

## Enriched niobium oxide mineralisation at Aileron – West Arunta

- **Emily** – the best niobium intercept achieved to date at Emily, on the north-west structural trend adjacent to Luni:
  - 23m @ 4.2% Nb<sub>2</sub>O<sub>5</sub> from 40m to end of hole
- **Green** – first RC holes completed have confirmed that the regolith profile and niobium oxide mineralisation extend beyond the depth of the first pass aircore drilling<sup>1</sup>. First RC assays expected November 2024.
- **Joyce** – first aircore drilling intersected a carbonatite complex on two aircore drill lines 1.6km apart, parallel with the regionally significant north-east trending Weddell Fault <sup>1</sup>.
- **Perce** – diamond drilling (EIS co-funded) revealed shallow cover and intersected a block of uplifted mafic geology that contained lamprophyres (which are often associated with carbonatites), rare earth elements (up to 0.2% TREO) and a narrow vein of high-grade copper. Follow up aircore/RC drilling will target favourable structural locations adjacent to the gravity anomaly.

Commenting on the emerging picture at Aileron, Executive Chairman Will Robinson said:

*“Following the discovery of Luni we adopted a drilling strategy of using low cost, fast moving aircore to rapidly provide a broad outline of the potential for shallow, high-grade niobium mineralisation across our key target areas.*

*It is encouraging to intersect spectacular niobium grades in aircore drilling at Emily to complement similar previous results at Green and Crean.*

*We have now transitioned to follow-up RC drilling, which is demonstrating that high-grade niobium oxide mineralisation is extending beyond the depths initially indicated by aircore drilling at Green.*

*Assay results from the RC drilling at Green and Crean, through the better mineralised parts of these systems, are expected from November through until the March quarter 2025.”*

Prospect	Best Select Intersections	Current Status	Next Steps
<b>Green</b>	<ul style="list-style-type: none"> <li>• 10m @ 4.2% Nb<sub>2</sub>O<sub>5</sub> from 57m (EAL489)</li> <li>• 16m @ 3.0% Nb<sub>2</sub>O<sub>5</sub> from 47m (EAL500)</li> <li>• 18m @ 2.7% Nb<sub>2</sub>O<sub>5</sub> from 44m (EAL515)</li> </ul>	<ul style="list-style-type: none"> <li>• Aircore drilling has outlined a large footprint of +2% Nb<sub>2</sub>O<sub>5</sub></li> <li>• Numerous holes <u>end in mineralisation</u></li> </ul>	<ul style="list-style-type: none"> <li>• RC drilling to delineate zones of high-grade mineralisation</li> <li>• Mineral resource definition</li> </ul>
<b>Crean</b>	<ul style="list-style-type: none"> <li>• 52m @ 3.0% Nb<sub>2</sub>O<sub>5</sub> from 81m (EAL256)</li> <li>• 46m @ 3.1% Nb<sub>2</sub>O<sub>5</sub> from 60m (EAL239)</li> <li>• 32m @ 2.5% Nb<sub>2</sub>O<sub>5</sub> from 67m (EAL155)</li> </ul>	<ul style="list-style-type: none"> <li>• Coherent high-grade mineralisation over 1.2km</li> <li>• Numerous holes <u>end in mineralisation</u></li> </ul>	<ul style="list-style-type: none"> <li>• RC drilling to delineate zones of high-grade mineralisation</li> <li>• Mineral resource definition</li> </ul>
<b>Emily</b>	<ul style="list-style-type: none"> <li>• 23m @ 4.2% Nb<sub>2</sub>O<sub>5</sub> from 40m (EAL259)</li> <li>• 20m @ 2.7% Nb<sub>2</sub>O<sub>5</sub> from 41m (EAL225)</li> <li>• 16m @ 2.7% Nb<sub>2</sub>O<sub>5</sub> from 50m (EAL260)</li> </ul>	<ul style="list-style-type: none"> <li>• Aircore drilling completed to test for western extensions</li> <li>• Numerous holes <u>end in mineralisation</u></li> </ul>	Further aircore drilling to define high-grade zones
<b>Hurley</b>	<ul style="list-style-type: none"> <li>• 24m @ 0.9% Nb<sub>2</sub>O<sub>5</sub> from 66m (EAL034)</li> <li>• 28m @ 0.7% Nb<sub>2</sub>O<sub>5</sub> from 210m (EAL115)</li> </ul>	Diamond drilling intersected depth extensive primary carbonatite	Explore north and east for enriched oxide mineralisation
<b>Joyce</b>	First assays pending (Nov-Dec 2024)	First aircore drilling confirmed another carbonatite complex	Systematically explore Joyce with aircore drilling in 2025

