#### ASX Code: ESS

#### **Corporate Profile**

Shares on issue: 151 million Cash: \$3.4m (30 Sep 2020) Debt: Nil

#### **Corporate Directory**

**Non-Executive Chairman** Craig McGown

**Non-Executive Directors** Paul Payne Warren Hallam

Managing Director Timothy Spencer

**CFO & Company Secretary** Carl Travaglini

**Exploration Manager** Andrew Dunn

#### **Key Projects**

#### Sole Funded

Juglah Dome (Au) Blair-Golden Ridge (Au, Ni) Dome North (Li) Sinclair Caesium Mine (Cs) Mavis Lake (Li)

#### Free Carried to Decision to Mine

Acra (Au) 25% Kangan (Au) 30% Balagundi (Au) 25%

#### **Investor Relations**

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12 November 2020

# High grade caesium confirmed in central zone 60m north of Sinclair Mine

Assays results from the September drilling programme confirm a high-grade central zone located approximately 60m along strike from the zone previously mined from the open pit Sinclair Mine

## **HIGHLIGHTS**

- High grade intersections in the central zone included:
  - 5m @ 20.24% Cs<sub>2</sub>O from 54m (PDRC480)
  - o 4m @ 19.13% Cs<sub>2</sub>O from 51m (PDRC482)
  - o 3m @ 17.56% Cs₂O from 53m (PDRC477)
  - o 2m @ 15.71% Cs₂O from 54m (PDRC476)
  - o 2m @ 8.71% Cs<sub>2</sub>O from 53m (PDRC469)
  - o 1m @ 16.79% Cs<sub>2</sub>O from 59m (PDRC485)
- The central zone measures approximately 30 metres in length and up to 6 metres laterally. As indicated by the above intersections, the height of the mineralised zone varies from 1 metre to 5 metres.
- No significant intersections were recorded in the 'in-fill' zone or 'northern extension' zone.

Essential Metals Managing Director, Tim Spencer, said: *"The laboratory results confirm what our geologists saw during the drilling programme, namely that the central zone contains high grade crystalline (caesium bearing) pollucite.* 

Our modelling shows that the central zone exceeds the minimum range of the Exploration Target included in the ASX release dated 8 June 2020 (and repeated on the next page) with the high caesium grades in some of the holes being as good as any of the best seen in the main deposit that was mined during 2018-19."



**Figure 1:** Sinclair Caesium Mine – looking north-west with the blue arrow indicating the direction of the pollucite corridor.



Essential Metals Limited (ASX: ESS; "Essential Metals" or "the Company") provides the results of the September Sinclair drilling programme. The drilling programme was aimed at testing the northern extension of Sinclair Caesium Deposit, which was mined by open pit during 2018-19.

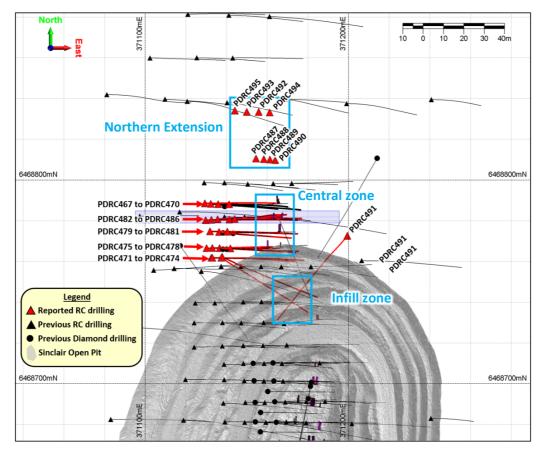
A geological review in the June Quarter underpinned delineation of an Exploration Target of between 1,000 and 2,000 tonnes of Cs<sub>2</sub>O at a grade between 8% and 14% Cs<sub>2</sub>O (caesium oxide) defined from remaining resources outside the stage 1 pit to the north and 2019 diamond core intersections that targeted these specific pollucite zones. The previous drilling had identified that a mineralised corridor extended up to 80 metres northwards from the bottom of the northern wall of the open pit.

