encounter RESOURCES LIMITED

# Thick, high-grade Niobium-REE at Aileron - West Arunta

- **The first two holes at Crean, drilled 1.5km apart on the Elephant Island Fault, have intersected carbonatites with both RC pre-collars finishing in high grade niobium and rare earths ("REE" or "TREO") mineralisation**
- **EAL008 intersected 94.7m of carbonatite from 55m to 149.7m. Assays results from the 90m deep RC pre-collar returned:**
  - **34m @ 1.0% $Nb_2O_5$ & 0.6% TREO from 56m to <u>end of pre-collar</u> including:**
    - **4m at 3.8% $Nb_2O_5$ & 1.9% TREO from 56m**
- **EAL007 intersected 282m of carbonatite from 64m to <u>end of hole at 346m</u>. Assay results from the 69m deep RC pre-collar returned:**
  - **2m @ 1.2% $Nb_2O_5$ & 0.6% TREO from 67m to <u>end of pre-collar</u>**
- **Assays for the diamond tails of EAL007 (from 69m) and EAL008 (from 90m) are expected to be received in August-September 2023**
- **The mineralised carbonatite remains open to the east and west and is increasing in width to the east where it is open in all directions**
- **An initial 80-100 hole RC drilling program will commence in August 2023**

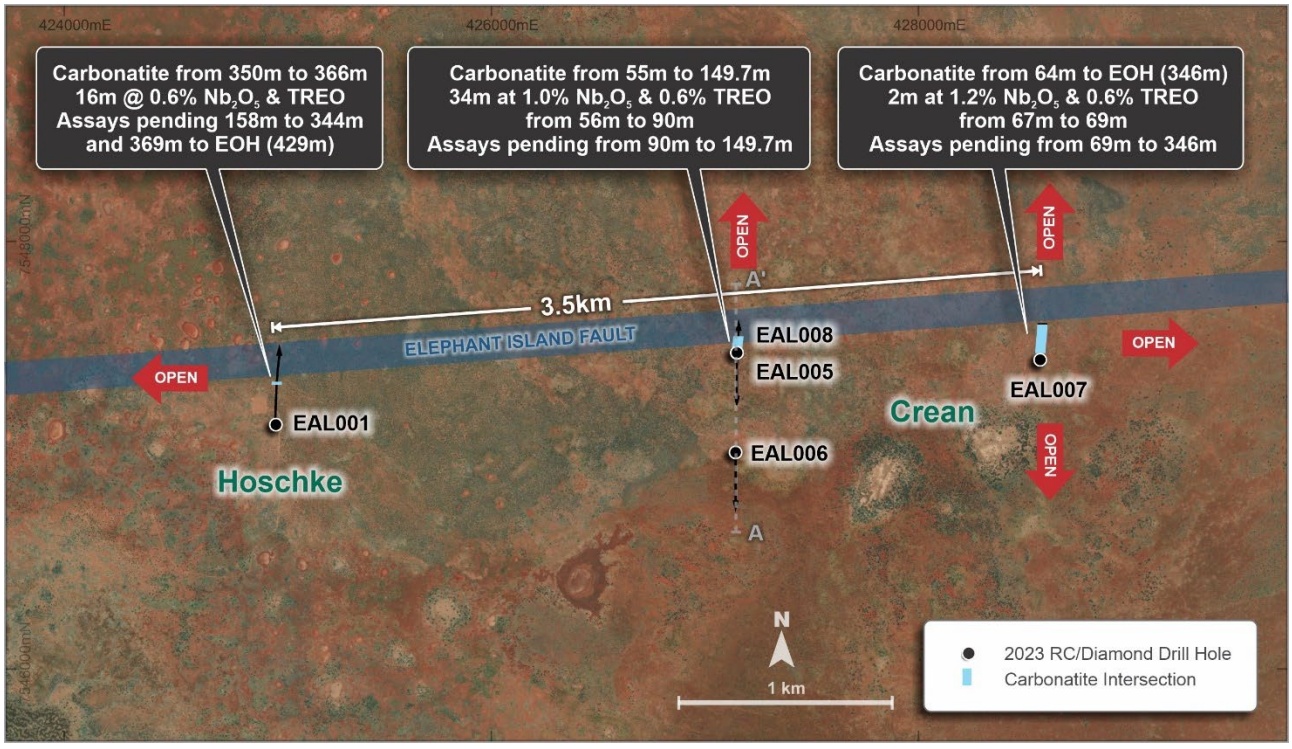


**Figure 1 – Aileron diamond drill plan showing the 3 holes (EAL001, EAL008 and EAL007) that intersected carbonatites over 3.5km of strike along the Elephant Island Fault**

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Encounter Resources Ltd ("Encounter") is pleased to confirm the intersection of high-grade niobium and REE mineralisation at the Aileron critical minerals project in the West Arunta region of WA.

**Commenting on the niobium-REE at Aileron, Encounter Managing Director Will Robinson said:**

*"The intersection of high-grade niobium and rare earths at Crean in the first two holes drilled 1.5km apart is an incredible start and demonstrates the critical minerals potential that is emerging in the West Arunta.*

*An 8,000-10,000m RC drill program is scheduled to commence in August to extend the niobium-REE mineralisation at Crean as well as drill testing a suite of new, high-quality targets.*

*It's still very early days but the success rate from the small number of holes drilled in the West Arunta is quite extraordinary and bodes well for future drill programs at Aileron."*

## Background

The 100% owned Aileron project covers 1,765km$^2$ and is located in the West Arunta region of WA ~600km west of Alice Springs. Encounter completed large gravity, magnetic and radiometric surveys at Aileron which defined three initial drill targets at Caird, Crean and Hoschke.