**Aileron Summary Table – high-grade niobium mineralisation across multiple targets** <sup>3,4,5,6,7</sup>

Encounter Resources Ltd (“Encounter”) is pleased to report notable progress across multiple targets at the Aileron project (100% ENR) in the West Arunta region of WA.

The carbonatite complexes in the West Arunta are evidently strike extensive, host abundant high-grade niobium mineralisation and, importantly, the major controlling structures can be imaged in multiple geophysical datasets.

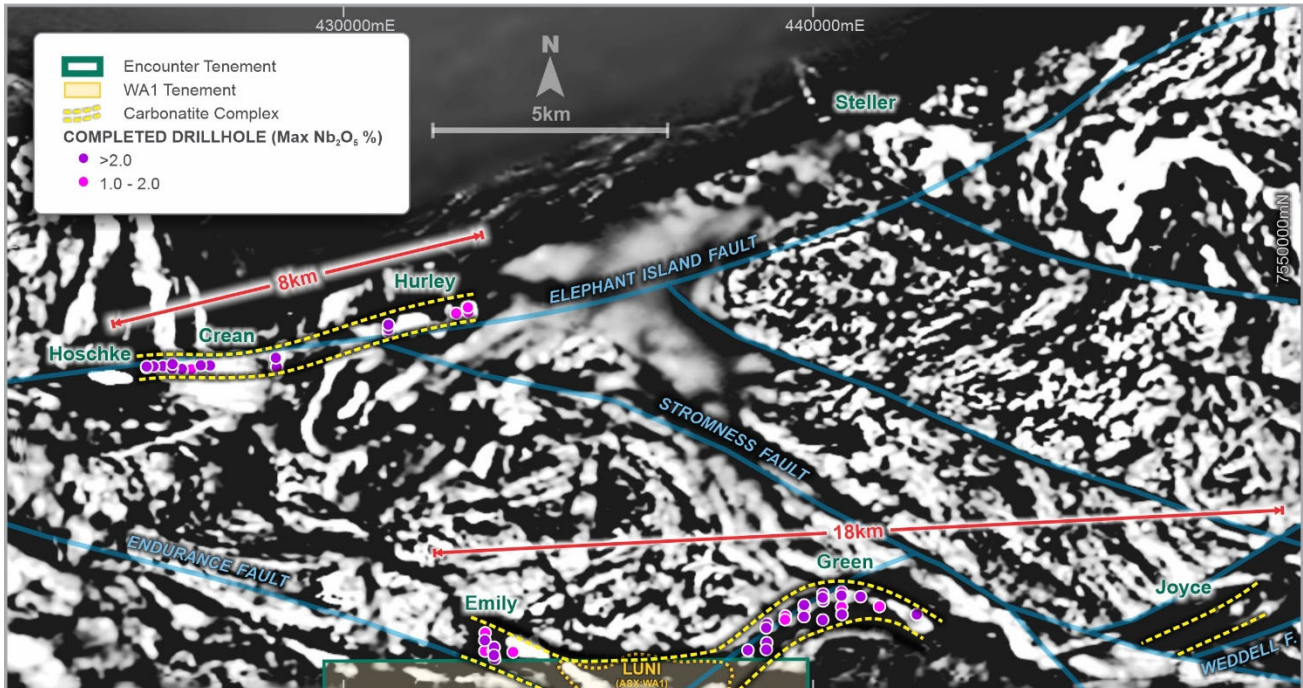


Figure 1 – High grade niobium intercepts follow structural corridors defined in geophysics (Magnetics TMI 1vd)

