

7 May 2014

ASX: AOH, FSE: A2O

RESERVES INCREASED AT THE KYLYLAHTI MINE, FINLAND

- **Contained copper increased 13% and contained gold by 25%**
 - **Copper metal in reserves exceed pre-mining reserves**
 - **2nd successive increase in reserves**
 - **Inferred resources at depth represent future reserve growth**
 - **Mine life of 7.5 years at a targeted production rate of 650,000tpa**
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Altona Mining Limited (“Altona” or the “Company”) is pleased to announce an increase to the Ore Reserve estimate for the 100% owned Kylylahti underground mine at its Outokumpu Copper Project in Finland. This increase follows the upgraded Resource estimates released to the ASX on 26 March 2014.

The Ore Reserve estimate for the Kylylahti mine adjusted for mine depletion to 31 December 2013 (see Table 1 for clarification) is:

4.55 million tonnes at 1.66% copper, 0.83g/t gold and 0.62% zinc containing:

75,651 tonnes of copper, 121,915 ounces of gold and 28,032 tonnes of zinc

An additional 0.2 million tonnes of planned production derived from inferred resources is classed as mining inventory.

Using the net smelter return for concentrate sales the contained copper equivalent is 97,400 tonnes at a grade of 2.14% copper equivalent. This estimate is now higher in tonnes, grade and contained metal than the August 2010 pre-production reserve estimate (see Figure 3 for resource growth).

Altona Managing Director Dr Alistair Cowden said: “This is the second successive increase in reserves. We expect infill and extension drilling to continue this trend of replacing or growing resources. It was pleasing to see the increase in byproduct gold grade and in contained gold to 122,000 ounces.

Altona is targeting lifting production to a rate of 650,000 tonnes per annum. Reserves and mining inventory total 4.75 million tonnes which will support production for a minimum of approximately 7.5 years.”

The mine plan is shown on long section in Figure 1.