In May-June 2023, a diamond (with RC pre-collar) drilling program at Caird, Crean and Hoschke was completed. In parallel, a large Falcon airborne gravity survey defined a suite of additional large scale targets at Aileron.

The originally planned 4 diamond hole program was completed in early June 2023, comprising 2 holes at Crean (EAL005 & EAL006) and 1 hole at each of Hoschke (EAL001) and Caird (EAL002).

The first diamond hole (EAL001) at Hoschke intersected a niobium-REE mineralised carbonatite dyke over a downhole length of 16m, within the Elephant Island Fault corridor (see ASX release 28 June 2023).

Two additional diamond holes at Crean (EAL007 & EAL008) were added to the program following observations of core from EAL001 (Figure 1).

## Pre-Collar Assay Results

Structural measurements from diamond core in EAL001 indicated that the carbonatite dyke is steeply dipping and strikes parallel to the interpreted major east-west Elephant Island Fault. This, along with zones of REE anomalism in pXRF[1] data from EAL005, provided an important vector to target additional mineralisation along the Elephant Island Fault.

EAL007 and EAL008 were drilled ~2.0km and ~3.5km east of EAL001 at Crean and both holes intersected thick zones of oxidised and primary carbonatite starting from near surface.

Assay results for the RC pre-collars have now been received with the assays for the diamond tails of EAL007 (from 69m) and EAL008 (from 90m) expected later in the September 2023 quarter.

- EAL008 intersected oxidised carbonatite from 55m to 119.6m and primary carbonatite from 119.6m to 149.7m. Assays results from RC pre-collar returned :
  - 34m @ 1.0% $Nb_2O_5$ & 0.6% TREO (~21% Nd+Pr:TREO) from 56m to end of pre-collar at 90m including:
    - 4m at 3.8% $Nb_2O_5$ & 1.9% TREO (~21% Nd+Pr:TREO) from 56m

- EAL007 intersected oxidised carbonatite from 64m to 75.9m and primary carbonatite from 75.9m to end of hole at 346m. Assay results from the RC pre-collar returned:
  - 2m @ 1.2% $Nb_2O_5$ & 0.6% TREO (~22% Nd+Pr:TREO) from 67m to end of pre-collar at 69m;

All holes drilled along the Elephant Island Fault corridor (EAL001, EAL007 & EAL008) contain niobium-REE carbonatites. The carbonatites currently extend for ~3.5km of strike and remain open to the east and west and are increasing in width to the east where they are open in all directions

Assays from EAL007 and EAL008 RC pre-collars confirm a significant, near surface, high grade niobium and REE mineralised oxide zone where the mineralised carbonatite comes to surface.

The upcoming 8,000-10,000m RC drill program has been designed to systematically test targets along the Elephant Island Fault corridor for oxidised, enriched niobium-REE mineralisation. The program is planned to include 80-100 RC holes to an average depth of 100m.

**Next Steps**

- A heritage survey is in progress at Aileron to support the planned RC drill program
- Assays from the 6 diamond holes completed are expected to be received in the September 2023 quarter
- RC drilling will commence in August 2023. This program (Figure 2) includes:
  - drilling to extend the shallow, high-grade niobium-REE mineralisation at Crean;
  - drilling of the Hurley and Wild targets located east of Crean along the Elephant Island and Stromness Faults; and
  - drilling at the Green target north of WA1 Resources' Luni niobium-REE discovery.