## Emily Target

Emily is located on a north-west structural trend adjacent to WA1 Resources’ Luni deposit (200Mt @ 1.0% Nb<sub>2</sub>O<sub>5</sub>)<sup>2</sup>. The first phase of aircore drilling at Emily was completed in June 2024 to test the north-south extent of mineralisation intersected in EAL098 (12m @ 2.3% Nb<sub>2</sub>O<sub>5</sub> from 54m)<sup>3</sup>. Assays returned shallow, high-grade niobium-REE mineralisation north and south of previously reported EAL098:

- 16m @ 2.7% Nb<sub>2</sub>O<sub>5</sub> from 50m to EOH (EAL260)
- 20m @ 2.7% Nb<sub>2</sub>O<sub>5</sub> from 41m to EOH (EAL225)<sup>4</sup>

Additional aircore drilling at Emily was completed in July and August 2024 to establish strike extent and continuity of the high-grade mineralisation previously identified.

First assays from this round of aircore drilling have returned the best niobium intercept achieved to date at Emily, and one of the highest grade niobium intersections in the West Arunta district so far:

- 23m @ 4.2% Nb<sub>2</sub>O<sub>5</sub> from 40m to EOH (EAL259)

Further assays from aircore drilling completed west of this high-grade mineralisation are expected in November-December 2024.

