3 August 2015

Ore Reserve for Cleveland Tailings Project supports low-cost production

This announcement should be read in conjunction with the attached Supporting Information and Appendix, which provide information material to understanding the reported estimates of ore reserves.

Elementos Limited (ASX: ELT) ("Elementos" or the "Company") is pleased to announce an initial Ore Reserve estimate based on the positive outcome of the Pre-feasibility Study (PFS) into the development of the Cleveland Tailings Project in north-west Tasmania.

The PFS, which is the subject of a separate market announcement made today, demonstrates that the Cleveland Tailings Project is both technically and financially viable and is considered sufficient to determine, in accordance with the JORC Code 2012, that a subset of the Indicated Mineral Resource (refer to announcement to ASX on the 17 June 2014) can be classified as an Ore Reserve.

Cleveland Tailings Ore Reserve estimate as at 3 August 2015 (at 0% Sn cut-off)

Classification	Tonnes (Mt)	Sn (%)	Cu (%)	Contained Sn (kt)	Contained Cu (kt)
Probable Reserve	3.7	0.29	0.13	11	4.8
Proven Reserve	0	–	–	–	–
Total Reserves	3.7	0.29	0.13	11	4.8

Sn = tin; Cu = copper; kt = thousand tonnes (kilotonnes); values are subject to rounding errors

The PFS identifies viable mining and processing methods and the infrastructure requirements for the project. Environmental and socioeconomic impact assessments are also well-advanced. The financial analysis conducted as part of the PFS takes into account all modifying factors that are considered relevant and material to the development of the project and the statement of Ore Reserves.

The inputs to the economic analysis were based on realistic assumptions of technical, engineering, operating, and economic factors. The selected loader-to-truck mining method is a proven method of extracting surface tailings. The process plant design is based on sound metallurgical testing and utilises conventional mineral processing technologies that are commonly used in similar mining operations. The estimates of capital and operating costs were obtained from sources at appropriate levels of confidence for the stage of development of the project, which Elementos considers are, on the whole, conservative. And the outlook for tin pricing, obtained from respected, independent market analysts, is positive over the life of the project.

Importantly, the project is located in an area of Tasmania with a strong mining culture, well-developed infrastructure, an available pool of skilled workers, a supportive community, and an encouraging state government. Environmental and mining applications have been lodged and Elementos has every reason to believe that approval is likely given the strong stakeholder support for the project.

The PFS recommends advancing the project to a detailed feasibility study to confirm the assumptions made in the PFS and investigate the technical factors identified by the PFS that have the potential to optimise mining and processing operations.

Commenting on the Ore Reserve estimate, Elementos CEO Tim McManus said, "Our recently released Pre-feasibility Study confirms that we have a technically and financially viable tailings reprocessing project at Cleveland. The project is located in a very attractive low-risk mining jurisdiction and features low operating costs and low capital expenditure requirements. Importantly, the project economics are positive at today's tin price."

Mr McManus also commented, "This Ore Reserve supports stage 1 of our development plan for Cleveland. We are now looking forward to further developing stages 2 and 3 and realising a globally significant tin and copper resource."

For more information, please contact:

Tim McManus

Chief Executive Officer

Phone: +61 7 3221 7770

Email: admin@elementos.com

Elementos is an Australian, ASX-listed metals company, focused on the development of Cleveland, an advanced stage tin-copper and tungsten project in Tasmania.

Please visit us at: www.elementos.com.au

COMPETENT PERSON'S STATEMENT

The information in this document that relates to Ore Reserves is based on information compiled by Tim McManus, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy, a full-time employee of Elementos, and who consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Tim McManus has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (JORC Code 2012).

In order to provide transparency and full disclosure of any potential conflict of interest by the Competent Person, it should be noted that Tim McManus is also a shareholder of Elementos Ltd. However, the information in this report provided by the Competent Person, as it relates to Ore Reserves, has been independently reviewed by a third party who confirmed that the Indicated Mineral Resource was estimated with sufficient confidence for it to be used as a basis for ore reserve estimation, and that the Ore Reserve estimate takes into account all the relevant Modifying Factors that are required to determine that the mine plan and production schedule are technically achievable and economically viable.

ORE RESERVE STATEMENT

A Pre-feasibility Study has been undertaken in order to achieve the required level of confidence in the Modifying Factors prior to the determination of the below-stated Ore Reserve, which is reported in accordance with The JORC Code 2012.

Cleveland Tailings Ore Reserve estimate as at 3 August 2015 (at 0% Sn cut-off)

Classification	Tonnes (Mt)	Sn (%)	Cu (%)	Contained Sn (kt)	Contained Cu (kt)
Probable Reserve	3.7	0.29	0.13	11	4.8
Proven Reserve	0	–	–	–	–
Total Reserves	3.7	0.29	0.13	11	4.8

Sn = tin; Cu = copper; kt = thousand tonnes (kilotonnes); values are subject to rounding errors

The overall confidence in the results of the study is within 25%. The company's confidence in the results of the study is based on:

- The preferred loader-to-truck mining method is an effective and technically viable method of extraction.
- The Process Plant design utilises conventional mineral processing technologies that are widely used in similar mining operations.
- The Process Plant design is based on sound metallurgical testing.
- The estimates of capital and operating costs were obtained from sources at appropriate levels of confidence for the stage of development of the project.
- The economic analysis was based on realistic assumptions of technical, engineering, operating, and economic factors.
- The outlook for tin pricing over the life of the project is positive.
- The sensitivity analysis indicates that the project is financially robust and, due to its low capital and operating cost profile, is able to operate through market troughs.
- The results of the study are sufficient for a Competent Person, acting reasonably, to determine a subset of the Mineral Resource may be classified as an Ore Reserve.

COMPLIANCE STATEMENTS

Elementos confirms that all relevant Mineral Resource and Ore Reserve estimates were estimated, reported and reviewed in accordance with the guidelines of the *Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (The JORC Code) 2012 edition.

Elementos confirms that it is not aware of any new information or data that materially affects the information included in the Cleveland Tailings Mineral Resource released on 17 June 2014 and that all material assumptions and technical parameters underpinning the estimates in the Cleveland Tailings Mineral Resource continue to apply and have not materially changed. Elementos also confirms the form and context in which the Competent Person's findings are presented have not been materially modified from the 17 June 2014 announcement.

SUPPORTING INFORMATION

Description of project

The Cleveland Tailings Project is located within EL 7/2005, which has an area of 18 square kilometres and includes the historical Cleveland Mine, tailings dams, and supporting surface infrastructure areas.

Elementos submitted a Mining Lease Application (MLA) with Mineral Resources Tasmania (MRT) on 31 March 2015. The MLA covers the reclamation of the Tailings Mineral Resource and Ore Reserve stated in this market announcement.

The in situ, hard-rock Cleveland deposit is a series of tin and copper bearing semi-massive sulfide lenses (pyrrhotite-cassiterite-stannite-chalcopyrite) within a series of sedimentary rocks belonging to Hall's Formation of Cambrian age. The deposit is geologically similar to the tin-bearing semi-massive and massive sulfide stratiform mineralisation at Renison.

Within the Cleveland mine's semi-massive sulfide mineralization, the cassiterite is fine grained with grains generally being in the size range of 0.02 mm to 0.07 mm. During the Aberfoyle operations at Cleveland, tin and copper recovery both averaged 60%. The cassiterite and chalcopyrite not recovered during historical processing forms the basis of Elementos's Tailings Mineral Resource and Ore Reserve.