The Exploration Target was based on modelling of the intersected pollucite zones. Conceptually, the minimum and maximum of the Exploration Target range represents 10% to 20% of the material that would be mined in a corridor mined with the following dimensions:

- Length = 80 metres
- Width = 8 metres
- Height = 6 metres

The potential quantity and grade of the Exploration Target is conceptual in nature. There is insufficient exploration information generated to estimate a Mineral Resource and it is uncertain that further exploration will result in the estimation of a Mineral Resource.

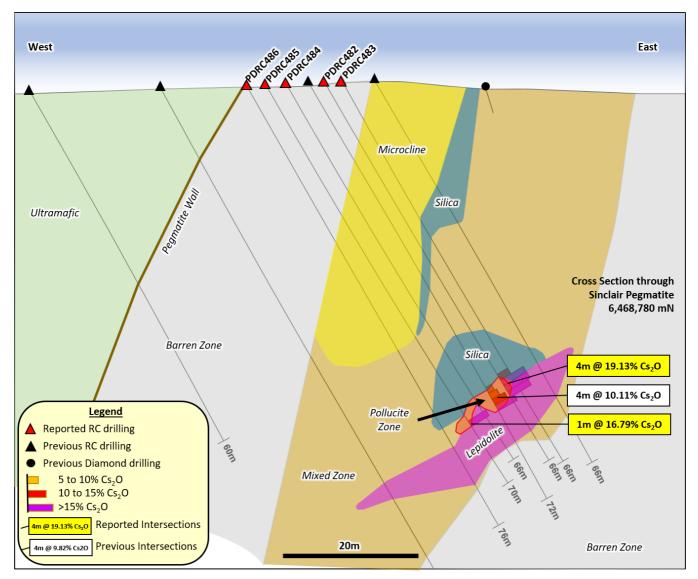
The September drill programme targeted three zones; Infill, Central and Northern Extension. Figure 2 below illustrates the locations of these zones in relation to the Sinclair open pit.



*Figure 2*: Drill locations, target zones and the Sinclair open pit with the September drill holes shown in red.



Drilling has confirmed the high-grade tenor of the Central Zone over approximately 30 metres in strike length and up to 6 metres in width. The height extends from one metre up to five metres.



*Figure 3*: Cross section illustrating some of the Cs<sub>2</sub>O intersections from the latest round of drilling.

Holes aimed at intersecting the Infill and the Northern Extension zones did not intersect caesium bearing pollucite (the host mineral for caesium above a grade of ~5%).

The Company is encouraged by the very high grades intersected in the Central zone with the view that more caesium will be required to be delineated in and around the Sinclair Deposit to form the basis of a second mining campaign.

Figure 4 on Page 4 illustrates a wireframe model of the central zone, demonstrating the intensity of the drilling in the context of the central zone being such a small target area.



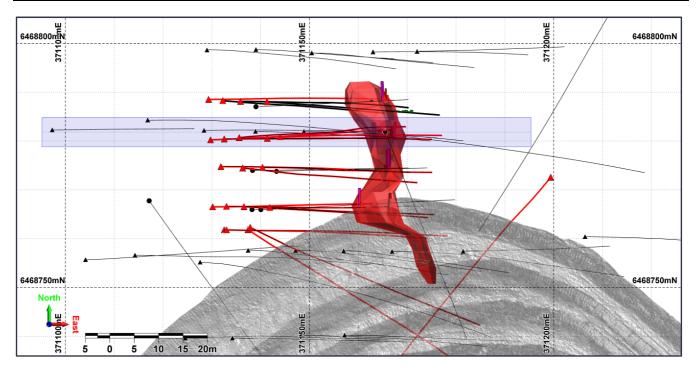


Figure 4: Plan view of a wireframe of the central zone (red shaded area) where high grade caesium was intersected.