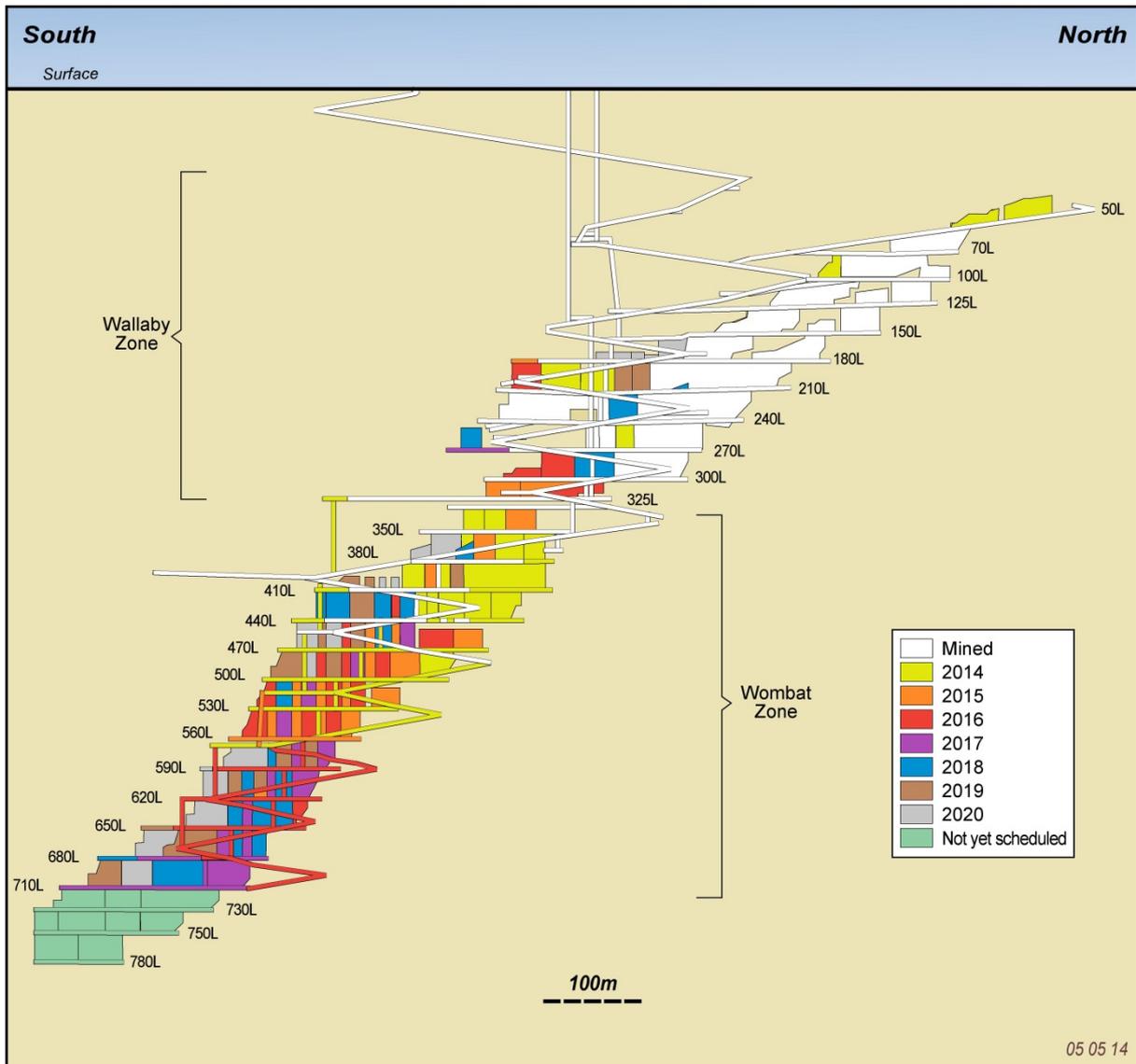


Figure 1: Longitudinal section of the Kylylahti mine showing the mine plan



Figure 2: Production drilling at Kylylahti mine

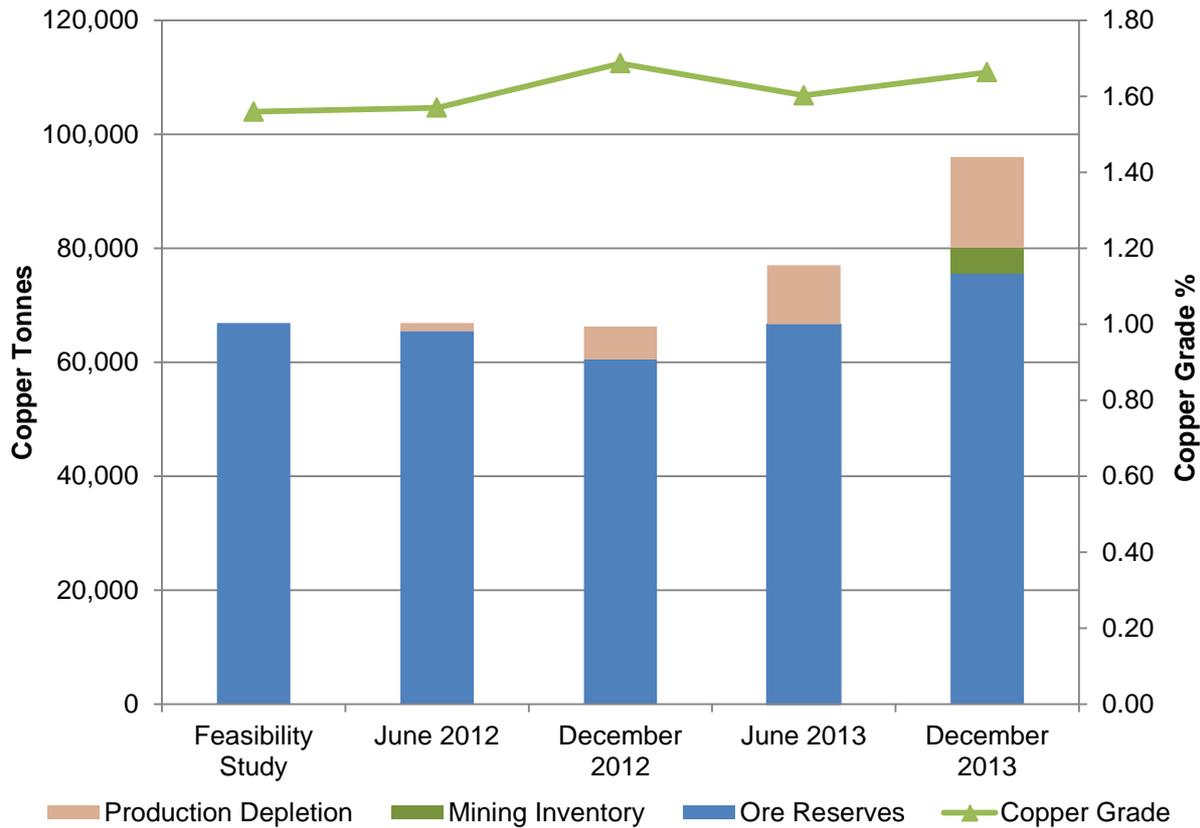


Figure 3: Copper metal in Reserves

Table 1: Kylylahti Ore Reserve Estimate, December 2013

	Tonnes (m)	Cu (%)	Au (g/t)	Zn (%)	Cu (t)	Au (oz)
Proven Ore Reserves	0.57	1.43	0.66	0.66	8,151	12,000
Probable Ore Reserves	3.98	1.70	0.86	0.61	66,068	110,000
Total Reserves	4.55	1.66	0.83	0.62	75,651	122,000
Mining Inventory	0.2	1.75	0.54	0.63	4,475	4,415

Note: Totals may not match sub-totals due to rounding.

This estimate is higher than the 30 June 2013 estimate of 4.2 million tonnes at 1.60% copper, 0.73g/t gold and 0.63% zinc (see ASX announcement on 29 August 2013). Contained copper increased by 13% as a result of ore tonnes increasing 9% and copper grade increasing by 4%.

Table 2: Kylylahti Ore Reserve Estimate, June 2013 (Superseded, provided for comparison purposes only)

	Tonnes (m)	Cu (%)	Au (g/t)	Zn (%)	Cu (t)	Au (oz)
Proven Ore Reserves	0.6	1.51	0.75	0.66	9,600	14,500
Probable Ore Reserves	3.5	1.62	0.73	0.62	56,700	82,200
Total Reserves	4.2	1.60	0.73	0.63	66,700	97,700

Note: Totals may not match sub-totals due to rounding.

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 production¹ 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.

¹Refer 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.

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JORC 2012

The Company has reported Reserves according to the 2012 update of the JORC Code and a full "Table 1" is appended. Kylylahti is an operating mine with extensive prior disclosure. The estimates herein reflect Altona's bi-annual reserve review.

Competent Persons Statement

1. Ore Reserve Estimates: The Kylylahti Ore Reserve Estimates that are reported in this ASX Release were undertaken by Mr Antti Sorsa MSc, MAusIMM, Mine Planning Manager at the Kylylahti mine and 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 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'. Mr Sorsa consents to the inclusion in the report of the matters based on their 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 and Dr Iain Scott PhD Min. Processing, BSc Met. (Hons) who are both full time employee of the Company and who have sufficient 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 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 and Dr Iain Scott consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.
3. Production target: An insignificant proportion of the estimated mine life, being less than 4.5% of the life of mine production target is based on inferred mineral resources. These inferred resources are scheduled for mining at the end of mine life and are located at the lower limit of the resource. These tonnes will be defined by infill drilling as mine development progresses deeper. Refer to ASX release of 26 March 2014 for further information on the Resource estimates for the Kylylahti Mine.
4. 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.