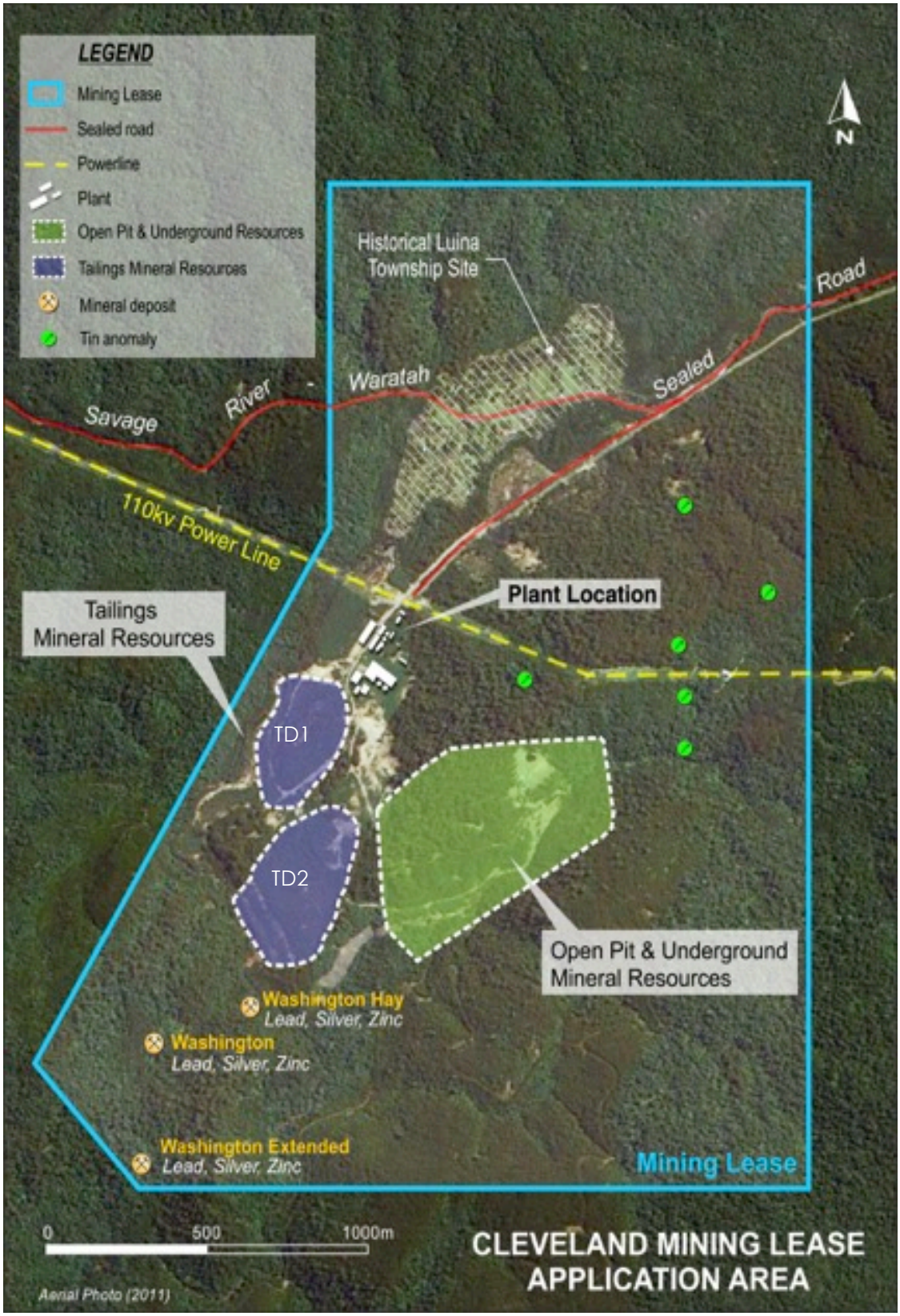
Tailings Dam 1 (TD1) is the dam closest to the old mill site and its embankments flank the Whyte River. The dam was the first to be constructed and importantly was in operation prior to the installation of flotation recovery. This is important as due to the lower recovery during operations, TD1 can be expected to be of a higher grade when reprocessed.

TD1 was constructed with a downstream toe of 'float' (gravel sized waste rock from previous milling operations) and the embankment raised by upstream construction by spiggoting from the crest, to an estimated maximum height of 22 metres. Surface drainage was set up to drain towards the centre of the dam and then in a north-easterly direction to an old decant tower, where it drained via an underground pipe to a small settling dam and then to the Whyte River. The surface of TD1 was rehabilitated and revegetated in 1987. Rehabilitation included a covering of 'float' to a depth of 300 mm, the surface was then capped with clay and seeded with native tree and shrub species.

Tailings Dam 2 (TD2) was also constructed by spiggoted tailings and raising by the upstream method. The dam was raised by a combination of 'float' toe zone and a wide berm at the mid-point of the dam. During operations, additional fill material was added to the toe of the embankment to strengthen the dam wall. The dam was taken out of service in 1985 and its estimated embankment height is approximately 40 metres. The surface and embankments of TD2 have also been covered with 400 mm of 'float' and 300 mm of clay and revegetated. Surface drainage is towards the centre of the dam with runoff from the southern and eastern

slopes. A channel has been constructed which directs the surface runoff to the northern side and into the perimeter drain which flanks TD1 and flows to the Whyte River. Seepage is evident near the southern abutment adjoining the Whyte River.

Mining lease application area



Summary of information material to the estimation of Ore Reserves

The supporting information below is required, under Chapter 5 of the ASX Listing Rules, to be included in market announcements reporting estimates of Ore Reserves. Elementos considers that this provides a fair and balanced representation of the information contained in the separately reported Pre-feasibility Study (PFS) and Ore Reserve Statement. It includes a summary of all information material to understanding the reported estimates of Ore Reserves.

Criteria used for classification of Ore Reserves, including the classification of the Mineral Resources on which the Ore Reserves are based, and the confidence in the modifying factors applied.

It is the opinion of the Competent Person that a technically viable method of extracting and processing the Mineral Resource has been established by the PFS. This opinion is based on (a) the Mineral Resource has been competently estimated, (b) the mining method is feasible and appropriate, (c) adequate provision has been made for loss and dilution, and (d) metallurgical testing has been competently carried out.

The basis of the Probable Ore Reserve estimate is the Indicated Mineral Resource of 3.8 Mt @ 0.30% Sn and 0.13% Cu (0% Sn cut-off), as announced by Elementos on the 17 June 2014 ("Cleveland Tailings Resource Upgrade").

The PFS includes a financial analysis based on realistic assumptions of technical, engineering, operating, and economic factors and the evaluation of other relevant factors that are sufficient for the Competent Person, acting reasonably, to determine a subset of the Mineral Resource may be classified as an Ore Reserve. The overall confidence of the study is within 25%, and it is recommended that the Project proceeds to further detailed studies to obtain a higher level of confidence as a basis of construction approval.

The main areas of uncertainty relate to (a) variability of goethite and siderite in the tailings material, (b) location and design of the Tailings Storage Facility, (c) copper concentrate product, (d) and variability of tin and copper grades. These potential risks are discussed further in the later section titled "Other material factors".

The mining method selected and other mining assumptions including mining recovery factors and mining dilution factors

It is the opinion of the Competent Person that the mining method and related factors and assumptions used in the PFS to convert the Mineral Resource to an Ore Reserve are at an appropriate level of confidence to state a Probable Reserve. These factors and assumptions include:

(a) Several mining methods were reviewed for their suitability. On the balance of all the criteria considered (capital cost, surface water management, production flexibility, physical variability of the tailings, availability and operating cost), a loader-to-truck method was selected.

(b) The tailings Mineral Resource is scheduled to be mined at a rate of 650 thousand tonnes per annum (ktpa) over a mine life of 7 years. The loader and truck capacity is factored at 75% to allow for moist material. The fleet has an availability of 75% and is assumed to operate on a two 12-hour daily shift roster.

(c) The mining rate is matched to meet processing throughput and will be conducted by loader-to-truck, which minimises water management complexities and is a low-capital option due to local contractors being engaged to provide mining services. The operating costs are competitive with traditionally lower operating cost alternatives such as dredging. This is largely due to the high availability of underutilised contracting services in the region and the low cost and high availability of skilled labour.