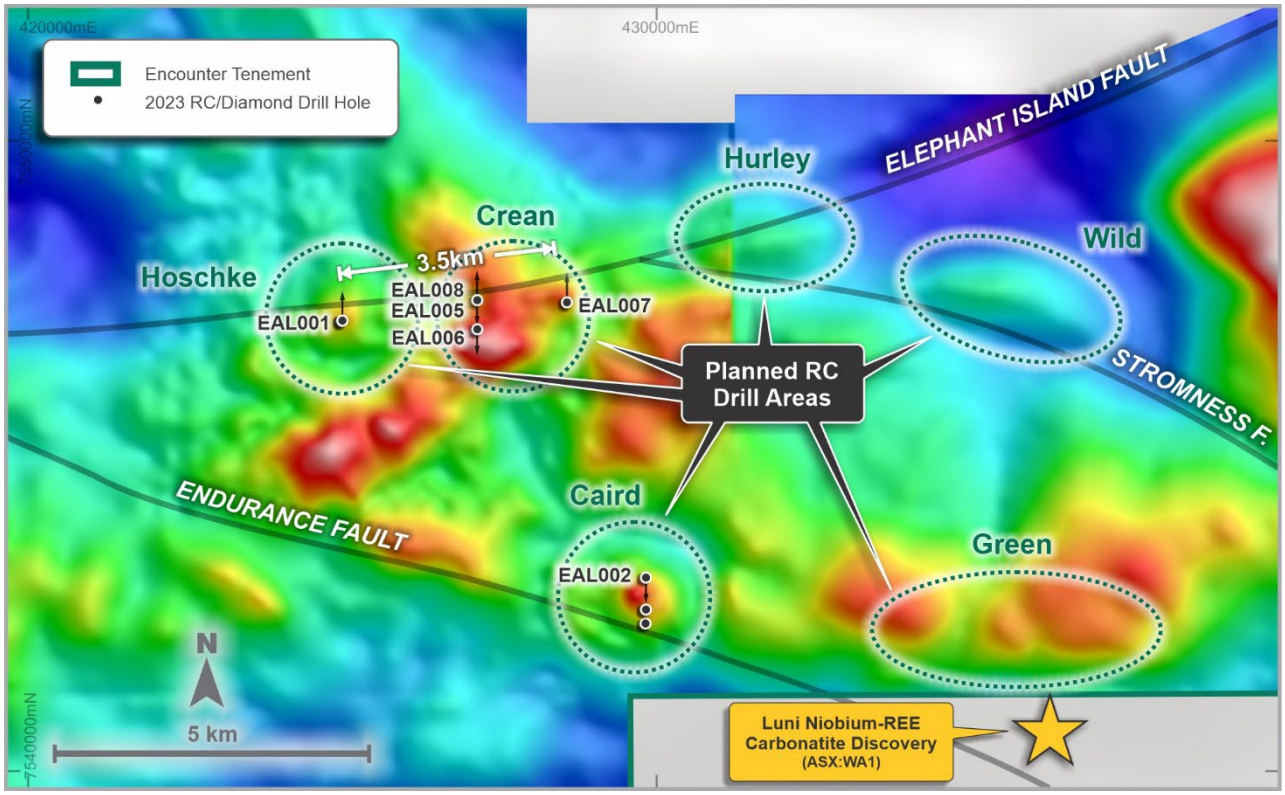



**Figure 2 – Aileron diamond drill locations (black dots) over residual gravity with planned RC drill program targets (dotted outlines)**