JORC Table 1

The table below is a description of the assessment and reporting criteria used in the Kylylahti 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
Estimation and Reporting of Ore Reserves	
Mineral Resource Estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> The Kylylahti resource model (December 2013) was used for conversion to Ore Reserves. The Mineral Resource is inclusive of Ore Reserves.
Site visits	<ul style="list-style-type: none"> The Competent Person works at the mine and is actively involved in the planning process on a daily basis.
Study status	<ul style="list-style-type: none"> The mine is in production and feasibility studies have been superseded. The surface level at the mine is +92 metres above sea level. The reference level for the levels is sea level so it should be noticed that the level values represent the depth below the sea level not depth from surface. The Ore Reserves above level 380 reflect an operating underground mine. The Ore Reserve for this area has been updated based on the experience gained from production. Ore Reserves below the 380 level are based on the mine plan by the mine planning team which includes transverse stoping as the main mining method in that area. The plan for transverse stoping has been updated for this reserve estimate utilising the experiences gained from production in upper level longitudinal stopes when applicable.
Cut-off parameters	<ul style="list-style-type: none"> The ore cut-off grade is based upon a Net Smelter Return (NSR) value, which is derived from copper, gold and zinc grades, recoveries and payabilities. Payabilities and recoveries vary with grade and concentrate quality but on average recoveries are copper 92%, gold 75% and zinc 49%. Payabilities are copper 96.5%, gold subject to 1g/t deduction from gold in concentrate and zinc 50%. The following approach has been to take determining NSR values to be used as cut-off parameters in different mining situations in the mine: NSR of 15.66€/t for development material that has to be hauled to surface. This approximates a copper grade of 0.39%. NSR of 28.27€/t for stope boundaries where the ore can be extracted without additional stope preparation work. This approximates a copper grade of 0.63%. Below level 300 a depth increment of 0.25€/t is added to the NSR cut-off for each 30m level interval representing the change in ore haulage distance. At the 590 level an additional depth increment of 2.75€/t is added to the NSR cut-off representing the overall change in backfill haulage distance. Below level 590 a depth increment of 0.25€/t is added to the NSR cut-off for each 30 metre level interval representing the change in backfill haulage distance. The NSR cut-off value between levels 300-750 varies from 28.27€/t to 36.52€/t. This approximates a copper grade of 0.65-0.81%.

Criteria	Commentary
	<ul style="list-style-type: none"> An NSR of 52.19€/t for the minimum grade of an entire stopping panel. This approximates a copper grade of 1.09%.
Mining factors or assumptions for levels above level 380	<p>The following is relevant for stoping design above level 380:</p> <ul style="list-style-type: none"> The mining method used is longitudinal open stoping with cemented rock fill (CRF) and/or waste rock fill. Parts of the orebody, however, will be mined using upward stoping without backfill. The stopes vary in dimension as follows: Heights between 8 metres and 30 metres, lengths between 20 metres and 50 metres and width in average between 4 metres and 12 metres. A 5.5 x 5.5 metre decline is used for ore transportation and access to development drives. Level spacing is 25-30 metres vertical, and development drives are connected to the decline by access drives. In the upper parts of the mine (levels 50 to 150) access drives are located at the southern end of the orebody, in the middle parts (levels 180 to 300) access drives enter the orebody in the middle, and development drives extend to the north and south. In the lower parts (levels 325 and 350) the decline moves around the orebody from the footwall to hangingwall side, and accesses the orebody from the northern end. On level 380 the access is again at the southern end of the orebody. Stoping generally proceeds from the northern and southern ends of the orebody, with mining upwards from the bottom. Due to the orebody plunging approximately ~25° to the south-west, the northernmost stopes on each level can be mined as a bottom level stope. In areas where stopes can be accessed from above, the front end of the stopes will be filled with CRF. The next stope opening will then be blasted so that no pillar will be left against the CRF wall, thus maximising ore recovery. Stope designs generally include dilution to ensure that the shapes are practical and can be mined and extracted. This dilution is included in the stope tonnes and grades as planned dilution. In addition, overbreak is assumed as unplanned dilution. The unplanned dilution factor applied is dependent upon the stope width and shape. It is assumed that approximately 0.5 metres of overbreak will occur on both sidewalls of the stope. Therefore dilution varies between 5% in wide stopes (>20 metres) and 25% in narrow stopes (4 metres). When stope shape and stope location is seen as being exceptionally difficult an additional dilution factor of 2 to 10% is used. Unplanned dilution is anticipated to come from footwall and hangingwall in a 50/50 ratio. The diluting material carries metal grades. The dilution grades that are used are calculated average resource model values for both Wallaby and Wombat orebodies assuming a 0.5 m thick layer on both sides of the stope. The definition of dilution here is assumed to be the ratio of dilution tonnes / in-situ ore tonnes (before ore loss is applied). The recovery from planned stopes is assumed to be 90% for open stoping and 85% for upward stoping. Additional ore losses are expected in potentially difficult stopes, based on their location or shape. The