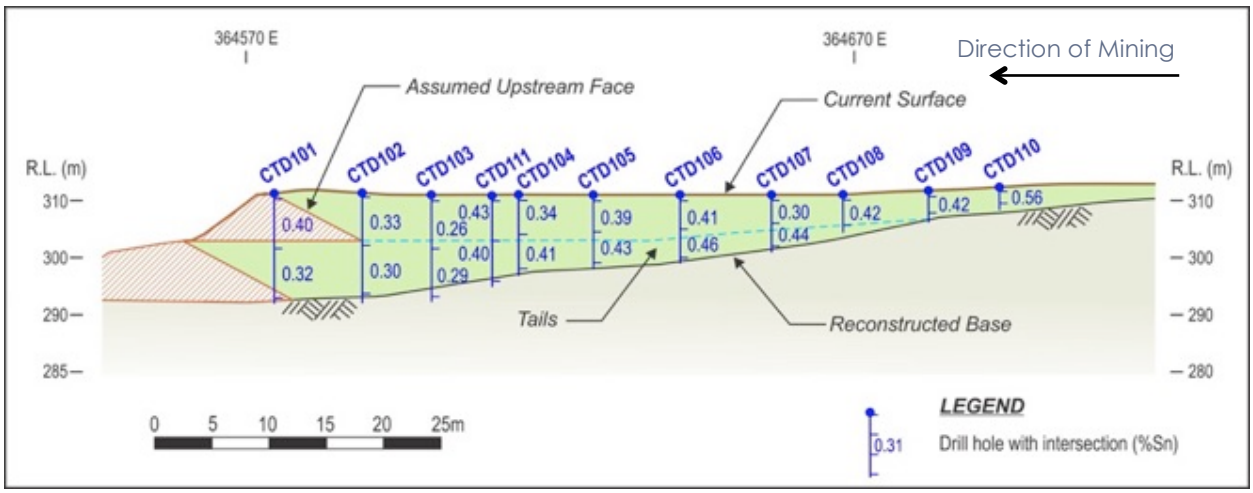
(d) The mine plan is to be executed in four phases: preliminary site works, construction and commissioning, mining of TD1 and mining of TD2. The resource will be mined as a global resource and reconciled as such.

(e) No stability calculations have been undertaken for tailings dam walls to check compliance with the current ANCOLD guidelines. However, the stability of the walls was assessed as part of an investigation undertaken by Golder Associates in 1978. It was noted during surveillance inspections in 1988 Golder's recommendations had been implemented. Existing wall stability is therefore not a concern and no failures have been noted in recent inspections. Removal of the tailings is expected to increase wall stability and safety as the work progress.

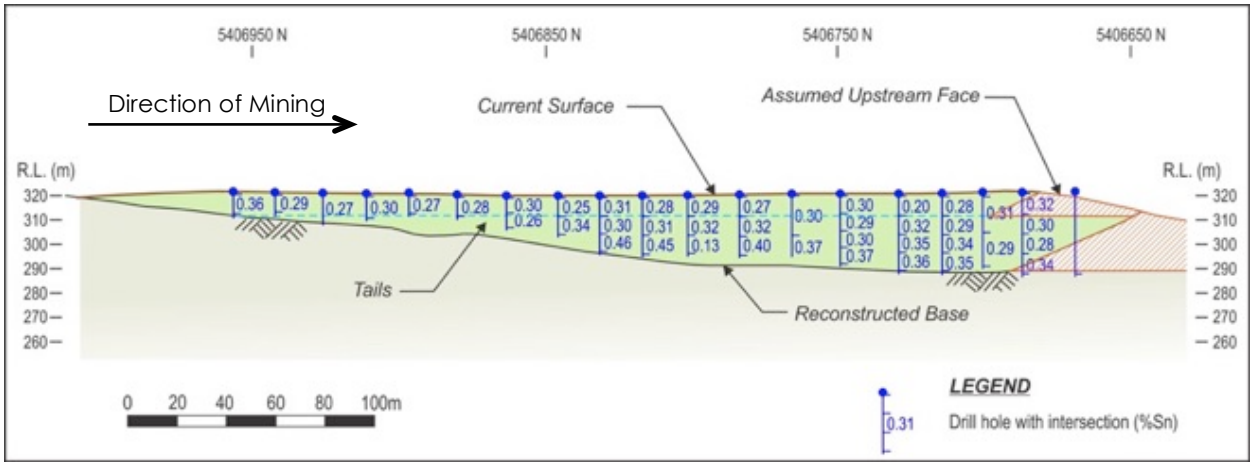
(f) An overall loss of 2% has been applied to the tonnes delivered to the trommel at the processing plant. This estimate was based on the application of 4% ore loss and 2% dilution to the Mineral Resource.

(g) Only Indicated Mineral Resources have been utilised in mining studies.

Tailings Dam 1 Schematic cross-section showing mining direction from 'beachhead' to the dam wall



Tailings Dam 2 Schematic cross-section showing mining direction from 'beachhead' to the dam wall



The processing method selected and other processing assumptions including the recovery factors applied and the allowances made for deleterious elements

It is the opinion of the Competent Person that the processing method and related factors and assumptions used in the PFS to convert the Mineral Resource to an Ore Reserve are at an appropriate level of confidence to state a Probable Reserve. These factors and assumptions include:

(a) Two saleable concentrate products will be produced: a tin concentrate grading 51% and a copper concentrate grading 18%, with recoveries of 47% and 31% respectively.

(b) Critical to the assessment in the PFS on the success of reprocessing the tailings at Cleveland has been the significant metallurgical testing under taken by ALS Burnie Laboratory and supervised on behalf of Elementos by Mike Gunn, a well-regarded and experienced tin metallurgist.

(c) The metallurgical test work utilised composite samples of tailings from the two tailings dams: TD1 and TD2. The test work was largely based on the flow sheet used by Cleveland Tin in pilot plant tests in 1984. Elementos took the samples using a "whacker" or sonic drill and 88 out of 110 intervals from 21 holes were composited, with surface capping material being discarded. Considering their spatial distribution and depth, the 88 intervals comprise an acceptably representative sample of the tailings. These samples also correlated to results from previous drilling completed in 2007.

(d) The composite sizing and assay was consistent with the weighted average of drill core interval sizings and assays and with estimates of the average tailings grade estimated from historical production data and past sampling programs.

(e) The results achieved in the bench-scale testing were comparable to those results interpreted from the preliminary testing. The amount and representativeness of metallurgical test work is reasonable for the type of study undertaken. The testing produced the metal recoveries and concentrate grades shown below, which are expected to be reproduced from the planned flow sheet.

Anticipated metal recovery and tin concentrate grade

	Solids tph	Grade %Sn	Total Sn recovery %	Grade %Cu	Total Cu recovery %
Dressed gravity product	0.12	58.3	18.1		
Dressed float product	0.33	25.0	29.2		
Total dressed product	0.45	33.7	47.3		
Leached gravity product	0.103	66.7	18.1		
Leached float product	0.192	42.5	29.2		
Total leached product	0.295	50.9	47.3		
Potential copper product			~1.5	18.1	30.0
Tailings	99.55	0.18	51.2		

Sn = tin, Cu = copper

(f) Based on these results, an Engineering Study was completed by Howcam-Mincore, which provided a Process Plant design and costing estimate to an accuracy of ±25%. The process consists of trommel and screening, sulfide (copper) flotation, gravity separation, regrinding, cassiterite flotation and concentrate leaching. The process is appropriate for the style of mineralisation and, at an individual component level, is a well-tested technology.

(g) The cassiterite flotation concentrate grade is projected on the basis of upgrading the flotation concentrate by UF Falcon. The grade and recovery that are achieved at Renison from a lower flotation concentrate grade are used for these projections. The test work has not generated sufficient mass of flotation concentrate to enable testing of UF Falcons, and this will be one of several justifications for a further testing. The use of sulfuric acid leaching to remove soluble minerals, such as siderite and goethite, provided the final product grade results.

(h) The Ore Reserve estimate is based on representative mineralogy, which is suitable to meet the saleable concentrate specification.

(i) The Project has adequate power, water and communications available on site with sealed roads to the port of Burnie for export to smelters in Asia.

The basis of the cut-off grade or quality parameters applied

As selective mining of the tailings is not planned, no cut-off grade has been applied. That is, the Ore Reserve has been quoted at 0.0% Sn cut-off grade.

Estimation methodology

It is the opinion of the Competent Person that the method used in the PFS to confirm the estimated volume of the Mineral Resource was technically sound. This opinion is based on:

(a) Elementos engaged independent mining consultants, Pitt & Sherry, to consolidate historical data and information for the use in technical studies. Pitt & Sherry used historical scanned surface plans and current test work to model the tailings dams and the base topography using Surpac mine modelling software. The geometry for the upstream faces of the embankment were derived from design sections of the dams and by reconstructing the base topography. Tailings volumes were then determined.

