ELEMENTOS
TOMORROW'S TIN

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ASX RELEASE

Fluorite (Critical Mineral) Confirmed at the Cleveland Tin Project

Highlights

- **Fluorite (aka. Fluorspar) is listed as a critical mineral by USA, Canada, Japan, China and the European Union.**
- **Significant fluorite levels at Cleveland first confirmed during mineralogical analysis on tin-copper core during a 2022 test-work program.**
- **2023 follow-up assays on 2022 drill hole C2119 has confirmed significant fluorite mineralisation in tungsten and tin-copper mineralisation zones throughout the project**
- **Tungsten is listed as a critical mineral by the Australian Federal Government, as well as USA, Canada, EU, UK, Japan and China. Tin is also listed as a critical mineral by USA, Canada, Japan and China**
- **A downhole and ground-based geophysics program planned for the second half of 2023 to further define extensions and targets at the Cleveland project in Tasmania**

Elementos Limited (ASX: ELT) has confirmed significant fluorite (CaF_2, also known as fluorspar) mineralisation at its Cleveland Tin Project in Tasmania, based on follow-up assays from drill hole C2119 completed in its 2022 diamond drilling program, and mineralogical results during metallurgical test work.

The presence of fluorite within Cleveland's tin-copper resource was first confirmed by an optical mineralogy study completed by ALS laboratories, in conjunction with McKnight Mineralogy, during 2022. The study involved the preparation of polished thin sections and scanning by QXRD analysis. The study found that fluorite comprised 8.7% of the composite sample assessed.

Initial assay results from hole C2119, reported on 15th June 2022[1], were for the standard project elements of tin, copper, tungsten (WO_3), molybdenum and bismuth. Fluorine, which was only identified as a mineral of interest during the mineralogy program, requires a separate method of analysis (alkali fusion). These analyses were subsequently carried out at the ALS facility in Vancouver, Canada.

Significant fluorite (CaF_2) results from this additional assay data are shown and <u>underlined</u> below:

C2119: **89.85m** @ **<u>5.44% CaF_2</u>** from 205.3m, including;
14.2m @ 0.36% WO_3 @ **<u>10.2% CaF_2</u>** from 221.0m – Tungsten Zone (Upper Foleys Zone)

3.85m @ 1.05% Sn, 0.28% Cu & **<u>5.36% CaF_2</u>** from 64.25m - Tin-Copper Zone (Battery Lode)

Note: The fluorine assay results are reported as fluorite (CaF_2 %). Fluorite is present in the drill core as coarse-grained minerals (Figure 1). Fluorite is the common product in commercial concentrates containing fluorine.

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Figure 1. Coarse grained fluorite (purple) with wolframite (black) and molybdenite (silver) with quartz ± carbonate ± sericite

Elementos' Managing Director Joe David commented, "The confirmation of two broad zones of significant fluorite mineralisation intersected at our Cleveland Tin Project is additonal confirmation that we sit on a very special asset here in Tasmania. The historic tin mine is one which is clearly highly mineralised and just starting to show it's potential as a source of other critical minerals.

"Whilst the project has Mineral Resource Estimates published for tin, copper and tungsten; the potential for additonal minerals such as fluorite, to add to the mineral suite for the project, is just beginning to be assessed and understood. The company will continue to progress its understanding of the fluorite mineralisation event through further in our field and laboratory programs, in addtion to desktop reviews of historical papers and mining reports from previous mining operations.

"It is also important to note that tungsten has been identified as a critical mineral by the Australian Government, with tungsten, fluorite and tin having been identified as critical minerals by a number of Australia's strategic partners (inlcuding the USA, UK and the EU)."

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Foleys Zone Drilling (Tungsten Zone)

Drill hole C2119 was drilled in 2022 to a depth of 300m. The drill hole targeted an untested zone that occurs between northeast dipping and southwest dipping limbs of the historical underground mine workings and current JORC 2012 compliant mineral resource[2] (Figures 2 & 3).

C2119 intersected a zone of intensive quartz veining from 205.3m down hole containing wolframite (tungsten), fluorite (fluorine) and molybdenite (Mo) within a significant zone of silica and sericite alteration. The mineralisation style and type has been interpreted to be an extension of the mineralisation within the Foleys Zone tungsten resource (Table 2), approximately 150m above the defined resource. Fluorite mineralisation within the Foleys Zone was studied in detail and reported in a PhD thesis by P.L.F. Collins in 1983*[3].

