pass search. More than 95% of the indicated resources were informed in the first pass search. • No check estimate utilising an alternative estimation method was done as reconciliation and production records provide a more relevant comparison point. • No assumptions were made regarding recoveries of by-products. • No deleterious element or other non-grade variables were estimated. • Block size is about half of the nominal sample spacing. • Selective mining units were not used for estimation as Kylylahti is an underground mine not estimated using recoverable resources methods. • No correlations were used between variables. • Kylylahti mineralisation is very visual. Logging information was used as guidance for creating geologically controlled envelopes of mineralisation. • Resource model validation included the following steps: o 2D and 3D visual checks between sample grades and model grades. o Sample vs domain grade checks inside the domains. o Swathe plots (northing and elevation slices at 25 metres spacing) were completed to check local estimation accuracy. o Composite vs raw metal and length checks.

Criteria	Commentary
	○ Krieging metric checks (regression slope and krieging efficiency) for estimation quality. ○ Volume comparisons of the solids versus the block model. ○ Comparison against the previous block model. ○ Reconciliation of data against the grade control model and mill is available and used to validate the resource model. • Previous resource models were used to validate the new resource statement. The new model contains more copper metal tonnes, with higher grades and more disseminated tonnes with lower grades. This was expected based on the new data.
Moisture	• Tonnes have been estimated on a dry basis.
Cut-off parametres	• Copper domains have been modelled using a 1.0% copper cut-off for massive copper domains and 0.4% copper cut-off for disseminated copper domains.
Mining factors or assumptions	• Kylylahti ore is mined using the underground mining method of longhole stoping. The mine has been in production since January 2012. • No internal or external dilution or ore loss are modelled in the resource model.
Metallurgical factors or assumptions	• No metallurgical assumptions have been built into the resources. • The mill has processed Kylylahti ore since February 2012. Metallurgical recoveries are well established and vary slightly with head grade, on average the recoveries are; copper 91.5%, gold 74% and zinc approximates 50%.
Environmental factors or assumptions	• Both the mine and mill are operating and are complying with the granted environmental permit.
Bulk density	• Bulk densities have been measured using the common water immersion method to measure dry densities from diamond core samples. • The bulk density database contains 15,818 density measurements at Kylylahti, covering about 40% of the assay database and representing all domains with adequate density. • Bulk density has been estimated into parent blocks using an ordinary krieging estimation method.
Classification	• Mineral Resources have been classified on the basis of geological and grade continuity confidence using drilling density, geological confidence, modelled grade continuities and conditional bias (slope of the regression and krieging efficiency) as criteria. • Measured Mineral Resources are defined using a minimum of 20 metres x 20 metres drill spacing supplemented by exposure in underground development with proven grade and geological continuity. Measured Mineral Resources contain grade control information from development with high confidence in geological and grade continuity. • Indicated Mineral Resources are defined using a 40 metres x 40 metres drilling spacing. • Inferred Mineral Resources are the less well drilled portion of the deposit at depth. • Mineral Resources have been classified on the basis of geological and grade continuity confidence using drilling density, geological confidence, modelled grade continuities and conditional bias (slope of the regression

Criteria	Commentary
	and krieging efficiency) as criteria. • Results appropriately reflect the Competent Person`s view of the deposit.
Audits or reviews	• A detailed internal audit was completed in August 2013. • The initial estimations for the Definitive Feasibility Study were undertaken by Optiro with subsequent updates by Altona. This estimate was audited by Snowden. An external audit by Optiro of Altona’s estimation methodology has been commissioned and is in progress. Sampling techniques have not changed since the study. The Competent Person(s) has reviewed both the sampling technique and database and considers both to be at required levels. Altona’s senior resource geologist based in Australia has completed an internal audit of the Kylylahti estimate.
Discussion of relative accuracy / confidence	• Relative accuracy and confidence levels were not determined in this estimation. Kylylahti mine has been in the production over the year and grade control data and mill reconciliation data is available to investigate accuracy of the resource model which is considered to be more accurate than the geostatistical approaches. Grade control information and mill reconciliation data shows that resource model estimates metal of the resources accurately with commonly lower tonnes and higher grade.