## The Next Steps

The drilling results will be assessed in the context of all other data accumulated from past exploration and mining activities and used to plan further exploration work at the Sinclair Caesium deposit. In particular, the Infill zone and the southern end of the open pit will be reassessed to determine where further drilling is warranted .

This ASX release has been approved by the Board of Directors

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## **About Essential Metals Limited**

Following successful completion of the Sinclair Caesium Mine, Essential Metals is now a well-funded and active explorer focused on key global demand-driven commodities, looking for its next opportunity to create shareholder wealth through exploration and project development. The Company operates a portfolio of strategically located lithium, caesium, gold, nickel and cobalt projects in mining regions in Western Australia, plus a high-quality lithium asset in Canada.

## Lithium - Caesium:

- The *Pioneer Dome LCT Project* is highly prospective for lithium-caesium-tantalum (LCT) mineral systems:
  - The *Dome North Lithium Project* is located in the northern area where multiple spodumene bearing pegmatites were discovered in 2019. It now has a Mineral Resource of 11.2 million tonnes @ 1.21% Li<sub>2</sub>O.
  - The *Sinclair Caesium Deposit* that was successfully developed and mined by the Company and extensions to the deposit are currently being explored.
- The Company holds a 51% Project interest in the *Mavis Lake Lithium Project*, Canada where Company drilling has intersected spodumene.

#### Gold:

- The *Juglah Dome Project* is located 60km east-southeast of Kalgoorlie and is considered to be highly prospective for gold with recent work also raising its prospectivity for VHMS style polymetallic deposits.
- The *Blair Golden Ridge* Project is located ~20km SSE of Kalgoorlie, WA and is prospective for gold. Activities are focussed on reappraising known prospects as well as identifying new areas within the large land tenure.

**Gold Farmin/Joint Ventures**: Essential Metals has three free-carried interests with well credentialed JV partners:

- Acra JV Project near Kalgoorlie: Northern Star Resources Limited (ASX:NST) has earned a 75% Project Interest and continues to fully fund exploration programmes until approval of a Mining Proposal by DMIRS with Essential Metals retaining a 25% interest.
- *Kangan Project* in the West Pilbara: A farmin & JV agreement with Novo Resources Corp (TSXV.NVO) and Sumitomo Corporation will fully fund gold exploration programmes until a decision to mine is made, with Essential Metals retaining a 30% interest.
- **Balagundi Project**: A farmin & JV agreement where Black Cat Syndicate Limited (ASX:BC8) is earning a 75% interest in the Project located at Bulong, near Kalgoorlie. Black Cat will then fully fund gold exploration programmes until a decision to mine is made, with Essential Metals retaining a 25% interest.

**Nickel**: The *Blair-Golden Ridge Project* includes the suspended Blair Nickel Sulphide Mine and the advanced Leo Dam prospect as well as several other prospects.



#### Reference to previous market announcements

The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

#### **Forward Looking Statement**

This announcement may contain forward-looking statements which involve a number of risks and uncertainties. These forward looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

#### **Competent Person Statement**

Mr Andrew Dunn (MAIG), Exploration Manager who is employed full-time by Essential Metals Limited, compiled the technical aspects of this Report. Mr Dunn is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralization and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Dunn consents to the inclusion in the report of the matters in the form and context in which it appears.