The fluorite occurs as at an early stage in conjunction with wolframite (tungsten) as coarse purple crystals (see Figure 1). A later stage of fluorite mineralisation occurs as green crystals in veins up to 0.5m wide (page 138*[3]). Topaz mineralisation has been observed in very minor quantities (topaz also contains fluorine). It has been reported*[3] as occurring as small crystals 0.05mm to 0.5mm in diameter. Topaz is not considered to be a significant fluorine mineral at the Foleys Zone. The fluorite intercept from C2119 approximately 150m above the Foleys Zone is shown below:

C2119: 89.85m @ 5.44% CaF_2 from 205.3m, including
14.2m @ 0.36% WO_3 @ 10.2% Ca F_2 from 221.0m

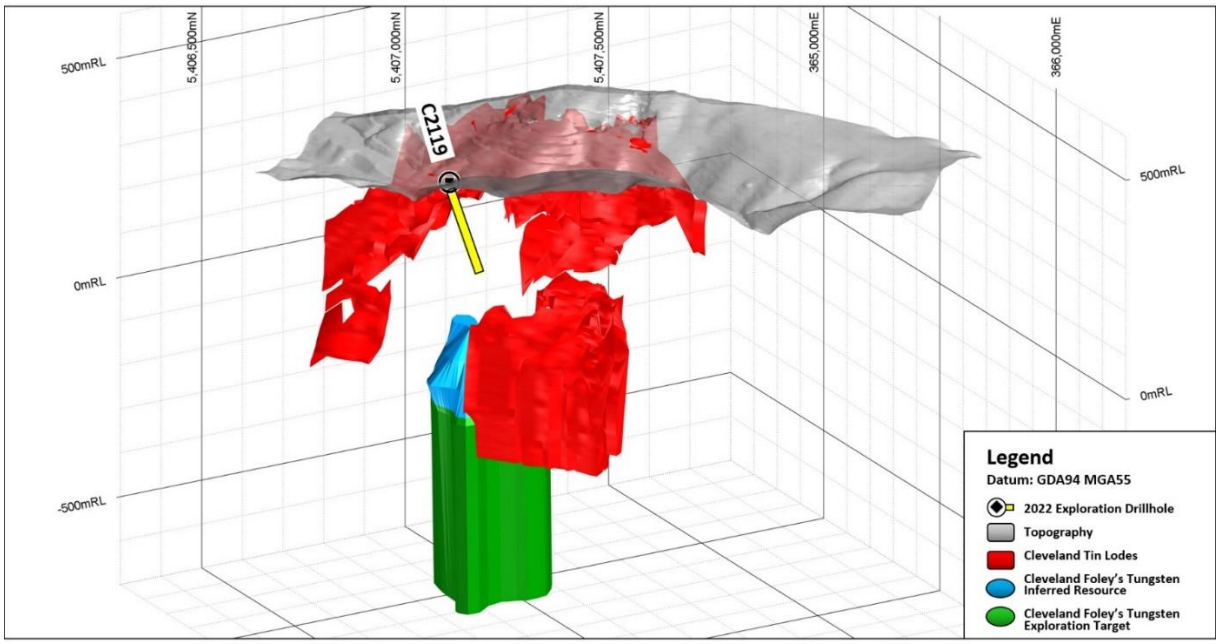

Figure 2. 3D view of the location of drill hole C2119 looking northwest highlighting the position with respect to the Cleveland tin-copper resource and Foleys Zone tungsten resource