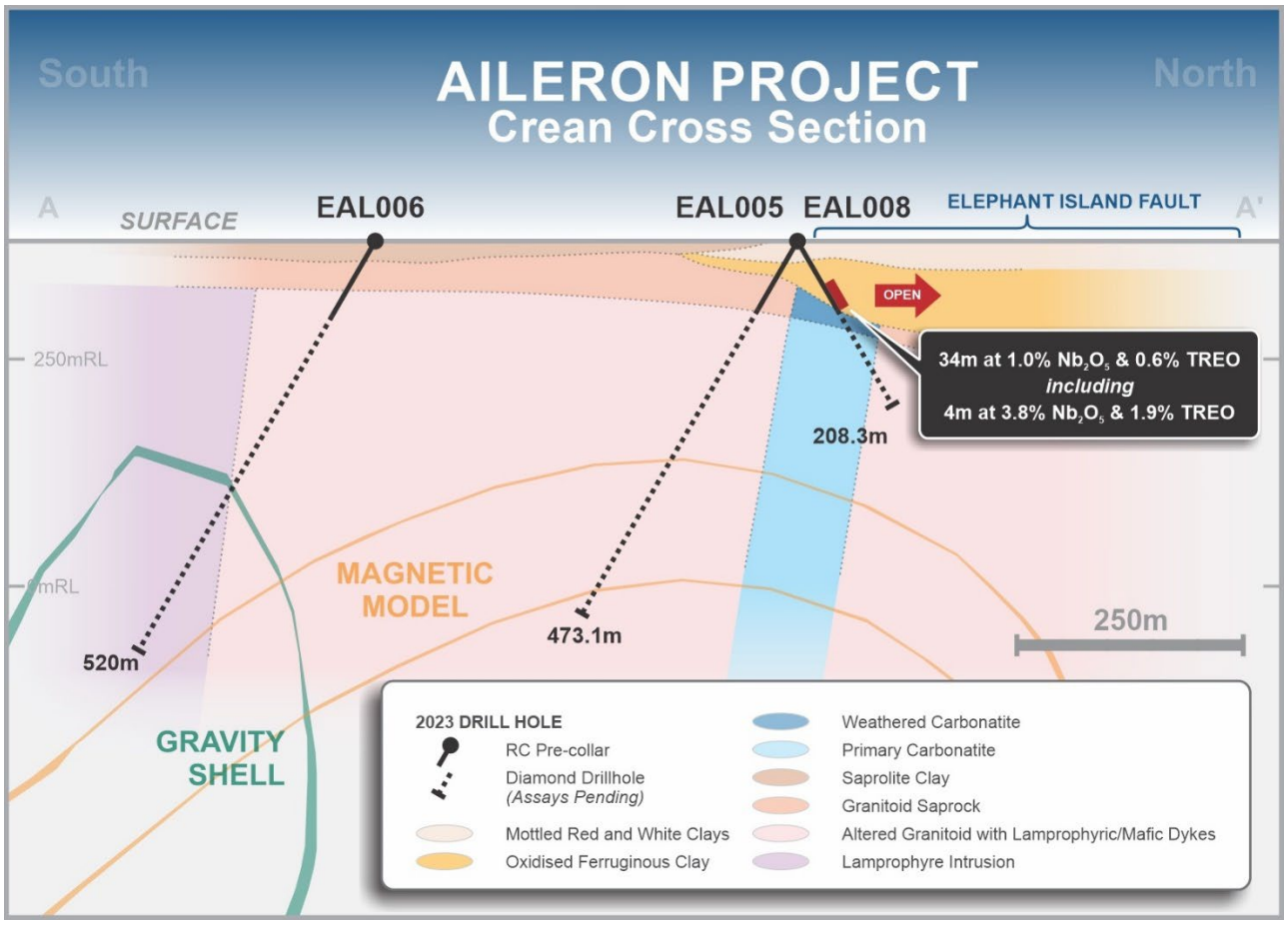



**Figure 3 – Crean schematic cross section 427150E**

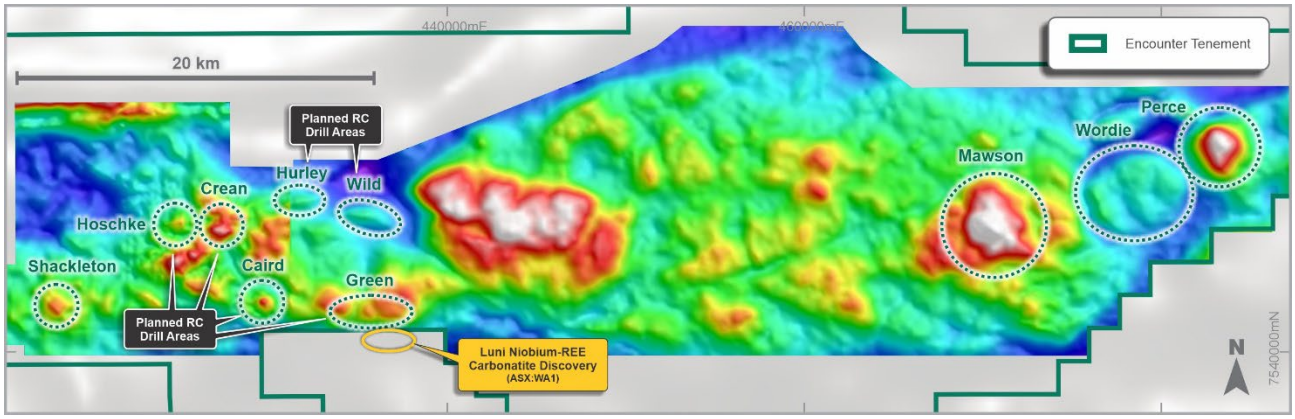



**Figure 4 – Aileron Falcon gravity survey has highlighted a number of high priority targets (dotted outlines)**

[1] ***Cautionary Statement*** *- The references to the presence of anomalism recorded in pXRF are not considered to be a proxy or substitute for laboratory analyses. Determination of mineralisation has been based on geological logging, visual observation and confirmation using a pXRF machine. No pXRF results are reported however the tool was used to verify the mineralisation. pXRF readings may not be representative of the average concentrations of the elements of interest in a certain volume of core. As such, pXRF results are used as a logging/sampling verification tool only. Laboratory analysis will be required to determine the level of mineralisation contained in the drill core carbonatite zones noted in EAL007 and EAL008.*

*Visual estimates of mineral abundance or anomalism recorded on pXRF should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.*