Criteria	Commentary
	<p>unrecovered ore (ore loss) is assumed to result from underbreak and over size material.</p> <ul style="list-style-type: none"> • The mine is using a cavity measurement surveying (CMS) device for measuring the actual stope volumes. Stope recovery and dilution of each stope is analysed from the CMS-results and this information is used to continuously improve the planning and production processes. • The minimum stope width used is 4 metres. • The infrastructure for mining above level 380 has been completed. Infrastructure includes the decline, access tunnels, development drives, ventilation headings/rises and support headings (such as water sumps). Electricity, water, ventilation and water discharge systems are also in place. • Reserves have only been derived from Measured and Indicated Resource categories.
Mining factors or assumptions for levels below level 380	<ul style="list-style-type: none"> • The following is relevant for stoping below level 380. • The main mining method to be used between the 380 and 750 levels is transverse open stoping with cemented rock fill (CRF) and/or waste rock fill. Longitudinal open stoping with cemented rock fill (CRF) and/or waste rock fill will be used when it is applicable due to orebody geometry. Parts of these longitudinal areas will be mined using longitudinal upward stoping without backfill. The stope height in transverse stoping is planned to be 30 metres, the length between 8 metres and 45 metres. The width in primary stopes will be 10 metres and in secondary stopes 15 metres. • The decline is used for ore transportation and access to development drives. Level spacing is 30 metres and development drives are connected to the decline with access drives. • Access development is driven in the hangingwall waste rock parallel with the orebody. From there, transverse ore drives enter the orebody every 12.5 meters. At the northern and southern ends of the orebody, where transverse stoping is not feasible, longitudinal ore drives are built along the orebody and the ore is mined using longitudinal open stoping. • Transverse stopes may be mined in two stages; the first stage will exploit high-grade massive sulphides on the footwall (east) of the deposit and the second stage will retreat to mine largely disseminated ore in the hangingwall. • Longitudinal stoping will start from the northern end of the orebody, and proceed upwards from the lowest level. Transverse stoping will start with primary stopes in the middle of the orebody at the bottom level, or in the northern end when stopes below the transverse stope have been mined. Once primary stopes have been filled with CRF, secondary stopes will be mined. Secondary stopes generally lie between cemented primary stopes and are filled with waste rock. Level 440 is planned to be used as a starting level, and ore below this is planned to be mined working below a ~5m thick ore crown pillar which is planned to be recovered when retreating from the production area. More starting levels will be used where necessary to ensure enough workable stoping locations for steady production. • In longitudinal stopes the front end of the stopes will be filled with CRF.

Criteria	Commentary
	<p>The next stope opening will then be blasted so that no pillar will be left against the CRF wall, thus maximising ore recovery. In transverse stoping, primary stopes will be filled with CRF to allow maximum recovery for the secondary stopes. When a secondary transverse stope is being mined in two parts, the front end of the first part will be filled with CRF to allow the recovery of the second part.</p> <ul style="list-style-type: none"> • Stope designs generally include dilution to ensure that stope shapes are practical and can be mined. This dilution is included in stope tonnes and grades as planned dilution. In addition, overbreak is assumed to result in unplanned dilution. In longitudinal stoping, the dilution factor is dependent upon the stope width and shape. It is assumed that approximately 0.5 metres of overbreak will occur on both sidewalls of the stopes. Therefore dilution varies between 5% in wide stopes (>20 metres) and 25% in narrow stopes (4 metres). When stope shape and stope location is seen exceptionally difficult an additional dilution factor 2 to 10% is used. • In the primary stopes of transverse stoping, both sidewalls are in ore and therefore no waste rock dilution comes from them. The footwall and hangingwall ends of the stope are in waste rock and 5-15% dilution is expected from them. In secondary stopes both sidewalls are made of CRF, and 5% of zero grade CRF dilution (which approximates a 56cm layer of CRF and bogged waste from the filled stope below) is assumed to come from them. The stope ends are in waste rock similarly to primary stopes, and 5-15% waste rock dilution is expected from them. • Unplanned waste rock dilution is expected to come from footwall and hangingwall in a 50/50 ratio. The diluting material carries metal grades. The dilution grades that are used are calculated average values for the Wombat orebody assuming a 0.5 m thick layer on both ends of the stope. • The definition for dilution here is assumed to be the ratio dilution tonnes / in-situ ore tonnes (before ore loss). • The recovery from planned stopes is assumed to be 90% for longitudinal and 85% for upwards stoping. The planned recovery for primary transverse stopes is assumed to be 92% and for secondary stopes 85%. The unrecovered ore is assumed to result mainly from failed blasts that fail to loosen the ore or from oversize boulders that prevent full clean-up of the stopes. • The mine is using a cavity measurement surveying (CMS) device for measuring the actual stope volumes. Stope recovery and dilution of each stope is analysed based on the CMS results and this information is used to continuously improve the planning and production processes. • The minimum stope width used in longitudinal stoping is 4 metres. Transverse stopes have fixed widths of 10 metres (primary stopes) and 15 metres (secondary stopes). • The development work of infrastructure for mining below level 380 is under way. Infrastructure will include the decline, access drives, development drives, ventilation headings/rises and support headings (such as water sumps). Electricity, water, ventilation and water discharge systems are also under construction. At the moment (May 2014) the decline is proceeding at level 470 and level development at levels 350 and 380 will soon be