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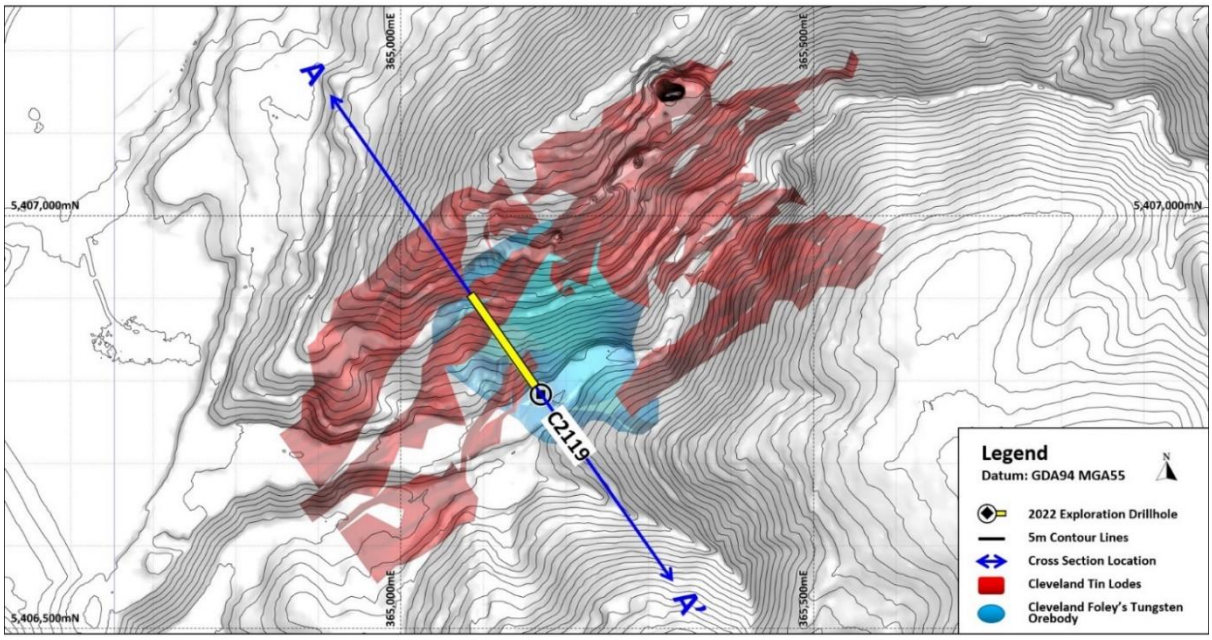

Figure 3. Topographical plan showing the location of drill hole C2119 and the current Cleveland Tin Lodes and Foley's Zone tungsten resource

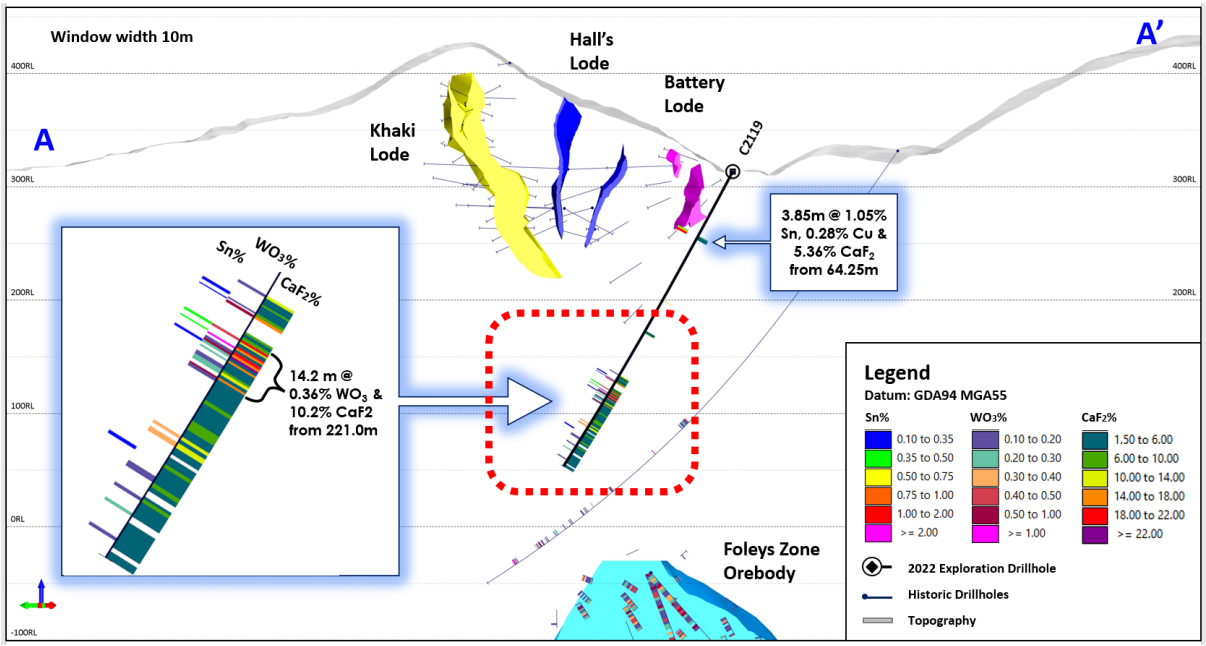

Figure 4. Section A-A' of C2119 Drilling (with assays plotted) looking northeast.