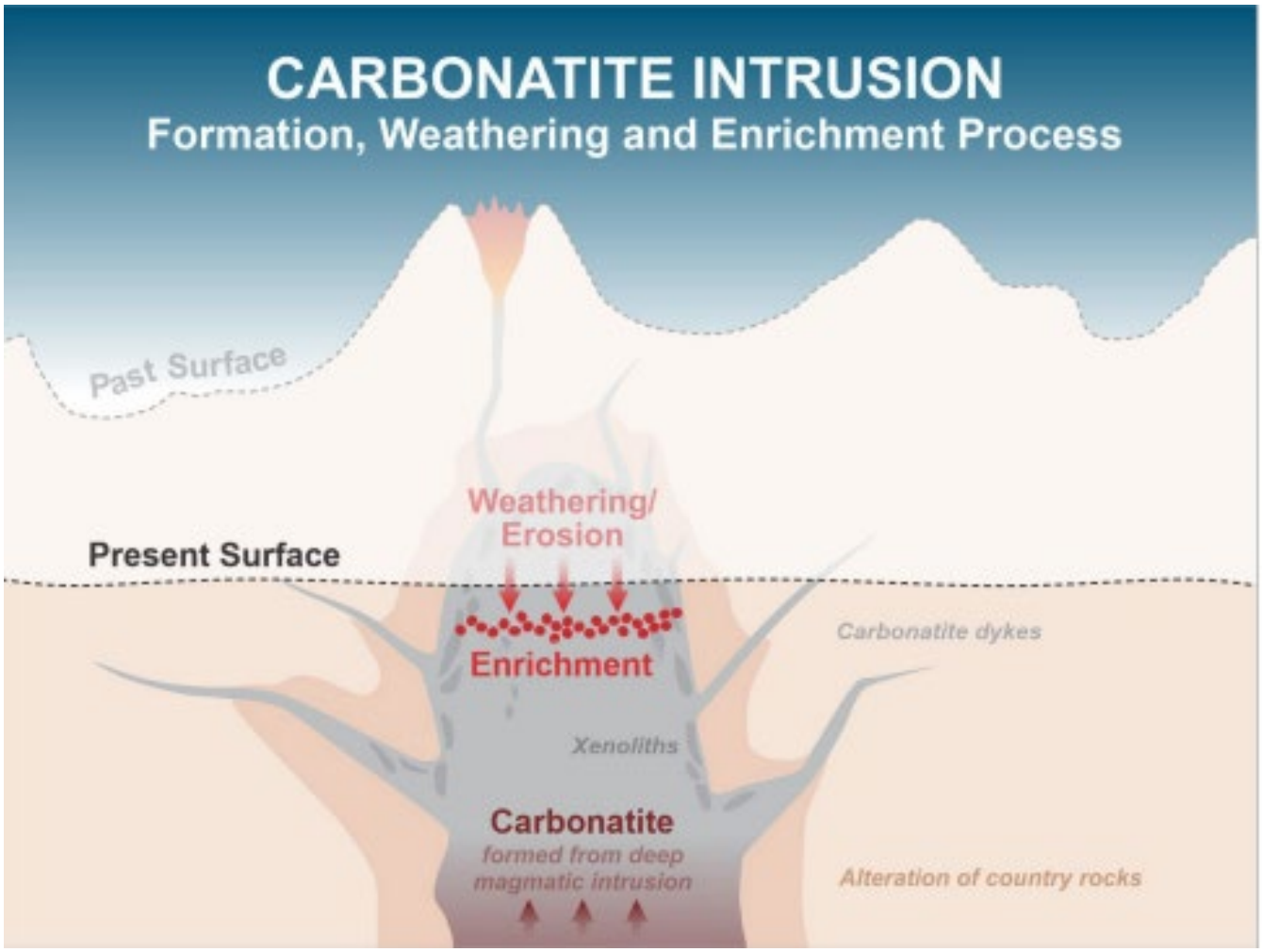



**Figure 5 – Carbonatite schematic (source: WA1 Investor Presentation - 8 May 2023)**

| Hole_ID | Hole_Type | MGA_Grid_ID | MGA_East | MGA_North | MGA_RL | Azimuth | Dip | EOH Depth |
|---|---|---|---|---|---|---|---|---|
| EAL001 | DDH | MGA94_51 | 424991 | 7547143 | 270 | 0 | -60 | 572.5 |
| EAL002 | RCD | MGA94_51 | 429828 | 7543078 | 270 | 180 | -60 | 463.3 |
| EAL002WB | RC | MGA94_51 | 429826 | 7543092 | 270 | 0 | -90 | 91 |
| EAL003 | RC | MGA94_51 | 429826 | 7542579 | 270 | 0 | -60 | 121 |
| EAL004 | RC | MGA94_51 | 429814 | 7542372 | 270 | 0 | -90 | 91 |
| EAL005 | RCD | MGA94_51 | 427149 | 7547479 | 270 | 180 | -60 | 473.1 |
| EAL006 | RCD | MGA94_51 | 427143 | 7547013 | 270 | 180 | -60 | 520 |
| EAL007 | RCD | MGA94_51 | 428570 | 7547446 | 270 | 0 | -60 | 346 |
| EAL008 | RCD | MGA94_51 | 427150 | 7547479 | 270 | 0 | -60 | 208.3 |

**Table 1: Collar locations and drill hole information of completed RC/diamond holes at Aileron**

| Hole ID | from (m) | to (m) | interval (m) | Nb2O5 % | TREO % | Nd + Pr (ppm) | NdPr:TREO% |
|---|---|---|---|---|---|---|---|
| **EAL008** | **56** | **90** | **34** | **0.97** | **0.59** | **1073** | **21** |
| *including* | *56* | *60* | *4* | *3.79* | *1.87* | *3442* | *21* |
| **EAL007** | **65** | **69** | **4** | **0.65** | **0.33** | **613** | **21** |
| *including* | *67* | *69* | *2* | *1.23* | *0.62* | *1152* | *22* |
| **EAL002WB** | **14** | **26** | **12** | **0.00** | **0.18** | **320** | **22** |
| and | **29** | **30** | **1** | **0.00** | **0.17** | **325** | **23** |
| and | **43** | **47** | **4** | **0.00** | **0.16** | **232** | **17** |
| and | **53** | **54** | **1** | **0.01** | **0.10** | **214** | **24** |
| **EAL002** | **25** | **27** | **2** | **0.01** | **0.15** | **273** | **21** |
| and | **30** | **31** | **1** | **0.00** | **0.10** | **119** | **14** |
| and | **33** | **34** | **1** | **0.00** | **0.16** | **337** | **24** |
| **EAL003** | **15** | **16** | **1** | **0.00** | **0.13** | **194** | **17** |
| and | **52** | **54** | **2** | **0.00** | **0.32** | **640** | **23** |
| **EAL004** | **5** | **10** | **5** | **0.00** | **0.13** | **264** | **22** |
| **EAL005** | **37** | **42** | **5** | **0.01** | **0.13** | **245** | **23** |
| **EAL006** | **28** | **29** | **1** | **0.01** | **0.11** | **233** | **25** |
| **EAL006** | **39** | **40** | **1** | **0.00** | **0.16** | **253** | **19** |
| **EAL006** | **61** | **63** | **2** | **0.03** | **0.26** | **420** | **19** |

***TREO % = ($La_2O_3$ + $CeO_2$ + $Pr_2O_3$ + $Nd_2O_3$ + $Sm_2O_3$ + $Eu_2O_3$ + $Gd_2O_3$ + $Tb_2O_3$ + $Dy_2O_3$ + $Ho_2O_3$ + $Er_2O_3$ + $Tm_2O_3$ + $Yb_2O_3$ + $Y_2O_3$ + $Lu_2O_3$)***

**Table 2: Diamond drill hole intersections above 0.1% $Nb_2O_5$ or 0.1% TREO. EAL008 and EAL007 were analysed with a lithium borate digestion using ALS lab method ME-MS81h. Samples from EAL002WB, EAL002, EAL003, EAL004, EAL005 and EAL006 were analysed with a mixed acid digest using ALS method ME-MS81h.**

*The information in this report that relates to Exploration Results and visual observations is based on information compiled by Mr. Mark Brodie who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Brodie holds shares and options in and is a full time employee of Encounter Resources Ltd and has sufficient experience which is relevant to the style of mineralisation under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Brodie consents to the inclusion in the report of the matters based on the information compiled by him, in the form and context in which it appears.*

*The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases and the form and context of the announcement has not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcements.*

*This announcement has been approved for release by the Board of Encounter Resources Limited.*

## About Niobium

### Niobium Uses

Niobium (Nb) is a ductile refractory metal that is highly resistant to heat and wear. Approximately 90% of niobium use is attributed to the steel industry, predominantly as a micro alloy with iron to make steel lighter and stronger. Applications of niobium in battery technology are evolving with potential to revolutionise the electric vehicle market.

### Lighter, stronger and corrosion resistant steel

The addition of small, relatively cheap, amounts of niobium (much less than 1%) significantly increases the strength and decreases the weight of steel products. This results in more economic, beneficial products for use in the construction industry (e.g., beams in buildings, bridges, oil rigs, railway tracks), in gas and oil pipelines, and in the automotive industry where weight savings result in increased performance and fuel reduction.

The addition of approximately 300g of niobium can reduce the weight of steel in a mid-size car by 200kg which increases fuel efficiency by 5%.

### Battery Technology Development

The incorporation of niobium into various battery components has shown the potential to enhance performance across a range of attributes including:

- Super-fast charging (<6 minutes) and discharging rates;
- Prolonging the lifespan of battery-powered products (more charging cycles); and
- Improved safety (lower fire risk).