Table 1 - Reverse Circulation Drill Hole Collar Locations												
(Cs <sub>2</sub> O cut-off 5%)												
Hole ID	Туре	Grid	East	North	RL	Dip	Azimuth	Depth	From	То	Interval	Cs <sub>2</sub> O
PDRC467	RC	MGA94_51	(m) 371141.3	(m) 6468788	(m) 332.9	(°) -58	(º) 94	(m) 66	(m)	(m)	(m)	% NSA
PDRC468	RC	MGA94_51	371135.9	6468788.1	332.6	-59	90	66				NSA
PDRC469	RC	MGA94_51	371133.9	6468788.3	332.5	-60	90	66	53	55	2	8.71
		_							53	55	2	
PDRC470	RC	MGA94_51	371129.3	6468788.5	332.4	-61	90	72				NSA
PDRC471	RC	MGA94_51	371137.9	6468762.3	333.5	-49	116	78				NSA
PDRC472	RC	MGA94_51	371137.4	6468761.9	333.4	-50	123	78				NSA
PDRC473	RC	MGA94_51	371133	6468761.8	333.4	-52	91	72				NSA
PDRC474	RC	MGA94_51	371132.5	6468761.8	333.3	-56	91	72				NSA
PDRC475	RC	MGA94_51	371141.9	6468766.4	333.6	-60	93	66				NSA
PDRC476	RC	MGA94_51	371136.6	6468766.6	333.4	-59	93	72	54	56	2	15.71
PDRC477	RC	MGA94_51	371133	6468766.6	333.1	-60	90	66	53	56	3	17.56
PDRC478	RC	MGA94_51	371130.2	6468766.5	333.1	-60	90	66				NSA
PDRC479	RC	MGA94_51	371140.4	6468774.6	333.3	-58	91	66				NSA
PDRC480	RC	MGA94_51	371136.3	6468774.5	333.1	-58	96	66	54	59	5	20.24
PDRC481	RC	MGA94_51	371131.9	6468774.8	332.9	-60	90	72				NSA
PDRC482	RC	MGA94_51	371141.4	6468780.5	333.1	-60	90	66	51	55	4	19.13
PDRC483	RC	MGA94_51	371144	6468780.9	333.2	-61	88	66				NSA
PDRC484	RC	MGA94_51	371135.6	6468780.7	332.9	-60	85	66				NSA
PDRC485	RC	MGA94_51	371132.5	6468780.4	332.7	-60	90	70	59	60	1	16.79
PDRC486	RC	MGA94_51	371129.7	6468780.2	332.5	-60	88	76				NSA
PDRC487	RC	MGA94_51	371154.5	6468810.5	331.6	-90	0	66				NSA
PDRC488	RC	MGA94_51	371158.3	6468810.2	331.2	-90	0	60				NSA
PDRC489	RC	MGA94_51	371161.3	6468810	330.9	-90	0	60				NSA
PDRC490	RC	MGA94_51	371163.9	6468809.8	330.6	-90	0	60				NSA
PDRC491	RC	MGA94_51	371199.4	6468772.6	330	-51	219	84				NSA
PDRC492	RC	MGA94_51	371155.8	6468833.4	329.6	-90	0	60				NSA
PDRC493	RC	MGA94_51	371150	6468833.4	330.5	-90	0	60				NSA
PDRC494	RC	MGA94_51	371161.2	6468833.1	329.3	-90	0	60				NSA

## Appendix 1 – Drill hole information and results

Notes:

Hole locations were measured by a licenced surveyor in MGA 94 zone 51 using a DGPS which is considered fit for purpose.

• For holes prefix PDRC, the azimuth is in degrees magnetic as derived from a hand held compass.

For holes prefix PDD the azimuth is in degrees true north as derived from a north seeking gyro tool.

• Selected Assay results derived from chemical analysis by Intertek-Genalysis. The elemental assay results have been calculated to oxide concentrations by multiplying Cs by 1.0602 to derive Cs<sub>2</sub>O.

• A cut-off grade of 5% Cs2O was applied.

• Intersections are 'down-hole' and do not represent a true width.

• Selected Cs<sub>2</sub>O assays have been rounded to one decimal place.



