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18 June 2024

## **ASX RELEASE**

## **High Grade Copper & Gold intersected at Cleveland Tin Project**

Elementos Limited's (ASX: ELT) diamond drill hole has intersected un-targeted high-grade copper and gold mineralisation at its Cleveland Tin Project in Tasmania.

Whilst drilling the planned 1,100m diamond drill hole (C2123) targeting extensions to the known tin, copper, tungsten Mineral Resource<sup>1,2,3</sup>, and fluorite mineralisation<sup>4</sup> at the Cleveland Tin Project in Tasmania, Elementos has intersected a narrow zone of high-grade stratiform copper sulphide and gold mineralisation at a downhole depth of 111.0m (Refer Table 1, Figure 1).

### C2123:- 0.45m @ 9.7% Cu, 5.15g/t Au, 18g/t Ag & 1.35% Zn from 111.0m

Beyond the high grades of copper and gold intersected, the exploration significance of this intercept is that C2123 is being drilled from a new location and at a new orientation to the majority of historic exploration drilling. The current drilling at Cleveland is located at the old Cleveland process plant ROM pad, to the northwest of the Company's tin, copper and tungsten mineral resources<sup>1</sup>, and drilled towards the south-east.

The intersected mineralisation consists of semi-massive, laminated pyrite, pyrrhotite and chalcopyrite over 0.45m within a distinct zone of fine-grained sediments between two mafic volcanic units.

The mineralisation reported from C2123 differs from the main Cleveland tin/copper mineralisation in two ways:

1) the Cleveland tin/copper mineralisation has formed by the replacement of carbonate rich sediments whereas the mineralisation in C2123 is interpreted to be primary and stratiform in nature (formed at the same time as the formation of the host sedimentary sequence) and 2) is dominated by copper and gold with no detectable levels of tin.

			ALS Analytical Method	ME-XRF15d	ME-XRF15d	ME-XRF15d	ME-XRF15d	ME-XRF15d	Au-AA25	Ag-AA46
Drill Hole ID	From (m)	To (m)	Sample Number	% Cu	% Pb	% Zn	% W	% Sn	g/t Au	g/t Ag
C2123	111.00	111.45	90002	9.70	0.06	1.35	<0.008	<0.01	5.15	18

Table 1. Analytical results from drill hole C2123

#### **Managing Director Joe David commented:**

"This un-targeted high-grade copper and gold drilling intercept confirms Elementos' understanding that the Cleveland Project is a highly mineralised project with high prospectivity for further mineralisation existing outside the defined Mineral Resources. Whilst we were not currently focussed on exploring for gold or copper, these results demand further evaluation which we will conduct following the completion of the hole."

## **TOMORROW'S TIN**

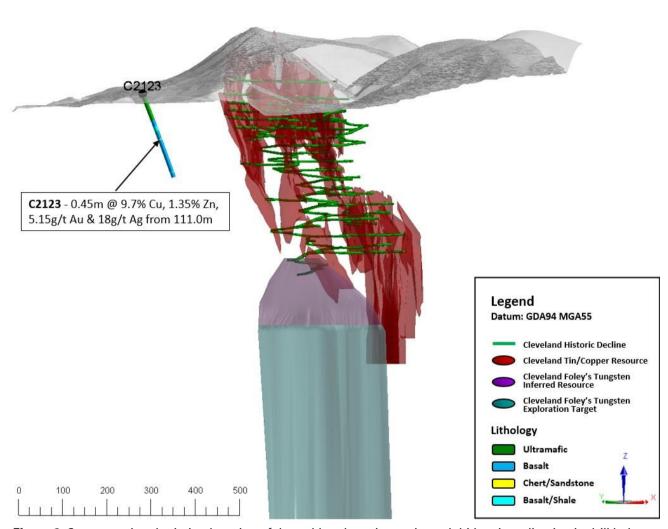
"Elementos remains focussed on continuing the drilling towards our Tin, Copper & Tungsten Mineral Resources<sup>1,2</sup>. The company will explore for extensions to the semi-massive sulphide mineralisation by carrying out a downhole electromagnetic survey on hole C2123 upon the completion of the Foleys Zone (Tungsten) deep diamond drill hole."

"We also remain enthused at the potential for further mineralisation to be intersected before reaching the tungsten targets."