(b) The current topographical surfaces were derived from LiDAR (Light Detection and Ranging) survey data and the datum for this data is Map Grid of Australia (MGA) based upon the Geodetic Datum of Australia 1994 (GDA94).

(c) The original base topography for TD2 was modelled by digitising historical topographical plans sourced from Mineral Resources Tasmania, supplemented by recent borehole data. The base for TD1 was derived by extrapolating the surrounding topography and depths derived from borehole data, as no historical topographical plans were available.

(d) The volumes reported by Pitt & Sherry confirmed the Mineral Resource estimate as a sound basis for reserve estimation.

Material modifying factors including the status of environmental approvals, mining tenements and approvals, other governmental factors and infrastructure requirements for selected mining methods and for transportation to market

It is the opinion of the Competent Person that all Modifying Factors material to the statement of Ore Reserves were considered in estimating the Ore Reserve. These factors included:

(a) Status of environmental approvals

A DPEMP has been prepared and submitted according to the Environment Protection Authority (EPA) guidelines for the preparation of a DPEMP for level 2 activities and 'called in' activities and the EPA guidelines for the Cleveland Mine Project DPEMP. The DPEMP was submitted on 12 March 2015. It identifies and assesses potential impacts associated with the proposed Project. The approvals process is continuing and Elementos has every reason to believe, at this time, that approval is likely.

(b) Mining tenements and approvals

The Project assets are 100% owned by Rockwell Minerals (Tasmania) Pty Ltd, which is a wholly owned subsidiary of Elementos Limited. The assets are held under Exploration Licence's EL7/2005 and EL15/2011.

The Cleveland Tailings Project is located within Exploration Licence 7/2005, which has an area of 18 square kilometres and includes the historical Cleveland underground mine, its tailings dams, and supporting surface infrastructure areas.

Elementos has submitted a Mining Lease Application (MLA) with Mineral Resources Tasmania. The MLA provides for the mining of tin, copper, tungsten and clay in adherence with the Tasmanian Mineral Resources Development Act 1995. The MLA covers the reclamation of the Tailings Mineral Resource and Ore Reserves.

(c) Other governmental factors

There are reasonable grounds to expect that all necessary government approvals will be received within the timeframes anticipated. There are no unresolved matters that are dependent on a third party, other than government approvals, on which extraction of the reserve is contingent.

There are no known proceedings standing against Elementos under any Commonwealth, state or territory law regarding the protection of the environment or the conservation or sustainable use of natural resources associated with the site.

(d) Infrastructure requirements for selected mining method

The infrastructure requirements for a loader and truck mining operation are minimal due to the availability of a local contractor based in Waratah with a fully serviceable workshop and yard. A laydown area has been delineated on site for mobilisation and demobilisation purposes.

(e) Transportation to market

The concentrate products will be stored in 24-tonne closed containers. The closed containers will enable covered storage to prevent rain egress and dust emissions prior to transport offsite. Approximately 2 to 3 containers of concentrate (24-72 tonnes of concentrate) per week are anticipated.

Semi-trailers capable of transporting a single container will provide product transport. Access to the site from Burnie will be via major sealed roads (Bass Highway, Massey Green Development Road, Ridgley Highway and Waratah Road).

A container ship currently runs between Melbourne, Burnie, and King Island every month. At the Port of Melbourne, cargo will be transferred to a larger vessel for shipment to customers in Asia with smelting and refining capabilities.

Potential buyers were contacted for both tin and copper products and confirmed their saleability in writing and their interest in negotiating sale agreements. However, at this stage, no sale contracts have been discussed or agreed.

(f) Other material factors

The ability to clean the concentrate to a marketable grade by acid leaching is a critical step in the process. The ability to clean the concentrate depends on the quantity of acid-soluble material in the flotation and gravity concentrates. Because the goethite and siderite (the main soluble minerals) are likely to have formed by oxidation processes within the Tailings Dams, their location and quantity is likely to be highly variable, which is a risk to the quality of the plant feed, and might impact on recoveries.

It is the opinion of the Competent Person that samples used for metallurgical test work are representative of goethite and siderite because the sample is composited from samples taken from across the Mineral Resource. Further studies will assist in understanding the variability, and regular sampling of tailings during mining will likely minimise this risk.

The Tailings Storage Facility requires further study to reduce the risk of capital overrun. Although the study sourced budget quotes based on preliminary engineering designs, there is a risk, due to further geotechnical work, that the Tailings Storage Facility design will require changes, which might increase the capital cost of the facility. Alternative locations, however, would significantly reduce the capital cost.

The copper concentrate requires further assessment because only small volumes of sample were available after characterisation of the tin concentrate. Although Elementos reasonably expects to produce a copper concentrate, it recognises that further assessment is warranted. In addition, further assessment of the reduction of penalty elements could potentially add significant value.

The sensitivity analysis demonstrates that the forecast cash flow is sensitive to fluctuations in both head grade and recovery. The results of the preliminary testing and the bench-scale testing are both comparable and demonstrate a consistent grade and recovery can be achieved for tin.

In addition to the drilling by Elementos, in 2007, Lynch Mining drilled 31 air core holes to test the tailings. Samples from the drill holes were submitted for assaying at the Burnie Research Laboratory. The tin and copper assays from these samples generally confirmed the reliability of tin and copper grades as estimated.

The quantity and grades of the tailings have been estimated from the operating statistics of a competently run mill and are considered to be reasonably reliable. The estimate of the Mineral Resource is of the entire tailings resource without application of a cut-off grade. As such, the estimate is a global estimate. Both generations of drilling provide adequate coverage and results correlate with the global estimate.

APPENDIX

Commentary against the criteria for Section 1: Sampling techniques and data, Section 2: Reporting of exploration results, Section 3: Estimation and reporting of Mineral Resources and Section 4: Estimation and Reporting of Ore Reserves in accordance with the JORC Code 2012 is presented below.

The criteria in this table are taken from table 1 section 1 of The JORC Code 2012.

Criteria	Commentary
Sampling techniques	The estimate of tailings grade is based on sampling in Aberfoyle's Cleveland Mill and subsequent metallurgical mass balances made by Aberfoyle during operations from 1968 to 1986. Unconsolidated samples of tailings were collected in 2007 from air core and auger drilling of 31 holes in Tailings Dams 1 and 2. Unconsolidated samples of tailings were collected in 2013 from Wacker drilling of 21 holes in Tailings Dams 1 and 2.
Drilling techniques	Holes drilled to test the tailings in 2007 were air cored or augured. Holes drilled to test the tailings in 2013 were drilled using a Wacker drill.
Drill sample recovery	Drilling campaigns were conducted in 2007 to obtain tailings material for metallurgical test work and in 2013 to test the physical material properties of the tailings and to provide tailings material for future metallurgical test work. The estimate of the tailings resource did not rely on the results of either drilling programme (see Estimation and modelling techniques in Table 1 Section 3 below). The technique used for the 2007 air core drilling was designed to recover samples from unconsolidated ground. The sample was returned from the face of the drill bit between an inner and outer tube to minimise sample contamination from the walls of the hole. The technique used for the 2013 Wacker drilling used a continuous sample recovery barrel enabling a full column sample of tailings material to be recovered.
Logging	The estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below). All samples acquired from air core and auger drilling in 2007 were logged for material type and extent of apparent oxidation. Samples were submitted to a commercial laboratory for particle sizing determinations and assay. All samples acquired from Wacker drilling in 2013 were logged for material type. Samples from this drilling were used in a metallurgical testing programme in 2014.
Sub-sampling techniques and sample preparation	Sampling in the Cleveland Mill was subject to metallurgical mass balances from 1968 to 1986. The estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below). Samples from air core and auger holes drilled in 2007 to test tailings were dried and split using a rotary splitter. The samples were of tailings, that is, of material, which had already been crushed and pulverised. Sampling and sample preparation methods were appropriate for the testing that was undertaken. Samples from the 2013 Wacker drilling were collected into core trays. Samples were sent to the Burnie Research Laboratory for storage. Samples from the Wacker holes drilled in 2013 were used in a metallurgical testing programme in 2014.