The fluorine assay results are being reported as fluorite. Fluorite is present in the drill core as coarse grained minerals (Figure 3). Fluorite is the common product in commercial concentrates containing fluorine.

The CaF_2 (fluorite) assay was calculated using the following formula:

*CaF_2 = ((Ca (atomic weight) + 2F(atomic weight))/2F(atomic weight)) * F (ALS assay)*

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An investigation was carried out into the relationship between calcium (Ca) and fluorine (F) to test the validity of the assumption that a majority of the fluorine in the assay data comes from fluorite. A total of 87 samples were compared in a scatter plot. The plot shows are good correlation between Ca and F with a R^2 value of 0.93. From this correlation, in combination with visual estimates of the mineralogy in the Foleys Zone, a large proportion of the fluorine is present as Fluorite. Samples outside the strong correlation trend were observed to contain elevated carbonate in veins.

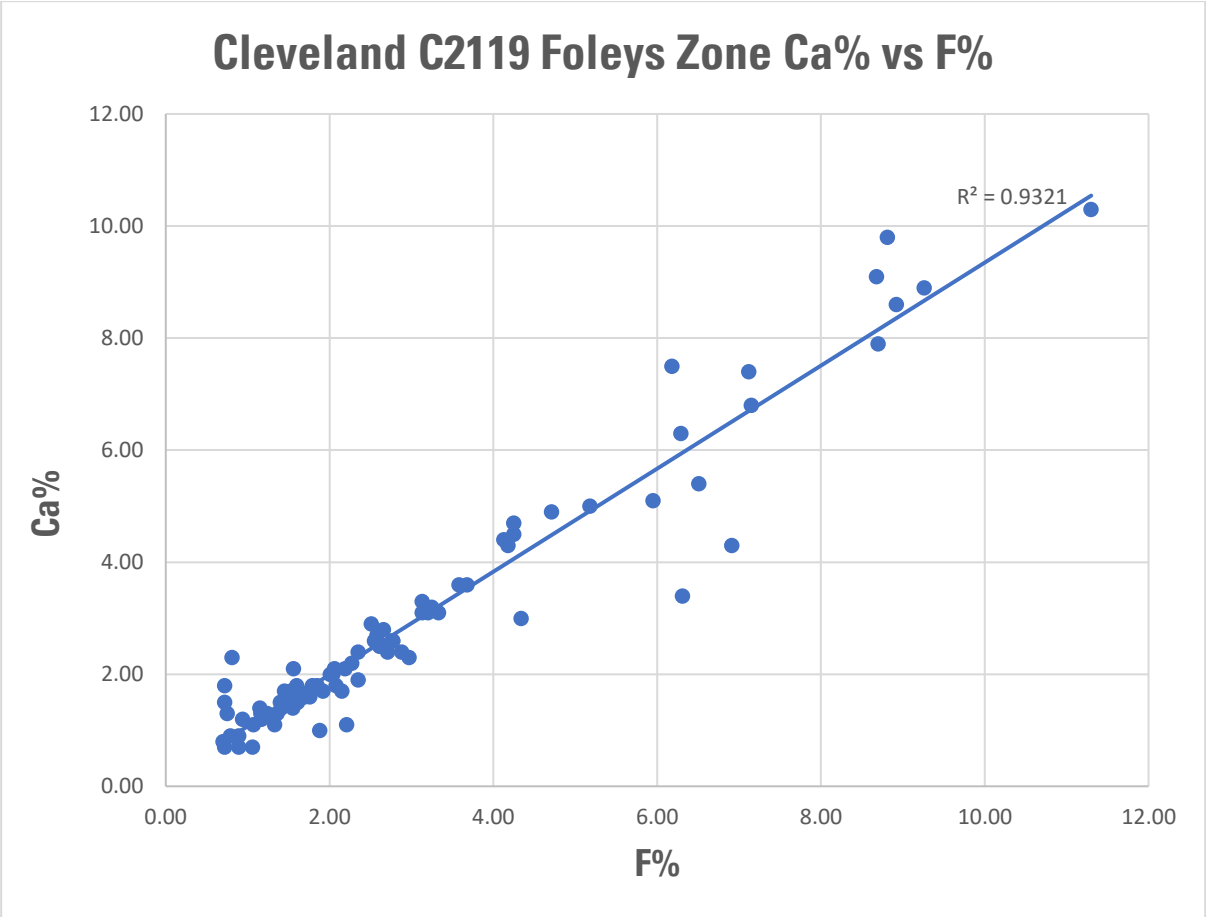

Figure 5. Correlation between F% and Ca% from drill hole C2119 for the Foleys Zone extension