## Appendix 2

## Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

## Pioneer Dome Project, Sinclair Deposit.

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg cut Faces, 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.	<ul> <li>Industry-standard reverse circulation drilling, using a face-sampling hammer was used to collect the sample.</li> <li>Single metre samples were collected in calico bags via a cone splitter directly from the cyclone on the RC drill rig. Three-metre composite samples for intervals that were considered to have low LCT element concentrations (confirmed with pXRF data) were collected from the sample piles via an aluminium scoop.</li> <li>Portable X-ray Fluorescence (pXRF) analysis was carried out for each 1m sample utilising a Bruker S1 Titan 600 handheld portable XRF analyser. This data was used for internal use only and not reported herein.</li> </ul>
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	<ul> <li>Booster and auxiliary compressors were utilised during drilling to ensure dry samples.</li> <li>Individual one metre samples were collected using a cyclone and a cone splitter into sub samples of nominal 3.0kg weight. The cyclone was regularly cleaned at the end of each 6m rod to minimise contamination.</li> <li>Duplicate samples and Certified Reference Standards were inserted at regular intervals to provide quality checks for assays. The standards and duplicates associated with the reported intersections are within acceptable limits.</li> </ul>
	<ul> <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 (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.</li> </ul>	<ul> <li>Reverse circulation drilling was used to obtain 1 m samples that were sub-sampled by a rig mounted cone splitter to produce a nominal 3.0 kg samples.</li> <li>These samples were crushed and pulverised by pulp mill to nominal P80/75um to produce a 50-gram charge for analysis.</li> <li>Samples containing a high Cs content were analysed using lithium borate fusion XRF analysis.</li> <li>Samples containing a low Cs content were submitted for Lithium exploration package of elements were digested by a four-acid digestion and determined with a Mass Spectrometer (Intertek analysis code 4A Li48-MS). The quoted detection limits for this method are a lower detection limit of 0.02 ppm and an upper detection of 2,000ppm Cs. Any over range Cs values were re-analysed by a sodium peroxide zirconium crucible fusion with Mass Spectrometry (MS) finish.</li> </ul>
Drilling techniques	• Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diametre, 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>Reverse Circulation Drilling.</li> <li>4.5-inch drill string.</li> <li>5.5-inch Face-sampling hammer.</li> <li>Auxiliary and Booster compressors were used to keep the samples dry.</li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>During RC drilling the geologist recorded occasions when sample quality was poor, sample return was low, when the sample was wet or compromised in another way.</li> </ul>
	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Sample recovery was good during the drilling.</li> <li>Geologist kept a watch on the second calico bag on the cone splitter to check if the sample volume matched the primary sample.</li> </ul>



Criteria	JORC Code explanation	Commentary
	• 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.	<ul> <li>There has been no correlation recognised between sample recoveries and grade.</li> </ul>
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.	<ul> <li>Geological information was captured during drilling. This included lithology, mineralogy, sulphide abundance, alteration, texture, recovery, weathering and colour.</li> <li>The details captured were considered appropriate.</li> </ul>
	• Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography.	<ul> <li>Logging has primarily been qualitative but it includes quantitative estimates on mineral abundance.</li> <li>Qualitative litho-geochemistry based on pXRF analyses are used to help confirm rock types.</li> <li>A representative sample of each RC drill metre was sieved and retained in chip trays for future reference.</li> </ul>
	• The total length and percentage of the relevant intersections logged.	The entire length of the drill holes was geologically logged.
Sub-sampling techniques and sample preparation	<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> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>RC drilling - Individual one metre samples were collected via a rig mounted cone splitter. All samples were dry. Individual samples were approximate 3.0kg. A second sample was collected in a calico bag from the cone splitter.</li> <li>Individual RC drilling metre samples of the pegmatite that were enriched in elements typically associated with lithium in LCT pegmatites, as determined by a portable XRF (S1 Titan 600 Bruker pXRF) were submitted to the laboratory. Three metre composites were collected for the remainder of the drill holes in areas where the pXRF analysis indicated low associated element concentrations. In some drill holes the sampling (on a three-metre composite basis) was undertaken prior to the pXRF analysis. Any three metre composite samples that returned anomalous LCT elements were re-sampled using the original single metre samples.</li> <li>The sample collection, splitting and sampling for the types of drilling used is considered standard industry practise.</li> </ul>
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<ul> <li>Cyclones are routinely cleaned after each 6m rod.</li> <li>Geologist recorded any evidence of sample contamination, when present.</li> <li>The use of booster and auxiliary compressors ensures samples are dry, which best ensures a quality sample.</li> </ul>
	<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>Duplicate field samples were routinely taken at a rate of 1 per 30 samples for RC drilling.</li> <li>Laboratory quality control samples were inserted by the laboratory with the performance of these control samples monitored by the laboratory and the company.</li> <li>Analysis of the aforementioned measures indicated that the sampling was representative and reliable.</li> </ul>
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>The sample size is considered appropriate for the style of deposit being sampled.</li> </ul>
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.	<ul> <li>The sample preparation and assay method used is considered standard industry practice and is appropriate for the deposit.</li> </ul>
	• For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	• The Company owns a Bruker S1 Titan 600 handheld XRF instrument. It was used to provide the geologist with basic, qualitative litho-geochemistry data and assist with selecting zones for sampling. Zones have been selected due to elevated caesium, niobium, tantalum, rubidium, or tin.