Criteria	Commentary
Quality of assay data and laboratory tests	Samples were taken routinely in Aberfoyle's Cleveland Mill and routinely assayed in the laboratory at Cleveland. Mill sampling in the Cleveland Mill was routine and subject to metallurgical mass balances from 1968 to 1986. A very large number of tailings samples were taken during that time, probably at least one per day from 1968 to 1986. The quality control procedures for sampling in the Cleveland Mill are not specifically known but the use of check samples by Aberfoyle was routine. Given that the data was collected at a large, competently managed mill and subjected to review by Aberfoyle senior management, it is reasonable to assume that the data is sound. The reliability of Sn and Cu assays made in the Cleveland laboratory was confirmed by re-sampling and re-assaying of existing drill core by Rockwell Minerals Limited in 2011. Aberfoyle made total % Sn assays by pressed powder XRF that was an appropriate method for the style of tin occurrence in the tailings. Aberfoyle determined soluble % Sn assays by wet chemical based method, which was an appropriate method for the style of tin occurrence in the tailings. Aberfoyle determined cassiterite % Sn by subtracting soluble % Sn from total % Sn which is an appropriate method for determining cassiterite % Sn.
Verification of sampling and assaying	Samples were taken routinely in the Cleveland Mill and routinely assayed in the laboratory at Cleveland. Assaying in the Cleveland Mill was subject to metallurgical mass balances from 1968 to 1986. Given that the data was collected at a large, competently managed mill and subjected to review by Aberfoyle senior management, it is reasonable to assume that the data is sound. The reliability of Sn and Cu assays made in the Cleveland laboratory was confirmed by re-sampling and re-assaying of existing drill core by Rockwell Minerals Limited in 2011.
Location of data points	In 2013, high-resolution topography over the mine site was acquired using LiDAR (Light Detection and Ranging). The LiDAR data provided an accurate survey of the top of the tailings dams. Pitt & Sherry mining consultants used Aberfoyle scanned surface plans and results of the 2013 test drilling to model the topography of the base of tailings using Surpac mine modelling software. The map grid used was the Map Grid of Australia (MGA) based upon the Geodetic Datum of Australia 1994 (GDA94). The estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below). Collar positions of the air core and auger holes drilled in 2007 were picked up by a registered Surveyor in MGA coordinates. Collar positions of the Wacker holes drilled in 2013 were picked up using GPS.
Data spacing and distribution	The estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below). Sampling in the Cleveland Mill was routine and subject to metallurgical mass balances from 1968 to 1986. A very large number of tailings samples were taken during that time, probably at least one per day from 1968 to 1986.
Orientation of data in relation to geological structure	Not applicable to mill sampling. The estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below). Air core, auger and Wacker holes were drilled vertically, which is more or less perpendicular to the general stratification in the tailings dams.
Sample security	Samples taken in Aberfoyle's Cleveland mill were submitted to the laboratory attached to the mill. Given the proximity of mill to the laboratory, samples were not susceptible to interference. The estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below). The supervising geologist from Lynch Mining Pty Ltd undertook supervision of the drilling of the air core and auger holes in 2007 and transportation of the samples to the Burnie Research Laboratory. The supervising geologist from Pitt & Sherry undertook supervision of the drilling of the Wacker holes in 2013 and transportation of the samples to the Burnie Research Laboratory.

Criteria	Commentary
Audits or reviews	The quality control procedures for sampling in the Cleveland Mill are not specifically known but the use of check samples by Aberfoyle was routine. Given that the data was collected at a large, competently managed mill and subjected to review by Aberfoyle senior management, it is reasonable to assume that the data is sound.

The criteria in this table are taken from Table 1 Section 2 of the JORC Code 2012.

Criteria	Commentary
Mineral tenement and land tenure status	Exploration Licence EL7/2005 covers the Cleveland mine and Mineral Resource. EL7/2005 is held by Elementos Ltd, through its wholly owned subsidiary Rockwell Minerals (Tasmania) Pty Ltd. The Project is currently subject to a Mining Lease Application.
Exploration done by other parties	(1898) S.C. Coundon, Prospector: Pegged leases over gossan for possibility of silver and lead. (1900) Harcourt Smith: Government Geologist, Department of Mines, Tasmania. Identified cassiterite in gossan. (1908 –1917) Cleveland Tin Mining Company N.L.: Mined oxidised ore for tin. (1923) A.M. Reid: Government Geologist, Department of Mines, Tasmania. Recognised fissure lodes and replacement lodes. (1935 -1937) Mount Bischoff Tin Mining Company: Small scale underground exploration: Battery, Smithy, Lucks, Khaki, Hall's, Henry's recognised. (1937) Q.J. Henderson: Government Geologist, Department of Mines, Tasmania. Described the work undertaken by the Mount Bischoff Tin mining Company. (1945) S.W. Carey: Government Geologist, Department of Mines, Tasmania. Reported all deposits were of replacement style. (1952 -1954) T.D. Hughes: Government Geologist, Department of Mines, Tasmania. Postulated that the ore would continue in depth. Recommended cutting of a grid and geophysical surveys. (1953-1954) O. Keunecke and K.H. Tate: Bureau of Mineral Resources Commonwealth of Australia. Concluded self-potential and magnetic surveys anomalies suggested that sulfide mineralisation may extend beyond the old workings. (1961-1965) Aberfoyle Tin Development Partnership: Explored the area with diamond drilling and proved up sufficient resources for mining. (1968 -1986) Cleveland Tin N.L. and Aberfoyle Limited: Mined tin and copper ore. (2007) Lynch Mining Pty Ltd: 30 air core holes, for a total length of 561m, drilled to test tailings dams. (2013) Elementos Limited (Rockwell Minerals): High-resolution topographic data acquired using LiDAR. 32 auger holes, for a total length of 612m, drilled to test tailings dams and to obtain samples for metallurgical testing.
Geology	The tailings are stored in two discrete dams for which the shapes and extents are reliably known (see Location of data points in Table1 Section 1 above). The tailings consist of silt size and lesser sand size, chiefly siliceous and lesser calcareous and sulfide material, created by crushing and grinding of hard rock in Aberfoyle's Cleveland Mill between 1968 and 1986. Tin occurs in the tailings principally as cassiterite and, to a much lesser extent, as stannite. Only tin that occurs as cassiterite has been considered for this estimate of the tailings resource.
Drill hole Information	Not applicable, the estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below).
Data aggregation methods	Not applicable, the estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below).
Relationship between mineralisation widths and intercept lengths	Not applicable, the estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below).
Diagrams	Not applicable, the estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below).

Criteria	Commentary
Balanced reporting	Not applicable, the estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below).
Other substantive exploration data	Not applicable, the estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below).
Further work	The estimate of the tailings resource did not rely on the results of drilling (see Estimation and modelling techniques in Table 1 Section 3 below). No further drilling is planned to test the tailings. Selective mining of the tailings is not required nor planned (see Mining Factors or assumptions in Table 1 Section 3 below) and the estimate of the tonnage and grade of the tailings will not be materially improved by further drilling.

The criteria in this table are taken from Table 1 Section 3 of the JORC Code 2012.