Battery Lode (Tin-Copper Zone)

C2119 intersected an extension to the Battery Lode below the current JORC resource from a downhole depth of 64.25m for a downhole length 3.7m (Figure 3). Battery Lode intercept:

C2119: 3.85m @ 1.05% Sn, 0.28% Cu & 5.36% CaF_2 from 64.25m

The presence of fluorine as fluorite within the Battery Lode was confirmed by an optical mineralogy study completed by ALS laboratories, in conjunction with McKnight Mineralogy, in 2022. The study involved the preparation of polished thin sections and scanning by QXRD analysis. The study found that fluorite comprised 8.7% of the composite sample being assessed.

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Hole ID	SAMPLE	From (m)	To (m)	Interval (m)	Sample Type	ALS Code	ALS Vancouver F-ELE82 CaF2 (%)
C2119	130485	64.25	65.00	0.75	1/2 CORE	BU22087639	6.76
C2119	130484	65.00	65.70	0.70	1/2 CORE	BU22087639	4.73
C2119	130482	65.70	66.50	0.80	1/2 CORE	BU22087639	5.40
C2119	130481	66.50	67.20	0.70	1/2 CORE	BU22087639	4.27
C2119	130480	67.20	68.10	0.90	1/2 CORE	BU22087639	5.51
C2119	130479	129.10	129.55	0.45	1/2 CORE	BU22087639	12.70
C2119	130476	160.00	161.00	1.00	1/2 CORE	BU22087639	5.36
C2119	130475	161.00	161.90	0.90	1/2 CORE	BU22087639	3.39
C2119	130478	161.90	162.50	0.60	1/2 CORE	BU22087639	6.58
C2119	130474	205.30	206.20	0.90	1/2 CORE	BU22087639	12.92
C2119	130443	206.20	207.20	1.00	1/2 CORE	BU22171725	2.73
C2119	130473	207.20	207.90	0.70	1/2 CORE	BU22087639	4.54
C2119	130472	207.90	208.40	0.50	1/2 CORE	BU22087639	3.21
C2119	130471	208.40	209.00	0.60	1/2 CORE	BU22087639	8.59
C2119	130444	209.00	210.00	1.00	1/2 CORE	BU22171725	3.18
C2119	130445	210.00	211.00	1.00	1/2 CORE	BU22171725	4.42
C2119	130470	211.00	211.55	0.55	1/2 CORE	BU22087639	4.50
C2119	130469	211.55	212.10	0.55	1/2 CORE	BU22087639	8.73
C2119	130468	212.10	212.50	0.40	1/2 CORE	BU22087639	9.68
C2119	130467	212.50	213.40	0.90	1/2 CORE	BU22087639	17.83
C2119	130477	218.25	219.00	0.75	1/2 CORE	BU22087639	8.49
C2119	130446	219.00	220.00	1.00	1/2 CORE	BU22171725	3.47
C2119	130447	220.00	221.00	1.00	1/2 CORE	BU22171725	6.10
C2119	130466	221.00	221.80	0.80	1/2 CORE	BU22087639	18.10
C2119	130465	221.80	222.25	0.45	1/2 CORE	BU22087639	10.64
C2119	130448	222.25	223.40	1.15	1/2 CORE	BU22171725	2.18
C2119	130463	223.40	223.90	0.50	1/2 CORE	BU22087639	18.33
C2119	130462	223.90	224.55	0.65	1/2 CORE	BU22087639	14.69
C2119	130461	224.55	225.30	0.75	1/2 CORE	BU22087639	3.86
C2119	130460	225.30	226.20	0.90	1/2 CORE	BU22087639	19.03
C2119	130459	226.20	226.93	0.73	1/2 CORE	BU22087639	17.88
C2119	130458	226.93	227.73	0.80	1/2 CORE	BU22087639	23.22
C2119	130449	227.73	228.50	0.77	1/2 CORE	BU22171725	5.92
C2119	130457	228.50	229.10	0.60	1/2 CORE	BU22087639	14.63
C2119	130450	229.10	230.60	1.50	1/2 CORE	BU22171725	1.83
C2119	130501	230.60	231.90	1.30	1/2 CORE	BU22171725	3.31
C2119	130456	231.90	232.62	0.72	1/2 CORE	BU22087639	8.92
C2119	130455	232.62	233.55	0.93	1/2 CORE	BU22087639	12.97
C2119	130502	233.55	234.58	1.03	1/2 CORE	BU22171725	4.83
C2119	130454	234.58	235.20	0.62	1/2 CORE	BU22087639	14.20
C2119	130503	235.20	236.20	1.00	1/2 CORE	BU22171725	5.57
C2119	130504	236.20	237.10	0.90	1/2 CORE	BU22171725	5.69
C2119	130505	237.10	238.20	1.10	1/2 CORE	BU22171725	5.69
C2119	130507	238.20	239.20	1.00	1/2 CORE	BU22171725	2.79
C2119	130508	239.20	240.50	1.30	1/2 CORE	BU22171725	3.35
C2119	130509	240.50	241.60	1.10	1/2 CORE	BU22171725	4.83