CBMM, the world's largest niobium producer, has a partnership with Toshiba to advance battery technology incorporating niobium and commercialise the next generation of batteries.

### Niobium Supply

Niobium production is heavily concentrated in Brazil, primarily under the control of CBMM. Brazil accounts for approximately 95% of global niobium supply from two producers: CBMM and China Molybdenum. Magris Performance Materials (MPM), the world's only other producer, operates the Niobec niobium mine in Canada.

### Niobium is a Critical Mineral

Niobium is essential for advanced technology and is identified by the Australian, US and Japanese Governments and the European Union as a critical mineral, i.e. minerals (or elements) considered vital for the well-being of the world's economies, yet whose supply may be at risk of disruption.

### Niobium Product Pricing

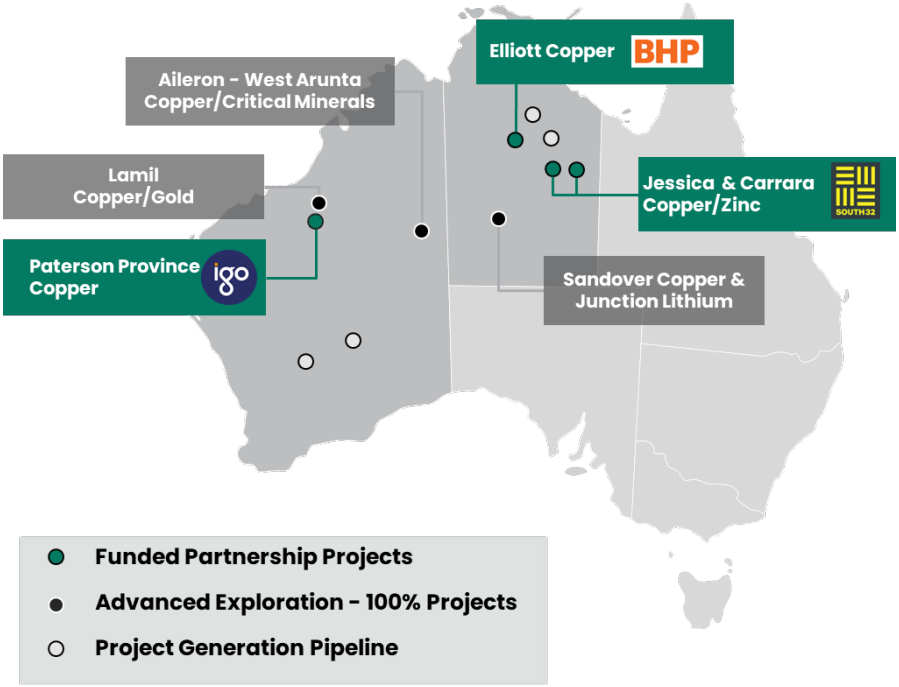
Niobium production is primarily sold in the form of ferroniobium (FeNb) to the steel industry. The average price of ferroniobium is currently trading at US$29,000/t.

In 2021, global niobium production reached approximately 110kt of Ferroniobium (FeNb) equivalent material and it is projected to reach as high as 130kt in 2023.

**Sources:**

Geoscience Australia - Australian Resource Reviews: Niobium 2019
NioBay Metals - Corporate Presentation (on James Bay niobium project) - March 2023
NioCorp Investor Presentation - 3 February 2023
Argonaut Securities – Sector Research - Niobium Supermetal - George Ross - Analyst - 26 June 2023

## About Encounter




Encounter is one of Australia's leading mineral exploration companies listed on the ASX. Encounter's primary focus is on discovering major copper dominant deposits in Australia.

Encounter controls a large portfolio of 100% owned projects in Australia's most exciting mineral provinces that are prospective for copper and critical minerals. Complementing this, Encounter has numerous large scale copper projects being advanced in partnership and funded through farm-in agreements with leading miners: BHP, South32 and IGO. Encounter's assets include:

### 100% ENR Projects

**Aileron Copper-Critical Minerals Project –WA**

- Targeting IOCG copper-gold and carbonatite hosted critical minerals
- Falcon airborne gravity survey May 2023
- Diamond drilling May -June 2023

**Sandover Copper Project - NT**

- Outcropping shale units that contain copper mapped for >20km
- Gravity survey completed, diamond drilling program planned

**Junction Lithium Project - NT**

- Highly anomalous lithium & critical minerals
- Confirmed LCT pegmatites

**Lamil Copper-Gold Project - Paterson Province WA**

- High-grade copper-gold reefs intersected

### Copper Farm-in Partners

**$7m invested by partners on ENR projects in 2022**

BHP

**Elliott Copper Project - NT**

**(up to $25m farm-in funding)**

- Diamond drilling intersected a potential "first reductant" horizon in 2022
- Key target for sediment-hosted copper deposits

SOUTH32

**Jessica and Carrara Projects – NT**

**(ENR carried to Scoping Study)**

- Diamond drilling July to November 2023
  - 4 holes (3,500m) at Jessica
  - 3 holes (3,000m) at Carrara

igo

**Yeneena Project – Paterson Province WA**

**(up to $15m farm-in funding)**

- Diamond drilling commenced July 2023
- 5 holes (2,900m) targeting high-value sediment-hosted copper

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## SECTION 1 SAMPLING TECHNIQUES AND DATA