Criteria	Commentary
Database integrity	The specific measures taken by Aberfoyle to ensure the integrity of the Cleveland metallurgical data are not known but, given that the data was collected at a large, competently managed mill and subjected to review by Aberfoyle senior management, it is reasonable to assume that the data is sound.
Site visits	Mick McKeown, now of Mining One, was employed as a geologist by Aberfoyle Limited from 1970 to 1973 and was professionally and personally acquainted with many of the Aberfoyle staff that worked at Cleveland. He made several visits to the Cleveland mine during the 1970s. In 2012, he visited the mine site and examined drill core from Cleveland held at the Mornington Core Store of Mineral Resources Tasmania.
Geological interpretation	The shapes and extents of the tailings dams are well known. The tonnages and grades estimated for this report were estimated from reports of tailings recorded by Aberfoyle as having been discharged from the Cleveland Mill between 1968 and 1986 (see Estimation and modelling techniques below). Tin and copper occur throughout the tailings and the distribution of both tin and copper terminates abruptly where the tailings deposits terminate. The tailings terminate at their base and up-hill at the original ground surface, and down-hill and along the flanks at the tailings dam embankments. The tailings were laid down sub-aerially and, once the dams were no longer in use, Aberfoyle covered them with a layer of gravel and topsoil less than one metre thick. The surface was then re-vegetated. A small amount of tailings, just over 14,000 cubic metres, from ore from the Hellyer silver-lead-zinc deposit is stored in two cells on the top of Tailings Dam 1.
Dimensions	Tailings Dam 1 is 300 m long and 100 m wide with a maximum depth of about 20 m. Tailings Dam 2 is 400 m long and up to 200 m wide with a maximum depth of about 35 m.
Estimation and modelling techniques	There is no block model of the tailings deposits. The tonnages and grades for this report were estimated from reports of tailings recorded by Aberfoyle as having been discharged from the Cleveland Mill between 1968 and 1986. The tailings resource is documented, discrete and complete. The mine operated (a) over a relatively short time period for a mine in this style of deposit - 18 years compared, for example, with over 100 years for Renison and Mt Bischoff, (b) in a relatively modern time period - from 1968 to 1986, and (c) stored all the tailings from the mill on site in discrete, easily identifiable dams - no tailings has been lost from the dams. Pitt & Sherry mining consultants used Aberfoyle surface plans and the results of 2013 test drilling to model the tailings dams and the base topography using Surpac mine modelling software. Assumptions regarding the geometry of the upstream faces of the dam walls and the width of dam crests were made in order to model the volumes of the embankments and thus determine the volumes of the contained tailings. The current topographical surfaces were derived from LiDAR survey data and the map grid used was the Map Grid of Australia (MGA) based upon the Geodetic Datum of Australia 1994 (GDA94).

Criteria	Commentary
Moisture	All assays were reported on a dry basis and all tonnages and grades are reported on a dry basis.
Cut-off parameters	Selective mining of the tailings is not planned, so no cut-off grade has been applied, that is, the Mineral Resource has been quoted at 0.0% Sn cut-off grade.
Mining factors or assumptions	Mineral Resources were estimated, not Ore Reserves, and no mining factors have been applied. A Loader and Truck mining method has been proposed and has been based on mining all the tailings, including the dam walls.
Metallurgical factors or assumptions	There are reasonable prospects for eventual economic extraction of tin and copper using gravity and flotation methods. In 1981, Aberfoyle considered that a mill recovery from treatment of run of mine ore of 65% for Sn could be maintained under best operating conditions. This is considerably better than the mill recoveries during the routine operation of the mill up until the time that report was made. This implies that some, at least, of the tin in the tailings dams should be recoverable. In 1984, two years before mine closure, Aberfoyle reported that mill recoveries from pilot scale treatment of tailings of between 33% and 45% for Sn were attainable using conventional gravity and flotation processing and 48-69% Sn recovery using pre-concentration by flotation and matte fuming. Recently, the metallurgical amenability of the tailings for Sn and Cu recovery has been reported in an internal study for Elementos by an independent metallurgical consultant. The study, based on the results of Aberfoyle bench and pilot scale test on tailings samples, proposed tin processing recovery from tailings treated of 50% into a 40% Sn concentrate and assumed copper processing recovery of 40% into a 20% Cu concentrate. Since this work, further test work has been conducted and has confirmed the recoveries and grades against the unit operations and flow sheet proposed.
Environmental factors or assumptions	A Development Proposal and Environmental Management Plan (DPEMP) has been submitted to the Environmental Protection Agency (Tasmania). Elementos plans to re-treat all the tailings, including that in the dam walls, to remediate acid drainage from the dams.
Bulk density	The historical tailings discharged from the Cleveland Mill, which makes up the current Mineral Resource, was reported as dry tonnes on a daily basis during the life of operations. These tonnes form the basis of the Mineral Resource tonnage estimate. A single density sample has been tested to date, the results of which corroborate the Mineral Resource tonnage estimate.
Classification	The mass and grades of the tailings have been estimated from the operating statistics of a competently run mill supervised by qualified metallurgists and may be expected to be reasonably reliable (see Estimation and modelling techniques above). The spatial distribution of the tailings tonnage and grade has not been determined but selective mining of the tailings is not planned (see Mining factors or assumptions above). This conforms to the Company's proposed plan to re-treat all the tailings, including that in the dam walls, to remediate acid drainage from the tailings dams (see Environmental factors or assumptions above). The mass of the tailings has been confirmed by independent mining consultants (see Estimation and modelling techniques above). The tailings resource is documented, discrete and complete (see Estimation and modelling techniques above). Selective mining is not required (see Mining factors or assumptions above), so further drilling of the tailings before mining will not be necessary for the purposes of tonnage and grade estimation. The mass, grade, density, shape and physical characteristics of the tailings have now been estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the tailings deposit and the tailings Mineral Resource has been classified as Indicated.
Audits or reviews	The method of estimation of the tailings resource has been reviewed by Mike Adams of Rockwell Minerals Tasmania Pty Ltd and David Foster of Mining One Pty Ltd.

Criteria	Commentary
Discussion of relative accuracy/ confidence	The quantity and grades of the tailings have been estimated from the operating statistics of a competently run mill and are considered to be reasonably reliable (see Estimation and modelling techniques above). The estimate of the mass of the tailings has been confirmed by independent mining consultants (see Estimation and modelling techniques above). The estimate of the Mineral Resource is of the entire tailings resource without application of a cut-off grade; in this sense, the estimate is a global estimate (see Estimation and modelling techniques above). The Mineral Resource estimate was based on production data from Aberfoyle's Cleveland Mill with which it conforms (see Estimation and modelling techniques above). Although the estimate of the tailings resource did not rely on the results of drilling, assays of samples from the 2007 and 2013 drill holes were submitted for assaying at the Burnie Research Laboratory. The Sn and Cu assays from these samples generally confirmed the reliability of Sn and Cu grades estimated for this report.

Commentary against the criteria for Section 4: Estimation and Reporting of Ore Reserves in accordance with the JORC Code 2012 is presented below.

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	The basis of the Ore Reserve estimate is the Tailings Mineral Resource as independently estimated by Mick McKeown of Mining One. The Ore Reserve stated herein is a subset of the Indicated Mineral Resource of 3.8 Mt @ 0.30% Sn and 0.13% Cu (0% Sn cut-off).
Site visits	Tim McManus (Competent Person) has visited the site multiple times with the specific purpose of confirming the existence of the Project's Mineral Resource and studying the Modifying Factors, which were applied to the Mineral Resource for Ore Reserve estimation purposes.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves is that of Pre-Feasibility Study level and has been undertaken to convert Mineral Resources to Ore Reserves. The study has determined a mine plan that is technically achievable and economically viable, and material Modifying Factors have been considered.
Cut-off parameters	As selective mining of the tailings is not planned, no cut-off grade has been applied, that is, the Ore Reserve has been quoted at 0.0% Sn cut-off grade.

Criteria	Commentary
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility Study to convert the Mineral Resource to an Ore Reserve are at an appropriate level of confidence to state a Probable Reserve. These factors and assumptions include: • Several mining methods were reviewed for their suitability. On the balance of all the criteria considered (capital cost, surface water management, production flexibility, physical variability of the tailings, availability and operating cost), a loader-to-truck method was selected. • The tailings Mineral Resource is scheduled to be mined at a rate of 650 thousand tonnes per annum (ktpa) over a mine life of 7 years. The loader and truck capacity is factored at 75% to allow for moist material. The fleet has an availability of 75% and is assumed to operate on a two 12-hour daily shift roster. • The mining rate is matched to meet processing throughput and will be conducted by loader-to-truck, which minimises water management complexities and is a low-capital option due to local contractors being engaged to provide mining services. The operating costs are competitive with traditionally lower operating cost alternatives such as dredging. This is largely due to the high availability of underutilised contracting services in the region and the low cost and high availability of skilled labour. • The mine plan is to be executed in four phases: preliminary site works, construction and commissioning, mining of TD1 and mining of TD2. The resource will be mined as a global resource and reconciled as such. • No stability calculations have been undertaken for tailings dam walls to check compliance with the current ANCOLD guidelines. However, the stability of the walls was assessed as part of an investigation undertaken by Golder Associates in 1978. It was noted during surveillance inspections in 1988 Golder's recommendations had been implemented. Existing wall stability is therefore not a concern and no failures have been noted in recent inspections. Removal of the tailings is expected to increase wall stability and safety as the work progress. • An overall loss of 2% has been applied to the tonnes delivered to the trommel at the processing plant. This estimate was based on the application of 4% ore loss and 2% dilution to the Mineral Resource. • Only Indicated Mineral Resources have been utilised in mining studies. The infrastructure requirements of the loader and truck mining method is minimal due to the contractor being local to the town of Waratah, where a fully serviceable workshop and yard is available. A laydown area has been delineated on site for mobilization and demobilization purposes.