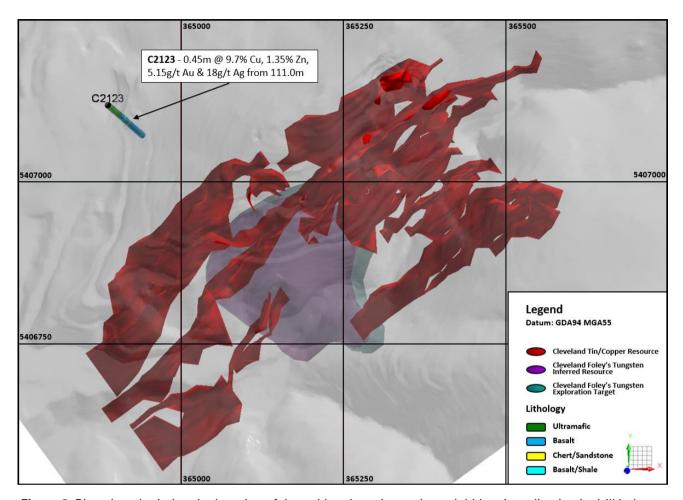
**Figure 1**. Drill hole C2123 depicting, with the orange box indicating the semi-massive copper sulphide mineralisation from 111.0m – 111.45m

## **TOMORROW'S TIN**



**Figure 2.** Cross-section depicting location of the gold and semi-massive sulphide mineralisation in drill hole C2123 in relation to the known mineral resources and underground infrastructure at Cleveland (looking from the southwest)

## **TOMORROW'S TIN**



**Figure 3.** Plan view depicting the location of the gold and semi-massive sulphide mineralisation in drill hole C2123 in relation to the known mineral resources at Cleveland (and Foleys Zone tungsten resource and exploration drilling target)

Hole ID	East GDA 94	North GDA 94	RL	Total Depth	Azimuth (t)	Azimuth (m)	Dip
C2123	364887	5407117	341	200.8	130	116.5	-69

Table 1. C2123 Drill hole collar data

### Elementos' Board has authorised the release of this announcement to the market.

### For more information, please contact:

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### TOMORROW'S TIN

#### **ABOUT ELEMENTOS**

Elementos is committed to the safe and environmentally conscious exploration, development, and production of its global tin projects. The company owns two world class tin projects with large resource bases and significant exploration potential in mining-friendly jurisdictions. Led by an experienced-heavy management team and Board, Elementos is positioned as a pure tin platform, with an ability to develop projects in multiple countries. The company is well-positioned to help bridge the forecast significant tin supply shortfall in coming years. This shortfall is being partly driven by reduced productivity of major tin miners in addition to increasing global demand due to electrification, green energy, automation, electric vehicles and the conversion to lead-free solders as electrical contacts.

#### **Competent Persons Statement:**

The information in this report that relates to the Annual Mineral Resources and Ore Reserves Statement, Exploration Results and Exploration Targets is based on information and supporting documentation compiled by Mr Chris Creagh, who is a consultant to Elementos Ltd. Mr Creagh is a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy 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. Chris Creagh 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).

The Australian Securities Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.

#### **References to Previous Releases**

The information in this report that relates to the Mineral Resources and Ore Reserves were last reported by the company in compliance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Mineral Resources, Ore Reserves, production targets and financial information derived from a production target were included in market releases dated as follows:

- 1 Substantial Increase in Cleveland Open Pit Project Resources following Revised JORC Study, 26 September 2018
- 2 Cleveland Project Tungsten Potential, 29 October 2013
- 3 Tin and tungsten drilling commences at Cleveland Tin project, 16 May 2024
- 4 Fluorite Confirmed at Cleveland Project, 03 March 2023

The company confirms that it is not aware of any new information or data that materially affects the information included in the market announcements referred above and further confirms that all material assumptions underpinning the production targets and all material assumptions and technical parameters underpinning the Ore Reserve and Mineral Resource statements contained in those market releases continue to apply and have not materially changed.