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Sampling techniques** | *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 sounds, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* | 8 RC pre-collars holes have been completed at Aileron. 6 diamond drilled tails have been completed. Assays reported are from RC pre-collar holes completed at Aileron in May and June 2023.<br><br>RC and diamond core underwent routine 1 metre pXRF analysis using a Bruker S1 TITAN to aid in logging and identifying zones of interest. |
| | *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used* | Drill hole collar locations were recorded by handheld GPS, which has an estimated accuracy of +/- 5m. |
| | *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 (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* | RC drilling was used to obtain riffle split 1m samples each approximately 3kg.<br><br>Diamond drill core was sampled as half and quarter core samples of NQ sized core.<br><br>All samples were submitted to ALS Laboratories in Perth where they were crushed and pulverised for analyses.<br><br>Samples were submitted for multiple laboratory analyses. Assays have been reported from ALS method ME-MS81h when completed (ME-MS81h reports high grade REE elements by lithium meta-borate fusion and ICP-MS. This method produces quantitative results of all elements, including those encapsulated in resistive minerals.)<br><br>All samples were also analysed using ALS method ME-MS61r (4-Acid digest on 0.25g sample analysed via ICP-MS and ICP-AES) and ALS method PGM-ICP23 (Pt, Pd, Au package using 30 g lead fire assay with ICP-AES finish). |
| **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).* | Results reported in this announcement refer to samples from RC drilling.<br><br>Reverse circulation drilling was used to obtain 1-3 kg samples every 1m downhole. |
| **Drill sample recovery** | *Method of recording and assessing core and chip sample recoveries and results assessed* | RC sample recoveries were estimated as a percentage and recorded by Encounter field staff. |
| | *Measures taken to maximise sample recovery and ensure representative nature of the samples* | Driller's used appropriate measures to minimise down-hole and/or cross – hole contamination in RC drilling. Where contamination of the sample was suspected this was noted by Encounter field staff as a percentage. |
| | *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.* | To date, no detailed analysis to determine the relationship between sample recovery and/or and grade has been undertaken for this drill program. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **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.* | Encounter Geologists complete geological logs on all RC chips. Lithology, alteration, mineralisation, structure and veining are recorded.<br>Detailed logging for diamond holes is ongoing. |
| | *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* | Geological logging is qualitative in nature and will record interpreted lithology, alteration, mineralisation, structure, veining and other features of the samples. |
| | *The total length and percentage of the relevant intersections logged* | Encounter Geologists complete geological logs on all RC chips. Lithology, alteration, mineralisation, structure and veining are recorded.<br>Detailed logging for diamond holes is ongoing. |
| **Sub-sampling techniques and sample preparation** | *If core, whether cut or sawn and whether quarter, half or all core taken.* | No assays from core drilled is reported in this announcement. |
| | *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | RC samples were collected on the rig using a riffle splitter. Samples were recorded as being dry, moist or wet by Encounter field staff. |
| | *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | Sample preparation was completed at ALS Laboratories in Perth for analyses. Samples were crushed and pulverised to enable a subsample for analyses. This is considered appropriate for the analysis undertaken. |
| | *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* | Field QC procedures involve the use of commercial certified reference materials (CRMs) and in house blanks. The insertion rate of these is at an average of 1:33. |
| | *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.* | Field duplicates were taken during RC drilling and were collected on the rig via a riffle splitter at a rate of 1:50.<br>The results from these duplicates are assessed on a periodical basis. |
| | *Whether sample sizes are appropriate to the grain size of the material being sampled.* | The sample sizes are considered appropriate to give an accurate indication of the mineralisation. |
| **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.* | All samples were submitted to ALS Laboratories in Perth for analysis.<br>Samples were submitted for multiple laboratory analyses. Assays have been reported from ALS method ME-MS81h when completed (ME-MS81h reports high grade REE elements by lithium meta-borate fusion and ICP-MS. This method is considered a complete digestion allowing resistive mineral phases to be liberated. This method produces quantitative results of all elements, including those encapsulated in resistive minerals.) Samples were analysed for Ce, Dy, Er, Eu, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Ta, Tb, Th, Tm, U, W, Y, Yb, Zr)<br>All samples were also analysed using ALS method ME-MS61r (4-Acid digest on 0.25g sample analysed via ICP-MS and ICP-AES, elements Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr, Dy, Er, Eu, Gd, Ho, Lu, Nd, Pr, Sm, Tb, Tm, Yb) and ALS method PGM-ICP23 (Pt, Pd, Au package using 30 g lead fire assay with ICP-AES finish). |

| | | |
|---|---|---|
| | | Standard laboratory QAQC was undertaken and monitored by the laboratory. |
| | *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.* | RC and diamond core underwent routine pXRF analysis at 1 metre intervals using a Bruker S1 TITAN to aid in logging and identifying zones of interest. All pXRF readings were taken in GeoExploration mode with a 60 second 3 beam reading.<br><br>OREAS supplied standard reference materials were used to calibrate the pXRF instrument. |
| | *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.* | Laboratory QAQC involves the use of internal lab standards using certified reference material and blanks as part of in-house procedures. Encounter also submits an independent suite of CRMs and blanks (see above). A formal review of this data is completed on a periodic basis. |