Criteria	Commentary
Metallurgical factors or assumptions	Metallurgical test work has utilised composite samples of tailings from the two tailings dams, both TD1 and TD2. The test work was largely based on the flow sheet used by Cleveland Tin in pilot plant tests in 1984. The Company took the samples using a 'whacker' or sonic drill and 88 out of 110 intervals from 21 holes were composited, with surface capping material being discarded. Considering their spatial distribution and depth the 88 intervals comprise an acceptably representative sample of the tailings. The composite sizing and assay was consistent with the weighted average of drill core interval sizings and assays, and with estimates of the average tailings grade estimated from historical production data and past sampling programs. The process and concentrate specifications were determined by extensive bench scale testing at ALS Burnie, a world-renowned tin laboratory. The results achieved in the bench scale testing were comparable to those results interpreted from the preliminary testing. The amount and representativeness of metallurgical test work is reasonable for the type of study undertaken. The metallurgical process proposed is on a Design Basis inclusive of: • 650 thousand dry tonnes per annum treatment rate • All new plant basis to Australian engineering standards • ~8,000 hours per annum operation • Complete stabilising control system and on-stream analysis system The process consists of trommel and screening, sulfide (copper) flotation, gravity separation, regrinding, cassiterite flotation and concentrate leaching. The process is appropriate for the style of mineralisation and at an individual component level, a well-tested technology. The cassiterite flotation concentrate grade is projected on the basis of upgrading by the UF Falcon of flotation concentrate. The grade and recovery that are achieved at Renison from a lower flotation concentrate grade are used for these projections. The test work has not generated sufficient mass of flotation concentrate to enable testing of UF Falcons, and this will be one of several justifications for additional testing. The use of sulfuric acid leaching to remove soluble minerals such as siderite and goethite provided the final product grade results. The ore reserve estimation has been based on the appropriate mineralogy to meet the saleable concentrate specification.
Environmental	A DPEMP has been prepared according to the Board of the Environment Protection Authority's (EPA) General Guidelines for the preparation of a DPEMP for Level 2 activities and 'called in' activities, January 2014 and the EPA's Cleveland Mine Project DPEMP Guidelines, 12 March 2012. The DPEMP was submitted on the 12th March 2015. The key environmental aspects relation to the Project are: • Acid and Metalliferous Drainage (AMD) - evaluating the status of AMD as a baseline condition, development of cost effective mitigation strategies for existing (legacy) AMD, and prevention of AMD from sulfide exposure in tailings and to a lesser extent in waste rock • Tailings Management - the storage of tailings in a geochemically and geotechnically stable environment • Water Quality and Water Management - the provision on a Water Management Plan which describes the baseline conditions, provides detail on the management and treatment of wastewaters and stormwater and also the management of AMD produced once the underground void is dewatered • Groundwater - the descriptions of current groundwater conditions and the impact of the operation on groundwater. The Project area is heavily disturbed by past mining activities and does not contain rare or threatened species. As a result the Project should not have an adverse impact on fauna or flora communities. Any impact by the Project on Matters of National Environmental Significance are expected to be minor and easily manageable.

Criteria	Commentary
Infrastructure	The proposed mining operations will meet the relevant acceptable performance standards of the Rural Resources Zone and applicable codes. General infrastructure will include office buildings and associated amenities. Communications will be provided by the Mt. Cleveland mobile phone tower, which provides full 4G-network coverage across site. The work force will be employed locally from the town of Waratah and surrounding districts. The power supply will be from the existing 110 kV / 22kv power supply line available on site and adjacent to the proposed Process Plant site. It has been confirmed adequate capacity exists within the 22 kV system to cater for the estimated maximum demand of approximately 2.7 MVA. The estimated annual consumption is approximately 18 GWh based upon operating 365 days/annum. Semi-trailers capable of transporting a single container will provide product transport and will access site from Burnie via the Bass Highway - Waratah Road route. A container ship currently runs from Melbourne, Burnie, King Island then back to Melbourne every month. From Melbourne cargo would then be transferred to a larger vessel for shipment to countries with smelting and refining capability. Main infrastructure will consist of a Process Plant and Tailings Storage Facility (TSF). An Engineering Study by Howcam-Mincore, dated March 15, provided the Process Plant design and detailed estimate to an accuracy of ±25%. This report is based on the results of the metallurgical testing and process design. On closure the tailings will be impounded in a TSF, in a fully saturated environment that is sustained due to the ability of the TSF to hold water. The TSF is also designed to shed any surplus rainfall. The net impact is an anaerobic environment in which bacterially activated oxidation activity cannot be sustained. The addition of lime to the tailings to neutralise the acid used in the process prior to discharge into the TSF will be controlled to maintain a pH of ~9.5. This pH will suppress the initiation of sulfide mineral oxidation. The proposed TSF will use upstream construction methodology, with two starter dams being designed to accommodate future lifts. Utilising an estimated tailings deposition schedule and a staged lift development, a detailed construction quantities estimation has been undertaken. This was then used, in conjunction with contractor quoted construction rates to determine the capital cost of each lift for the financial model. The final design of the size and capacity of the TSF is subject to detailed design at the next stage of study, which will require further geotechnical information.

Criteria	Commentary
Costs	The following assumptions were made in preparing the capital costs forecasts. • Construction activities are continuous • Capital Equipment will be ordered in a timely manner to ensure the units will be available when required. The basis of the capital estimates as well as a build up of the two major capital items, the Process Plant and Tailings Storage Facility, which represent 81% of Capital, have been sourced predominantly from quotes and detailed engineering and design to Pre-Feasibility Study standard. The capital cost estimate for the Process Plant is based on work by Howcam-Mincore, dated March 2015. The approach to estimating the capital cost has been to obtain multi-vendor budget quotes from suppliers for the major equipment items as per the process flow sheet. Based on the result of vendor inquiries, some engineering factors or material take-offs have been applied to the major equipment costs to give an estimated capital cost for a complete plant including engineering design, procurement, construction and project management. The capital cost estimates for the TSF were based on a design detailed in the Pre-Feasibility Study. TSF construction cost estimates were based on a quote from local contractor Joe Fagan Heavy Haulage, dated 22 April 2015 for the Clearing of Dam Site, Keyway Works and Embankment Construction, while benchmarking was used for the Filter placement, Decant Barge Pump and Instrumentation. The mining cost of A$1.95 per ore tonne, using the preferred mining method of loader to truck, is based also on a quote from local contractor Joe Fagan Heavy Haulage, who has knowledge of the conditions in the area, has conducted a site visit, and covers all activities as described in the Mine Plan. The processing cost (per feed tonne) was based on the Engineering Study, by the Howcam-Mincore. Inland transport and port costs are based on advice from local transport company Db Trans Transport with tin concentrate costs estimated at A$1,250 per container to load and transport to port for loading to vessel. Copper concentrate costs were estimated at A$950 per container. Ocean transport is based on advice from Monship, a local logistics company, and equates to A$103 per wet metric tonne. A marketing fee of 2% of revenue paid to an agent or trader has also been assumed for selling the products. The Project is subject to Tasmanian Government Royalties under the Mineral Resources Regulation 2006-REG 7 and REG 8. The prescribed rates of royalty are in two parts: a Net Sales Royalty of 1.9% of Net Sales, a Profit Royalty. The maximum total royalty payable is 5.35% of Net Sales. The Project's Net Profit will be subject to Australian Company Tax of 30%.