# JORC Code, 2012 Edition – Table 1

## **Section 1 Sampling Techniques and Data**

Diamond Drilling Exploration Program, Cleveland Tin Project, Tasmania – June 2024

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>C2123 was completed by PQ diameter pre-collar diamond drill core to depths where hole stability had been established. The remainder of the drill hole was completed recovering HQ diameter drill core.</li> <li>HQ drill core was sampled based on intervals determined by the project geologist and cut using a diamond saw to split the core in half.</li> <li>The Cleveland Project contains two mineralizing systems. An upper zone of tin/copper mineralisation and a lower tungsten zone.</li> <li>The tin mineralisation at Cleveland occurs predominantly as cassiterite. The cassiterite is associated with pyrrhotite, pyrite, chalcopyrite, marmatite/sphalerite, chalcopyrite and minor arsenopyrite. The pyrrhotite is magnetic.</li> <li>The tungsten mineralisation at Cleveland occurs as wolframite, associated with quartz veining and significant silica-mica alteration. Minor cassiterite, fluorite and molybdenite mineralisation is associated with the tungsten mineralisation.</li> <li>Mineralised zones were determined visually</li> <li>Samples were split into half core with a minimum sample weight of approximately 1kg. Samples were prepared and analysed in a certified commercial laboratory.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>A UDR 1500 self-propelled track mounted drilling rig was used, drilling PQ and HQ standard diamond core. Coring was from surface.</li> <li>Drill core was collected using a standard double tube system.</li> </ul>

Criteria	JORC Code explanation	Commentary
		Drill core is oriented
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative</li> </ul>	Diamond drill hole core recoveries and RQD are logged. Measurements are taken systematically downhole between core blocks. The maximum increment being 3.1m.
	nature of the samples.	Drill core recovery for the mineralised intervals being reported was 100%
	<ul> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	No sample bias has been observed due to rock type or core recovery.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	All drill core has been photographed dry and wet. The core is photographed within core boxes, which are identified by drill hole number and start and finish depths. Drill run depths are marked on core blocks. All drill core has
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	been geologically and geotechnically logged prior to being sampled.
	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul> <li>Whole core was split using a diamond saw operated by trained Company personnel. Sample lengths varied depending on observed mineralisation zones and/or lithological boundaries.</li> </ul>
preparation	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<ul> <li>Sample selection and marking is carried out by the project geologist</li> <li>Cutting and sampling is carried out by the project geologist or a suitably qualified and experienced contractor</li> </ul>
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	Half core dried, crushed, pulverized and split by ALS Laboratories, Burnie,     Tasmania. This facility followed the following sample preparation procedure.
	<ul> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second- half sampling.</li> </ul>	<ul> <li>CRU-36f to weigh, dry and crush the samples where 85% &lt;3.15mm. PUL-23j to pulverised up to 85% passing 75 microns.</li> <li>No duplicates are taken from the core</li> <li>Sample weights are between 1.0kg and 3.0kg</li> </ul>
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Duplicate samples were selected and analysed by ALS as part of the internal QAQC procedures
Quality of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	ALS, Burnie, Tasmania, analysed the samples by the XRF-15d method for Cu, Pb, Zn, Sn & W. Au-AA25 for Au & Ag-AA46 for Ag
laboratory tests	For geophysical tools, spectrometers, handheld XRF instruments, etc, the	No accredited standards and blanks were submitted to the laboratory.

Criteria	JORC Code explanation	Commentary
	parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Elementos considers the assay data from the drill core to be accurate, based on the generally accepted industry standard practices employed by the company and the QAQC procedure adopted by ALS.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All the mineralised intersections and assay data is reviewed by the Elementos Competent Person.</li> <li>The geological logging and drilling program supervision is being carried out by qualified and experienced Company personnel. The drilling program is controlled by the Company's Competent Person</li> <li>Drill core is available for verification at the Company's facility in Wynyard, Tasmania.</li> <li>No twinned drill holes have been completed in this programme.</li> <li>Geological data is recorded on laptop computers onto a standardised Excel logging template utilising the Company's coding system. Data is uploaded on a daily basis onto a commercial "cloud" data storage system.</li> <li>No adjustment has been made to the original assay data as received from ALS.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>C2123 has been located using a hand-held GPS.</li> <li>Grid system is GDA 94 Zone 55.</li> <li>RL's are MSL plus 1000m</li> <li>Downhole surveys are collected every 30m using an AXIS Champ Gyro downhole survey tool</li> <li>Drill orientation during set-up is established using a compass and back sight and foresight markers. Dip is determined using a clinometer on the drilling rig mast.</li> <li>The level of topographic control offered by the initial collar survey is considered sufficient for the current stage of the work program.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the</li> </ul>	The drill hole being reported has been targeted to increase the confidence level in the existence of mineralisation reported in earlier exploration