Criteria	JORC Code explanation	Commentary
	• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	<ul> <li>Intervals that weren't identified as elevated from the pXRF analysis were composited to three metre samples and submitted to the laboratory for analysis.</li> <li>Standards and blanks have been analysed with the Bruker to ensure the instrument is operating as expected and it is correctly calibrated.</li> <li>Standard Reference Materials were inserted at a rate of 1 per 30 samples.</li> <li>Duplicate field samples were routinely taken at a rate of 1 per 30 samples for RC drilling.</li> <li>Laboratory quality control samples were inserted by the laboratory with the performance of these control samples monitored by the laboratory and the company.</li> <li>Analysis of the aforementioned measures indicated that the sampling was representative and reliable.</li> </ul>
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> </ul>	<ul> <li>Significant intersections were calculated by geological staff with these intersections checked by the Exploration Manager.</li> <li>Laboratory assay results were compared to the pXRF analyses.</li> <li>The significant assay results were compared to the logging to confirmed they matched the pollucite zones.</li> <li>No holes have been twinned but the nature of pollucite mineralisation warrants very close spaced drillholes, sometimes less than 5m apart.</li> </ul>
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<ul> <li>The geological and sampling information were uploaded to the Company's SQL drilling database.</li> </ul>
	• Discuss any adjustment to assay data.	<ul> <li>The Company has adjusted the lithium (Li), tantalum (Ta) and caesium (Cs) assay results to determine Li<sub>2</sub>O, Ta<sub>2</sub>O<sub>5</sub> and Cs<sub>2</sub>O grades. This adjustment is a multiplication of the elemental Li, Ta and Cs assay results by 2.153, 1.221 and 1.0602 to determine Li<sub>2</sub>O, Ta<sub>2</sub>O<sub>5</sub> and Cs<sub>2</sub>O grades, respectively.</li> </ul>
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.	<ul> <li>The collar locations of the holes have been surveyed by a licenced surveyor using a differential GPS. The collar surveys provide very accurate positions for all holes including the RL of each drill collar.</li> </ul>
	• Specification of the grid system used.	• MGA94 (Zone 51)
	Quality and adequacy of topographic control.	<ul> <li>Topographic control is by DGPS, carried out by a licensed surveyor.</li> <li>A high-resolution DEM exists over the entire M63/665 lease.</li> </ul>
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	<ul> <li>Drill spacing for caesium extensions was drilled on 5 to 8m spaced panels with drill holes ~3m apart.</li> </ul>
	<ul> <li>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.</li> </ul>	<ul> <li>Current data is sufficient to establish geological continuity of the pollucite (Cs) zone. Due to the poddy nature of the pollucite mineralisation that any Mineral Resource Estimate (MRE) would likely only be able to classified as Inferred or Indicated.</li> </ul>
	<ul> <li>Whether sample compositing has been applied.</li> </ul>	• The reported intersection were from 1m samples, none were composites.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have</li> </ul>	<ul> <li>The geometry of the pollucite mineralisation is complex. It broadly has a north-south strike and moderate west dip. The majority of the drill holes tested the mineralisation at a near optimal orientation. However, PDRC471, PDRC472 and PDRC491 were drilled oblique to the mineralisation due to the position of the open pit and lack of suitable drill site.</li> <li>Cross sections were drawn as the holes progressed to ensure the drilling was optimal to the interpreted orientation of the mineralisation.</li> </ul>