Criteria	Commentary
	<p>finished. Main areas for level development at May 2014 are the 410 and 440 levels.</p> <ul style="list-style-type: none"> Reserves are derived only from Measured and Indicated Resource categories.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The Kylylahti mine and Luikonlahti mill have been operating since early 2012 processing Kylylahti ore as designed in the 2010 Definitive Feasibility Study; extensive detail is given in the ASX release dated 23/10/2010. The metallurgical process is well established; 3 stage crushing, rod mill and pebble mill followed by flotation to produce copper-gold concentrate and a zinc concentrate for sale, together with a low-grade cobalt-nickel concentrate for storage and a sulphur concentrate for disposal. The flowsheet is virtually identical to that employed at the plant in the past for 15 years of treating similar ore. Metallurgical recoveries are well established and vary slightly with head grade on average the recoveries are: <ul style="list-style-type: none"> Copper 92.1% Gold 74.9% Zinc 49.0% Extensive metallurgical testwork representative of the ore body has been completed over the 20 years between discovery and production. Metallurgical domains reflect the geological domain with massive and disseminated sulphides. There are no deleterious elements. Bulk sampling is not applicable, as the mine is in production. The saleable product is a concentrate, not a mineral.
Environmental	<ul style="list-style-type: none"> Mined waste rock will be used in stope backfill. Before stoping and backfilling commenced, development waste rock has been stored in a constructed waste rock pile on the surface. Rain and seepage waters are collected and treated before being drained into the environment. When mining advances, the waste rock pile will be transported underground into stope fill. Mined ore is trucked 43 kilometres to the Luikonlahti mill for processing. Copper-gold and zinc concentrates are produced for sale and Co-Ni and Sulphur concentrates are stored in lined dams for possible sale or further processing in the future. The final tailings are non-acid forming and are stored in the tailings storage facility. All rain, process and seepage waters are collected and treated before being drained to the environment. The exception is a small amount of leakage from an old pit at Luikonlahti which is permitted under licence conditions. Altona is investigating collection of these waters. Both Mine and Mill operate under granted Environmental Permits.
Infrastructure	<ul style="list-style-type: none"> All required infrastructure is in place and has been used since production started at early 2012. The processing plant is located 43 kilometres from the mine. Power, water and transportation is available and already in use. The centre of the municipality of Polvijärvi (~5,000 inhabitants) is located only 2 kilometres from the Kylylahti mine. Additionally the town of Outokumpu and the city of Joensuu are located 20 kilometres and 40