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Hole ID	SAMPLE	From (m)	To (m)	Interval (m)	Sample Type	ALS Code	ALS Vancouver F-ELE82 CaF2 (%)
C2119	130510.00	241.60	242.60	1.00	1/2 CORE	BU22171725	4.13
C2119	130511.00	242.60	243.80	1.20	1/2 CORE	BU22171725	8.73
C2119	130512.00	243.80	244.90	1.10	1/2 CORE	BU22171725	2.90
C2119	130513.00	244.90	245.80	0.90	1/2 CORE	BU22171725	3.14
C2119	130514.00	245.80	246.80	1.00	1/2 CORE	BU22171725	3.31
C2119	130515.00	246.80	247.80	1.00	1/2 CORE	BU22171725	4.23
C2119	130516.00	247.80	249.00	1.20	1/2 CORE	BU22171725	5.24
C2119	130517.00	249.00	250.10	1.10	1/2 CORE	BU22171725	5.47
C2119	130518.00	250.10	251.30	1.20	1/2 CORE	BU22171725	6.43
C2119	130519.00	251.30	252.30	1.00	1/2 CORE	BU22171725	7.36
C2119	130520.00	252.30	253.30	1.00	1/2 CORE	BU22171725	6.43
C2119	130522.00	253.30	254.27	0.97	1/2 CORE	BU22171725	5.51
C2119	130523.00	254.27	256.00	1.73	1/2 CORE	BU22171725	2.88
C2119	130524.00	256.00	257.00	1.00	1/2 CORE	BU22171725	12.23
C2119	130525.00	257.00	258.25	1.25	1/2 CORE	BU22171725	5.51
C2119	130526.00	258.25	259.90	1.65	1/2 CORE	BU22171725	13.38
C2119	130527.00	259.90	261.00	1.10	1/2 CORE	BU22171725	2.96
C2119	130528.00	261.00	262.30	1.30	1/2 CORE	BU22171725	3.47
C2119	130529.00	262.30	263.30	1.00	1/2 CORE	BU22171725	1.44
C2119	130530.00	263.30	264.70	1.40	1/2 CORE	BU22171725	1.93
C2119	130531.00	264.70	265.85	1.15	1/2 CORE	BU22171725	5.30
C2119	130532.00	265.85	267.00	1.15	1/2 CORE	BU22171725	6.68
C2119	130533.00	267.00	268.40	1.40	1/2 CORE	BU22171725	3.62
C2119	130534.00	268.40	269.40	1.00	1/2 CORE	BU22171725	2.55
C2119	130535.00	269.40	270.70	1.30	1/2 CORE	BU22171725	4.66
C2119	130536.00	270.70	272.70	2.00	1/2 CORE	BU22171725	2.38
C2119	130537.00	272.70	274.10	1.40	1/2 CORE	BU22171725	6.84
C2119	130538.00	274.10	275.60	1.50	1/2 CORE	BU22171725	3.29
C2119	130539.00	275.60	277.60	2.00	1/2 CORE	BU22171725	1.48
C2119	130540.00	277.60	278.50	0.90	1/2 CORE	BU22171725	2.36
C2119	130541.00	278.50	279.60	1.10	1/2 CORE	BU22171725	7.56
C2119	130543.00	279.60	281.60	2.00	1/2 CORE	BU22171725	2.20
C2119	130544.00	281.60	282.60	1.00	1/2 CORE	BU22171725	1.62
C2119	130545.00	282.60	284.00	1.40	1/2 CORE	BU22171725	1.54
C2119	130546.00	284.00	285.00	1.00	1/2 CORE	BU22171725	4.27
C2119	130547.00	285.00	287.00	2.00	1/2 CORE	BU22171725	1.48
C2119	130548.00	287.00	289.00	2.00	1/2 CORE	BU22171725	1.66
C2119	130549.00	289.00	291.00	2.00	1/2 CORE	BU22171725	2.98
C2119	130551.00	291.00	292.00	1.00	1/2 CORE	BU22171725	3.80
C2119	130552.00	292.00	293.00	1.00	1/2 CORE	BU22171725	3.68
C2119	130553.00	293.00	294.10	1.10	1/2 CORE	BU22171725	5.16
C2119	130554.00	294.10	295.25	1.15	1/2 CORE	BU22171725	2.40
C2119	130555.00	295.25	296.20	0.95	1/2 CORE	BU22171725	1.83
C2119	130556.00	296.20	297.50	1.30	1/2 CORE	BU22171725	1.48
C2119	130557.00	297.50	298.50	1.00	1/2 CORE	BU22171725	3.95
C2119	130558.00	298.50	300.00	1.50	1/2 CORE	BU22171725	4.19