Criteria	JORC Code explanation	Commentary		
	introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>Down hole intercept widths are estimated to closely approximately true widths based on the interpretation of the pegmatite bodies and the orientation of the drilling.</li> </ul>		
Sample security	• The measures taken to ensure sample security.	<ul> <li>The Company uses standard industry practices when collecting, transporting and storing samples for analysis.</li> <li>Drilling pulps are retained by the Company off site.</li> </ul>		
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>Sampling techniques for assays have not been specifically audited but follow common practice in the Western Australian exploration industry.</li> <li>The assay data and quality control samples are periodically audited by an independent consultant.</li> </ul>		



## Section 2 - Reporting of Exploration Results

(	Criteria listed in	h the nre	ceding ser	ction also a	annly to	this section	١
	Cincenta insteu in	i the pre	ceuing set		apply to	this section.	/

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	<ul> <li>The Pioneer Dome drilling reported herein is entirely within M63/665 which is a granted Mining Lease.</li> <li>The tenement is located approximately 40km north of Norseman, WA.</li> <li>The Company is the registered holder of the tenement and holds a 100% unencumbered interest in all minerals within the tenement.</li> <li>The tenement is on vacant crown land.</li> <li>The Ngadju Native Title Claimant Group has a determined Native Title Claim which covers the Pioneer Dome project.</li> </ul>
	• 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.	• At the time of this report M63/665 was in Good Standing. To the best of the Company's knowledge, other than industry standard permits to operate there are no impediments to Company's operations within the tenement.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>There has been no previous caesium exploration drilling or sampling on the Pioneer Dome project other than that carried out by the Company. Previous mapping by the Western Australian Geological Survey and Western Mining Corporation (WMC) in the 1970's identified several pegmatite intrusions, however, these were not systematically explored for Lithium or associated elements such as caesium.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	• The Project pegmatites are consistent with records of highly differentiated Lithium Caesium Tantalum (LCT) pegmatite intrusion. This type of pegmatite intrusions are the target intrusions of hard rock lithium deposits. The Sinclair Deposit is classified as a Petalite/Lepidolite sub type and is highly enriched in caesium in the very rare mineral form pollucite.
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, including 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 plus hole length.</li> <li>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.</li> </ul>	Refer to Appendix 1 of this announcement.
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>Weighted average Cs<sub>2</sub>O assays within the release are calculated using 5% Cs<sub>2</sub>O cut-off grade, minimum thickness 1m, with a maximum of 1m of internal waste and no external dilution.</li> <li>Assays in Table 1 are as per the intervals sampled.</li> <li>There are no metal equivalent values reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisatio n widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <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>	• Downhole lengths are reported in Appendix 1. The current geological interpretation, based on drilling and mapping, suggests that the true widths approximate the down hole widths.
Diagrams	<ul> <li>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.</li> </ul>	• Refer to figures in this 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 of the drill details for the latest Sinclair Pollucite programme have been provided in Appendix 1 of this announcement.
Other substantive exploration data	<ul> <li>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.</li> </ul>	• All meaningful and material exploration data has been reported.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>A comprehensive review of these results and a re-assessment of Pollucite potential near the Sinclair open pit needs to be carried out, to understand the potential upside.</li> </ul>