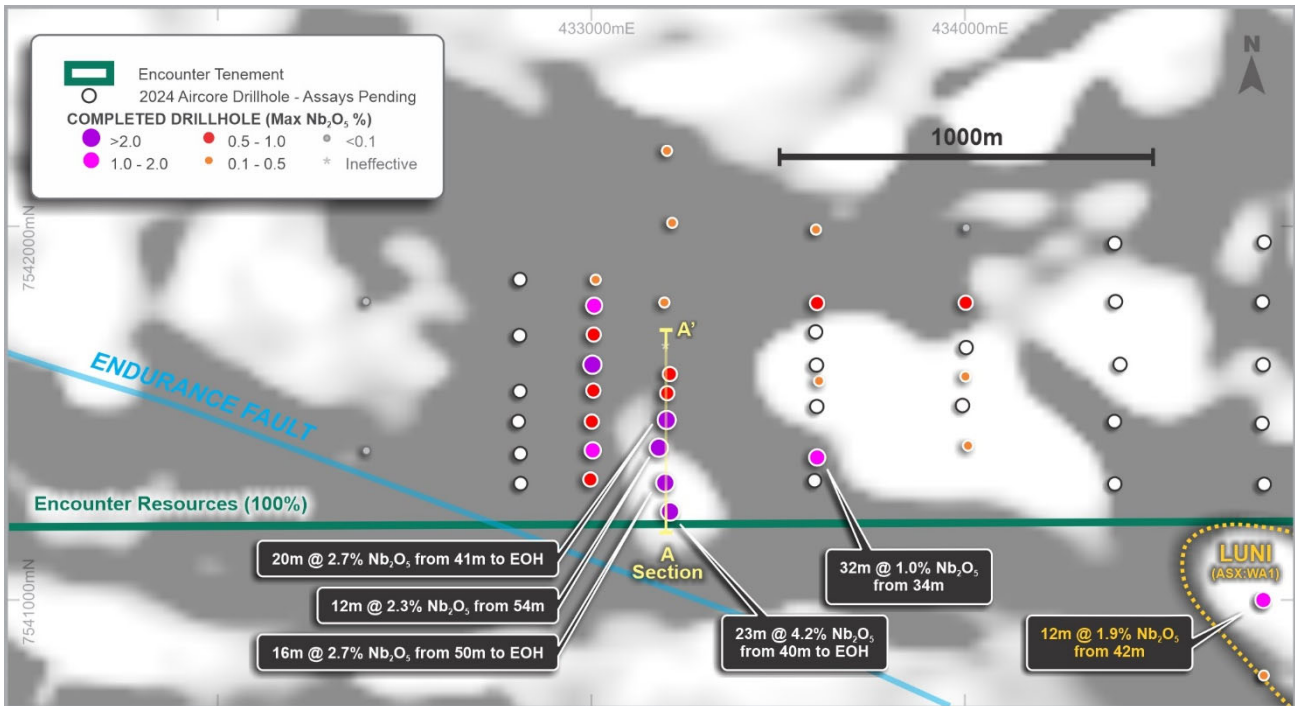


Figure 2 – Emily Target – Aircore/RC drill status plan

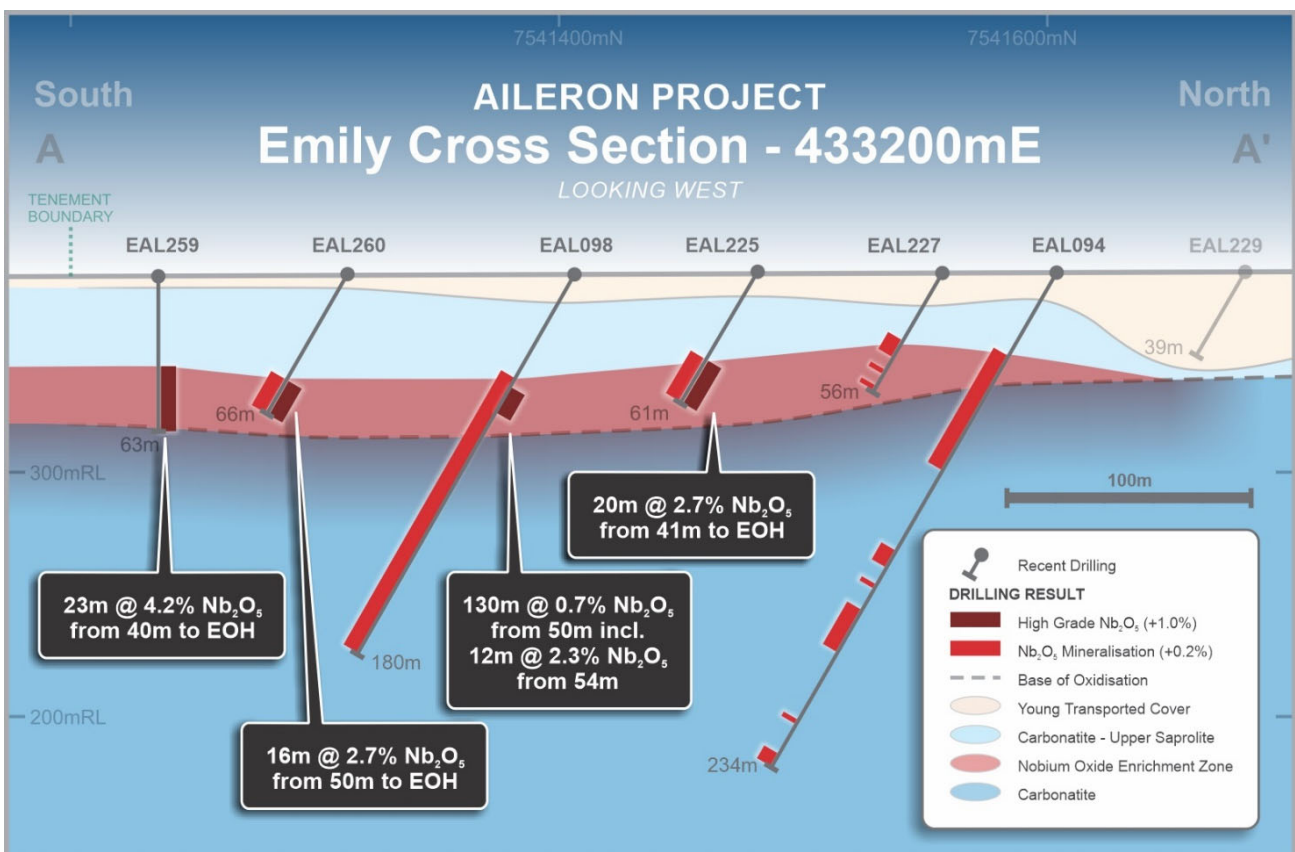


Figure 3 – Emily Target – Aircore/RC drilling cross section A – A'