Table 1. Analytical results for fluorite for C2119

*CaF_2 % calculated by F% * 2.0547

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NOTE: this Open Pit Tin-Copper Mineral Resource is a sub-set of the Total Tin-Copper Mineral Resource noted b

Category	Tonnage	Sn Grade	Contained Sn	Cu Grade	Contained Cu
Indicated	1.73 Mt	0.93%	16,100t	0.33%	5,700t
Inferred	0.16 Mt	1.18%	1,900t	0.49%	800t
TOTAL	1.89 Mt	0.95%	18,000t	0.34%	6,500t

Underground Tin-Copper Mineral Resource - September 2018 (at 0.35% Sn cut-off

NOTE: this Underground Tin-Copper Mineral Resource is a sub-set of the Total Tin-Copper Mineral Resource not

Category	Tonnage	Sn Grade	Contained Sn	Cu Grade	Contained Cu
Indicated	4.50 Mt	0.68%	30,600t	0.29%	13,000t
Inferred	1.08 Mt	0.70%	7,500t	0.25%	2,700t
TOTAL	5.58 Mt	0.68%	38,100t	0.28%	15,700t

Total Tin-Copper Mineral Resource - September 2018 (at 0.35% Sn cut-off)

Category	Tonnage	Sn Grade	Contained Sn	Cu Grade	Contained Cu
Indicated	6.23 Mt	0.75%	46,700t	0.30%	18,700t
Inferred	1.24 Mt	0.76%	9,400t	0.28%	3,500t
TOTAL	7.47 Mt	0.75%	56,100t	0.30%	22,200t

Tables subject to rounding errors; Sn = tin, Cu = copper

**1- This information was prepared and first disclosed in 2013 under the JORC Code 2012. It has not been updated since on the basis that the information has not materially changed since it was last reported*

Tailings Ore Reserve - September 2018 (at 0% Sn cut-off)

Category	Tonnage	Sn Grade	Contained Sn	Cu Grade	Contained Cu
Probable	3.7 Mt	0.29%	11,000t	0.13%	5,000t

Table subject to rounding errors; Sn = tin, Cu = copper

**2 - This information was prepared and first disclosed in 2015 under the JORC Code 2012. It has not been updated since on the basis that the information has not materially changed since it was last reported*

Underground Tungsten Mineral Resource - September 2018 (at 0.20% WO_3 cut-off

Category	Tonnage	WO_3 Grade
Inferred	4 Mt	0.30%

Table subject to rounding errors; WO_3 = tungsten oxide

**3 - This information was prepared and first disclosed in 2014 under the JORC Code 2012. It has not been updated since on the basis that the information has not materially changed since it was last reported*

Table 2. Cleveland Tin Project JORC Resources

In addition to the Mineral Resources, in October 2013 the company released an Exploration Target for the Foley's Zone (below 850m RL) at between 24mt @ 0.3% WO3 at a 0.2% WO3 cut-off grade and 60mt @ 0.2% WO3 at a 0.0% WO3 cut-off grade below -180mRL*[2].