| **Criteria** | **JORC Code explanation** | **Commentary** |
|---|---|---|
| **Verification of sampling and assaying** | *The verification of significant intersections by either independent or alternative company personnel.* | Geological observations included in this report have been verified by Sarah James (Exploration Manager) |
| | *The use of twinned holes.* | No twinned holes have been drilled. |
| | *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | Primary logging and sampling data is being collected for drillholes on toughbook computers using Excel templates and Maxwell Geoservice's LogChief software. Data collected is sent offsite to Encounter's Database (Datashed software), which is backed up daily. |
| | *Discuss any adjustment to assay data.* | Standard stoichiometric calculations have been applied to convert element ppm data to relevant oxides. Industry standard calculation for TREO as follows $La_2O_3$ + $CeO_2$ + $Pr_2O_3$ + $Nd_2O_3$ + $Sm_2O_3$ + $Eu_2O_3$ + $Gd_2O_3$ + $Tb_2O_3$ + $Dy_2O_3$ + $Ho_2O_3$ + $Er_2O_3$ + $Tm_2O_3$ + $Yb_2O_3$ + $Y_2O_3$ + $Lu_2O_3$<br>Conversion factors<br>$La_2O_3$ 1.1728<br>$CeO_2$ 1.2284<br>$Pr_2O_3$ 1.1703<br>$Nd_2O_3$ 1.1664<br>$Sm_2O_3$ 1.1596<br>$Eu_2O_3$ 1.1579<br>$Gd_2O_3$ 1.1526<br>$Tb_2O_3$ 1.151<br>$Dy_2O_3$ 1.1477<br>$Ho_2O_3$ 1.1455<br>$Er_2O_3$ 1.1435<br>$Tm_2O_3$ 1.1421<br>$Yb_2O_3$ 1.1387<br>$Y_2O_3$ 1.2699<br>$Lu_2O_3$ 1.1371 |
| **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.* | Drill hole collar locations are determined using a handheld GPS. Down hole surveys were collected during this drilling program at approximately 30m intervals downhole. |

| | | |
|---|---|---|
| | *Specification of the grid system used.* | Horizontal Datum: Geocentric Datum of Australia1994 (GDA94) Map Grid of Australia 1994 (MGA94) Zone 52 |
| | *Quality and adequacy of topographic control.* | Estimated RLs were assigned for drillhole collars and are to be corrected at a later stage using a DTM created during the aeromagnetic survey. |
| **Data spacing and distribution** | *Data spacing for reporting of Exploration Results.* | The drill hole section spacing are between 1.2km and 2.3km. This is early stage exploration with one or two drillholes at the Caird, Crean and Hoschke prospects. |
| | *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.* | Mineralisation has not yet demonstrated to be sufficient in both geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications to be applied. |
| | *Whether sample compositing has been applied.* | Intervals have been composited using a length weighted methodology. |
| **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.* | This is early-stage exploration drilling and the orientation of the hole with respect to key structures is not fully understood. An orientated structural measurement from the basal contact of the carbonatite dyke in EAL001 diamond core and structural measurement collected from EAL007 and EAL008 indicate the unit is steeply dipping and strikes parallel to the major interpreted east-west Elephant Island Fault. |
| | *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.* | This is early stage drilling and the orientation of the hole with respect to key structures is not fully understood. Orientation measurements from EAL001, EAL007 and EAL008 diamond core indicate the unit is steeply dipping and strikes parallel to the major interpreted east-west Elephant Island Fault. |
| **Sample security** | *The measures taken to ensure sample security.* | The chain of custody is managed by Encounter. Samples were transported by Encounter personnel and reputable freight contractors to the assay laboratory. |
| **Audits or reviews** | *The results of any audits or reviews of sampling techniques and data.* | Sampling techniques and procedures are regularly reviewed internally, as is data. To date, no external audits have been completed on Aileron data. |

## SECTION 2 REPORTING OF EXPLORATION RESULTS

| 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 including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* | The Aileron project is located within the tenements E80/5169, E80/5469, E80/5470 and E80/5522 which are held 100% by Encounter Resources<br><br>The tenements are contained within Aboriginal Reserve land where native title rights are held by the Parna Ngururrpa and the Tjamu Tjamu.<br><br>No historical or environmentally sensitive sites have been identified in the work area. |
| **Exploration done by other parties** | *Acknowledgment and appraisal of exploration by other parties.* | Prior to Encounter Resources, no previous on ground exploration has been conducted on the tenement other than government precompetitive data. |
| **Geology** | *Deposit type, geological setting and style of mineralisation* | The Aileron project is situated in the Proterozoic West Arunta Province of Western Australia. The geology of the area is poorly understood due to the lack of outcrop and previous exploration. The interpreted geology summarises the area to be Paleo – Proterozoic in age and it is considered prospective for IOCG style and carbonatite-hosted critical mineral deposits. |
| **Drill hole information** | *A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes:*<br>• *Easting and northing of the drill hole collar*<br>• *Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar*<br>• *Dip and azimuth of the hole*<br>• *Down hole length and interception depth*<br>• *Hole length* | Refer to tabulation in the body of this announcement |

| *Criteria* | *JORC Code explanation* | **Commentary** |
|---|---|---|
| **Data aggregation methods** | *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* | All reported assays have been length weighted, with a nominal 0.1% $Nb_2O_5$ and 0.1% TREO lower cut-off. No upper cuts-offs have been applied. |
| | *Where aggregated 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.* | All reported assays have been length weighted, with a nominal 0.1% $Nb_2O_5$ and 0.1% TREO lower cut-off. No upper cuts-offs have been applied. |
| | *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | No metal equivalents have been reported in this announcement. |
| **Relationship between 14ineralization widths and intercept lengths** | *These relationships are particularly important in the reporting of exploration results.*<br>*If the geometry of the 14ineralization 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 (e.g. 'down hole length, true width not known').* | The geometry of the mineralisation is not yet known due to insufficient drilling in the targeted area but is interpreted to be steeply dipping in diamond core from EAL001, EAL007 and EAL008 |
| **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 plane view of drill hole collar locations and appropriate sectional views.* | Refer to body of this announcement |
| **Balanced Reporting** | *Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | All reported assays have been length weighted, with a nominal 0.1% $Nb_2O_5$ and 0.1% TREO lower cut-off. No upper cuts-offs have been applied. |
| **Other substantive exploration data** | *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; 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.* | All meaningful and material information has been included in the body of the text.<br>No metallurgical assessments have been completed. |
| **Further Work** | *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large – scale step – out drilling).*<br>*Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | The next phase of work will include systematic RC drilling along the Elephant Island Fault as well as RC drilling of other targets identified at Aileron. |