Criteria	Commentary
Revenue factors	The mine schedule is for 3.7 Mt of the tailings material to be mined by loader and truck. The loader and truck capacity is factored at 75% to allow for wet material. The fleet has an availability of 75% and is assumed to operate on a 2 X 12 hour daily roster. Once mined the tailings are hauled by truck to the Process Plant to be reprocessed to produce two saleable concentrate products; a tin concentrate grading 51% and a copper concentrate grading 18%, with recoveries of 47% and 31% respectively.

Production schedule

		Total	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Plant feed	kt	3,698	250	650	650	650	650	650	198
Recovered Sn	t	5,247	355	922	922	922	922	922	257
Recovered Cu	t	1,490	101	262	262	262	262	262	80
Sn concentrate	t	10,288	696	1,809	1,809	1,809	1,809	1,809	550
Cu concentrate	t	8,278	560	1,455	1,455	1,455	1,455	1,455	442
Total Concentrate	t	18,566	1,256	3,264	3,264	3,264	3,264	3,264	992

t = tonne, Mt = million tonnes, Sn = tin, Cu = copper, FY17 = financial year 2016–17 (ending 30 June 2017) Table subject to rounding errors

Both concentrates are to be exported and sold to end users or traders. A number of end users and traders were contacted and all expressed interest in purchasing the concentrates. Prices for both concentrates are derived from the respective Metal Price. Both tin and copper are principle metals traded on the London Metal Exchange (LME) and have total price transparency. Pricing for both concentrates is based on the Cost Estimation Handbook AusIMM Mono 27 and confirmed with market sources. This method derives the concentrate price from the respective Metal Price with adjustments for grade, unit deductions, impurity penalties, Treatment Charges and Refining Charges (TCRC) and ocean freight costs. The tin price and A$:US$ foreign exchange rate (FX) forecasts are based on Roskill's forecasts. The copper price forecast is from Citi Research. Roskill expects tin prices to gradually recover to 2019 but from 2020 expects prices to show considerable upside potential as an increasing deficit requiring much higher prices to encourage new development in order to balance the market.

Market assessment	Over 50% of tin consumption is used for solder in electronics and electrical goods, 17% in Tinplate and Packaging and 17% in Chemicals. The rest is in various applications including Float Glass and alloys. Given over 90% of revenue is from the sale of tin concentrate, a tin marketing report was obtained from Roskill, a leading independent metal and minerals research consultancy (Roskill Market Outlook Report; Tin, Ninth Edition, 2015 Premium Version, released in April 2015). In summary, Roskill details a tin market that is currently over supplied but is forecast to return to a deficit, where it has been for six out of the last ten years, as demand growth outpaces supply growth, which is expected to weaken. Copper is used extensively in manufacturing and construction. Given only approximately 10% of revenue is from the sale of copper concentrate the Pre-Feasibility Study relied on analyst's reports, public reports and discussions with industry contacts. Industry analyst CRU forecast that sizeable deficits are emerging for the copper market towards the end of the current decade and it is likely that new projects will be required to meet the forecast copper demand. This view is endorsed by Citi Research in its Commodities 2Q'15 Outlook dated April 15, which forecasts increasing deficits starting in 2016 from slower production growth. Macquarie Bank in its Commodities Compendium, 19 May 2015, forecasts increasing deficits from 2018. The concentrates will be supplied to countries with smelting and refining capability.

Criteria	Commentary
Economic	The financial analysis of the Project was performed by WK Services using a sophisticated spreadsheet utilising the Discounted Cash Flow (DCF) method. The mine production schedule input to the model was drawn from the Pre-Feasibility Study. Capital and operating costs input into the model were at a Pre-Feasibility Study level of accuracy. The discount rate used was 8%. The following table provides the positive economic results for the analysis conducted in the Pre-Feasibility Study.

Project economic analysis outputs

Parameter	Unit	Base Case
Project revenue	A$m	143
Operating costs (incl. depreciation)	A$m	87
Post-tax free cash flow	A$m	39
Pre-development and production capital	A$m	21
Post-production capital	A$m	9.7
C1 costs	US$/Recovered Tin t	7,879
C2 costs	US$/Recovered Tin t	12,055
C3 costs	US$/Recovered Tin t	13,137
NPV (8) pre-tax	A$m	34
IRR (ungeared) pre-tax	%	68
NPV (8) post-tax	A$m	22
IRR (ungeared) post-tax	%	46
Payback period post-tax	years	3

Table subject to rounding errors

The Sensitivity Analysis shows the project is highly sensitive to lower product prices and an appreciating Exchange Rate, both of which will reduce A$ Revenue and consequently NPV. This risk is mitigated by the low cost structure of the Project, which places it in the bottom half of the cost curve allowing it to trade through low price troughs in the cycle. This is demonstrated by the current tin price, which is at 5-year lows. At this low price and current spot A$:US$ exchange rate (0.77:1), the project makes a profit, is cashflow positive and has a positive Post Tax NPV. The sensitivity analysis also demonstrates that the forecast cashflow is sensitive to fluctuations in both head grade and recovery. The results of the Preliminary Testing and the Bench Scale Testing are both comparable and demonstrate a consistent grade and recovery can be achieved for tin. In 2007, Lynch Mining drilled 31 air core holes to test the tailings. Samples from the drill holes were submitted for assaying at the Burnie Research Laboratory. The tin and copper assays from these samples generally confirmed the reliability of tin and copper grades as estimated. The quantity and grades of the tailings have been estimated from the operating statistics of a competently run mill and are considered to be reasonably reliable.

Social	The proposed Project is located in a region where mining is the principal economic activity and the Project is expected to be consistent with the existing social fabric of the region. Documented feedback through local community engagement meetings has been very positive.

Criteria	Commentary
Other	If the Company decides to develop and commission a mine, the operations of the Company including mining and processing will carry significant risks. These include but are not limited to failure to achieve predicted grade and quality specifications in mining and processing, TSF design, capital cost and approval, technical difficulties encountered in commissioning and operating plant and equipment, mechanical failure, metallurgical problems affecting extraction rates and costs, adverse weather conditions, industrial and environmental accidents, industrial disputes, unexpected shortages or increase in the costs of consumables, spare parts, plant and equipment. A Project risk assessment has been undertaken to assess the risks to people, production and cashflow. After the implementation of risk reduction strategies, the highest remaining risk to the Project had a risk ranking of 3 (Possible & Moderate). No material legal agreements and marketing arrangements have been undertaken due to the status of the project. A Mining Lease submission has been made, along with a Development Permit and Environmental Management Plan submission. There are reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility Study. There are no unresolved matters that are dependent on a third party, other than government approvals, on which extraction of the reserve is contingent.
Classification	The basis of the Mineral Resource, estimated from the operating statistics of a competently run mill are a reasonable and reliable base, after the application of Modifying Factors, to state a Probable Reserve of 3.7 Mt at 0.29 %Sn and 0.13% Cu, as delivered to the Process Plant. The result appropriately reflects the Competent Person's view of the deposit with all Probable Ore Reserves having been derived from Indicated Mineral Resources.
Audits or reviews	Independent mining consultancy AMC Consultants Pty Ltd has reviewed the estimation of the Tailing Project's Mineral Resource and Ore Reserve estimates. AMC has reported that the Indicated Mineral Resource has been estimated with sufficient confidence for it to be used as a basis for Ore Reserve estimation, and that the Ore Reserve estimate takes into account all the relevant Modifying Factors that are required to determine that the mine plan and production schedule are technically achievable and economically viable.
Discussion of relative accuracy/ confidence	The results of this study indicate that tailings reprocessing is viable, with the preferred mining method, Loader and Truck, having been established and an effective method of mineral processing determined, based on sound metallurgical testing. The global estimate has been competently estimated, with the main source of uncertainty being the Tailings Storage Facility design, capital cost and approval. The Pre-Feasibility Study includes a financial analysis based on realistic assumptions of technical, engineering, operating, and economic factors and the evaluation of other relevant factors that are sufficient for the Competent Person, acting reasonably, to determine a subset of the Mineral Resource may be classified as an Ore Reserve. The overall confidence of the study is within 25% and it is recommended that the Project proceed to further detailed studies to obtain a higher level of confidence as a basis of construction approval.