(The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.)

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

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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 tin developer, 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 "Tin and tungsten mineralisation extended at Cleveland Tin Project", 15th June 2022

*2 "Substantial Increase in Cleveland Open Pit Project Resources following Revised JORC Study", 26th September 2018

*3 "Geology and Mineralisation at the Cleveland Mine Western Tasmania", P.L.F. Collins. PhD thesis. University of Tasmania, 1983.

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.

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JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Diamond Drilling Programme – C2119 - Cleveland Project, Tasmania

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• C2119 was completed by HQ diameter pre-collar diamond drill core to 47.6m. The remainder of the drill hole was completed recovering NQ diameter drill core. • Only NQ drill core was sampled based on intervals determined by the project geologist and cut using a diamond saw to split the core in half. • 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. • 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. • Mineralised zones were determined visually
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• A UDR 200D self-propelled track mounted drilling rig was used, drilling HQ and NQ standard diamond core. Coring was from surface. • Drill core was collected using a standard double tube system.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Each individual drill core run was marked on a core block with metres drilled and metres recovered. Drill core recoveries checked by the project geologist • Overall drill core recovery is 98%
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• The total length of the drill hole has been photographed (wet and dry), and geologically and geotechnically logged prior to being sampled.

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Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Half core split using a diamond saw on a maximum length of 1.0m. Sample lengths varied depending on observed mineralisation zones and/or lithological boundaries. • Sample selection and marking is carried out by the project geologist • Cutting and sampling is carried out by the project geologist or a suitably qualified and experienced contractor • Half core dried, crushed, pulverized and split by ALS Laboratories, Burnie, Tasmania • No duplicates are taken from the core • Sample weights are between 0.5kg and 3.0kg
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Total fluorine was analysed at ALS Laboratories North Vancouver, Canada using the F-ELE82 technique. • Certified reference standards and blanks were submitted with the core samples
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• The data is collected and entered into a database by a qualified geologist • Significant intervals are reviewed by a senior employee prior to sampling • Data is entered into an excel spreadsheet. All data is stored on a local data storage system with a copy on a remote data storage system
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill collars are surveyed by hand held GPS • Grid system is GDA 94 Zone 55. • RL's are MSL plus 1000m • Downhole surveys are collected every 30m using an Ausmine Downhole Camera • Drill orientation during set-up is established using a compass and back sight

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Criteria	JORC Code explanation	Commentary
		and foresight markers. Dip is determined using a clinometer on the drilling rig mast.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drill intercepts have been reported on a weighted average basis
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• All drill holes were oriented normal to the strike of the known mineralisation and strata at Cleveland. The known mineralisation has sub-vertical dips towards the southeast.
Sample security	• *The measures taken to ensure sample security.*	• Samples are collected and transported by road by company employees to ALS Burnie
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• n/a

Section 2. Reporting of Exploration Results

Diamond Drilling Programme – C2119 - Cleveland Project, Tasmania

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *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.*	• 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. • The project lies within Forest Tasmania Managed Land
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

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Criteria	JORC Code explanation	Commentary
		ceased in 1986.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• 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 • The host sedimentary rocks were intruded by the Devonian-Carboniferous Meredith Granite. A quartz-porphyry dyke occurs approximately 350m below the land surface. • 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. • 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. • The tungsten mineralisation occurs as greisenisation of a quartz-porphyry dyke and fissure veins, referred to as the Foley's Zone.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *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.*	•

HOLE	EAST_GDA94	NORTH_GDA94	RL	Depth	DIP	MAG AZIMUTH
C2119	365170	5406783	313.4	300	-62	312

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Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• All diamond drill hole fluorine assay results reported are shown in the text of this report. • The mineralised intervals reported in the body of this report are stated on a weighted average basis • No bottom or top cut was applied to the aggregates • No metal equivalents have been used
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• The sections and plans shown in the body of the report display the relationship between the drill hole intercept and the known mineralisation
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.*	• All drill hole assay data used in this report is shown in Table-1?
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.*	• n/a
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• A downhole electromagnetic survey is panned for the first half of 2023 on a number of the drill holes completed in 2022

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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

n/a