Criteria	Commentary
	<p>kilometres away from the mine respectively. Accommodation is readily available in all these places. The mine has currently all the workforce needed for full operation.</p> <ul style="list-style-type: none"> • The centre of the village Luikonlahti (~500 inhabitants) is located ~3 kilometres from the Luikonlahti mill and the centre of the municipality of Kaavi (~3000 inhabitants) is located ~15 kilometres from the processing plant. Additionally the town of Outokumpu and the city of Kuopio are located 40 kilometres and 75 kilometres away from the processing plant respectively. Accommodation is readily available in these places. The processing plant has currently all the workforce needed for full operation.
Costs	<ul style="list-style-type: none"> • The Kylylahti mine and Luikonlahti mill have been operating almost two years since early 2012, processing Kylylahti ore as designed in the feasibility study. The experience from production is used for estimating the capital and operating costs. • Allowances made for the content of deleterious elements in concentrate (currently there are no deleterious elements in the copper-gold concentrates but cobalt and iron penalties in zinc concentrates) are based on the agreements made with the current customer. • The long term metal prices used for Ore Reserve estimation are based on the company's forecasts and are as follows: <ul style="list-style-type: none"> - Copper: 3.00 US\$/lb - Gold: 1300 US\$/oz - Zinc: 0.85 US\$/lb • The exchange rate used in the study is based on the company's forecasts and is as follows: <ul style="list-style-type: none"> - Euro/USD: 1.25 • The transportation charges used are based on the current contracts. • The treatment and refining charges and also penalties (currently none applicable) are based on the agreements made with the current customer. • The allowances made for royalties payable (government/private) are based on Finnish mining legislation. There is no government royalty payable and only small compensation payments are made to landowners. Most of the operations are situated on land owned by the company.
Revenue factors	<ul style="list-style-type: none"> • Kylylahti mine and Luikonlahti mill have been operating since early 2012 processing Kylylahti ore as designed in the feasibility study. The operating experience and current agreements with customers are used to estimate the revenue factors. • The metal prices used are based on LME pricing less various standard deductions and charges for treatment and refining as per the agreements made with the current customer.
Market assessment	<ul style="list-style-type: none"> • Altona regularly reviews supply and demand characteristics for copper metal. At the forward prices assumed, Altona believes resources are economic. • Copper is a freely traded commodity on world markets. • Regular copper supply and demand analysis is available from a variety of sources (eg. Merchant banks, trading houses, brokers etc). • Copper is not an industrial mineral.

Criteria	Commentary
Economic	<ul style="list-style-type: none"> • Kylylahti is an operating mine. Operating costs are based on actual data, not assumptions. • Reserves are estimated on the basis of the net smelter return using long term copper prices and actual operating cost data.
Social	<ul style="list-style-type: none"> • The Kylylahti mine and Luikonlahti Mill are fully permitted and operating according to those permits. The Company undertakes various community engagement activities and sponsorships with local municipalities.
Other	<ul style="list-style-type: none"> • Risks are those typical of underground copper mines. • All necessary legal agreements are in place and in order. • All necessary governmental agreements and licencing requirements are in place and in order.
Classification	<ul style="list-style-type: none"> • Reserves have been classified as Proved Ore Reserves and Probable Ore Reserves. Proved Ore Reserves have been derived from the Measured Resource category and Probable Ore Reserves from the Indicated Resource category. • The Proved Ore Reserves category comprises Ore Reserves in the Wallaby, Gap and Wombat orebodies between levels 70 and 380 excluding 180 and 210 level hangingwall gold rich stopes and development, 270 and 300 level hangingwall gold rich stopes and development, which are included in the Probable Ore Reserves category. • The Probable Ore Reserve category includes Ore Reserves from level 380 downwards including also those areas described in the previous point. Also remaining reserves at 50-level are included in the Probable Ore Reserves. • Results appropriately reflect the Competent Person`s view of the deposit. • No Probable Ore Reserves have been derived from Measured Mineral Resources.
Audits or reviews	<ul style="list-style-type: none"> • An external review of the procedures used for reserve estimation has been carried out by Optiro. • Above 300 metre level mining reconciliation information is available which is constantly internally reviewed. • The mine plan on which the reserves are based on is internally reviewed. • An external geotechnical study concerning the transverse stoping and mine infrastructure in the Wombat orebody is currently ongoing.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> • No relative accuracy and confidence level work has been done. • Underground mining information with grade control data and mill reconciliation data exists and has been used which increases the confidence of the reserve estimates.