Criteria	JORC Code explanation	Commentary
	degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.  • Whether sample compositing has been applied.	programmes. The drill hole has not been specifically designed for the purposes of reporting Exploration Results.  • Sample compositing has not been carried out.
Orientation of data in relation to geological	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	There is too little information at this stage as to whether the drill results being reported present any bias regarding stratiform or structurally controlled mineralisation
structure	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The orientation of the drilling is not considered at this time to have introduced any bias to the sample data.
Sample security	The measures taken to ensure sample security.	Transport of core samples to the ALS facility in Burnie is carried out by Company personnel. Drill core from this programme is stored at the Company's core processing facility in Wynyard. All sample pulps are stored in the ALS facility in Burnie prior to being transferred to the Company's secure facility in Waratah.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been carried out for the current drilling program described in this release.

## Section 2. Reporting of Exploration Results

Diamond Drilling Exploration Program, Cleveland Tin Project, Tasmania – June 2024

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Exploration Licence EL7/2005 is centred on the historical Cleveland tin mine in Tasmania. EL7/2005 is held by Rockwell Minerals (Tasmania) Pty Ltd, a 100% subsidiary company of Elementos Limited.</li> <li>The project lies within Forest Tasmania Managed Land</li> </ul>

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Targeting for the current drilling programme is based on historical exploration and mining information compiled from data collected by Aberfoyle Resources who operated the Cleveland tin mine until operations ceased in 1986.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Cleveland mineralisation is hydrothermal mineralisation associated with Devonian-Carboniferous granite intrusives, which outcrop within 5 kilometres of the historical workings. Gravity survey data suggests the granite occurs approximately 4km below the historical workings</li> <li>The host sedimentary rocks were intruded by the Devonian-Carboniferous Meredith Granite. A quartz-porphyry dyke occurs approximately 350m below the land surface.</li> <li>The tin/copper mineralisation occurs as semi-massive sulphide lenses consisting of pyrrhotite and pyrite with cassiterite with lesser stannite, chalcopyrite, arsenopyrite, quartz, fluorite and carbonates. Sulphide minerals make up approximately 20-30% of the mineralisation.</li> <li>The semi-massive sulphide lenses have formed by the replacement of carbonate rich sediments and are geologically similar to tin bearing massive to semi-massive sulphide mineralisation at Renison and Mt Bischoff.</li> <li>The tungsten mineralisation occurs as greisenisation of a quartz-porphyry dyke and fissure veins, referred to as the Foley's Zone. The tungsten mineralisation has been reported to occur approximately 150m above the top of the porphyry dyke to a depth of 750m below this point.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	Hole ID East GDA 94 North GDA 94 RL Total Depth Azimuth (t) Azimuth (m) Dip C2123 364887 5407117 341 200.8 130 116.5 -69  • An updated Mineral Resource for Cleveland was released to the ASX on 26 <sup>th</sup> September 2018 - "Substantial Increase in Cleveland Open Pit Project Resources following Revised JORC Study".

Criteria	JORC Code explanation	Commentary
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	<ul> <li>All diamond drill hole assay results reported are shown in the body of this report.</li> <li>None of the reported assay data is stated on a weighted average basis</li> <li>No bottom or top cut was applied</li> <li>No metal equivalents have been used</li> </ul>
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	This report is based on a geological interpretation by Company personnel and on analytical data from ALS, Burnie on drill core analyses only.
mineralisation widths and intercept	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The drill hole has been designed to intersect the Foleys Zone tungsten mineralisation at depth.
lengths	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	All drill hole lengths reported in the release are "down hole lengths". True widths are not known.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	See main body of the report
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The reporting is considered to be balanced.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Elementos is reporting results for drill hole C2123 as it contains mineralisation that is considered to be different in nature and deposited/formed in a different manner to the previously reported mineralisation at Cleveland.

Criteria	JORC Code explanation	Commentary
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Continue with the planned drill hole to test the extent of tungsten mineralisation within the Foleys Zone
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Complete downhole electromagnetic studies on C2123 to determine if there are any off-hole anomalies that may represent an extension to the mineralisation intersected in C2123.

Section 3 Estimation and Reporting of Mineral Resources

n/a

Section 4 Estimation and Reporting of Ore Reserves

n/a

Section 5 Estimation and Reporting of Diamonds and Other Gemstones