## Green Target

Reconnaissance aircore drilling completed at Green has mapped the footprint of a large mineral system containing frequent high-grade niobium intercepts grading higher than 2% Nb<sub>2</sub>O<sub>5</sub> (Figure 1). Previously reported results included numerous end of hole intersections within the Green carbonatite complex and high-grade intersections including<sup>5</sup>:

- 10m @ 4.2% Nb<sub>2</sub>O<sub>5</sub> from 57m part of 38m @ 1.5% Nb<sub>2</sub>O<sub>5</sub> from 51m (EAL489)
- 10m @ 4.3% Nb<sub>2</sub>O<sub>5</sub> from 51m part of 16m @ 3.0% Nb<sub>2</sub>O<sub>5</sub> from 47m to EOH (EAL500)
- 18m @ 2.7% Nb<sub>2</sub>O<sub>5</sub> from 44m part of 72m @ 1.0% Nb<sub>2</sub>O<sub>5</sub> from 40m (EAL515)
- 10m @ 3.5% Nb<sub>2</sub>O<sub>5</sub> from 47m part of 47m @ 1.0% Nb<sub>2</sub>O<sub>5</sub> from 43m to EOH (EAL534)

RC drilling is now being deployed to delineate coherent high-grade zones, with mineable dimensions, within the large, mineralised carbonatite complex at Green.

The first RC holes completed have confirmed that the weathering (regolith) profile and niobium oxide mineralisation extend beyond the depth of the first pass aircore drilling<sup>1</sup>.

First assays from RC drilling are expected in November 2024.

## Joyce Target

Two initial lines of aircore drilling 1.6km apart at the Joyce target (located 5km east of Green, see Figure 1) have both intersected a carbonatite complex that is anomalous in niobium and rare earth elements (REE) via handheld pXRF field analysis.<sup>1</sup>

The Joyce carbonatite complex is interpreted to extend broadly parallel with the regionally significant north-east trending Weddell Fault. Joyce will be initially explored with low cost aircore drilling to map out the mineralised footprint along the regionally extensive Weddell Fault.

Follow-up aircore drilling at Joyce will be completed in 2025, in order to focus near-term resources on the RC definition of the thick high-grade mineralisation at Green and Crean.

First assays from aircore drilling at Joyce are expected in November-December 2024.

## Hurley Target

Two diamond drill holes were completed in July 2024 at the intersection of the Elephant Island and Stromness Faults (between the Crean and Hurley targets), where numerous aircore holes did not penetrate cover. These diamond holes intersected depth extensive carbonatite under Permian cover which supports an interpretation that Crean and Hurley are part of a strike extensive carbonatite complex. As such, the Elephant Island corridor has the potential to host variably mineralised carbonatite over a strike length of several kilometres.

Assays from the diamond drilling confirmed that the primary carbonatite contains anomalous niobium-REE to end of hole and includes several narrow high-grade intervals.

The next steps at Hurley will include further drilling north and east of previous drilling to test for changes in the regolith profile that could contain enriched high-grade oxide mineralisation. This is planned to occur in 2025.

## Perce and Mawson

Diamond drilling (EIS co-funded by the WA Government) was completed at the Perce and Mawson geophysical targets at the eastern side of the Aileron project, approximately 40km east of the majority of known mineralisation at Aileron, and where no previous drilling has been completed.

These drill holes confirmed that the cover sequence is significantly shallower than expected in the eastern part of Aileron, with crystalline basement intersected at 19m. This has dramatically increased the explorability of the eastern margin of the project and accordingly this area can be tested with lower cost aircore/RC drilling and parts may be amenable to low-cost surface geochemical sampling.

At Perce, diamond drilling intersected an uplifted block of dense metamorphosed mafic geology beneath shallow cover, which is interpreted to be the source of the modelled gravity anomaly. The first hole contained lamprophyres (which are often associated with the carbonatites in the West Arunta), rare earth element anomalism (up to 0.2% TREO) and a narrow vein of high-grade copper.

This copper vein is an isolated occurrence and was not associated with a zone of alteration. The structural margins of this uplifted block are considered prospective for intrusive related copper-gold mineralisation and carbonatites and will be targeted in future exploration.

Follow up aircore/RC drilling will target favourable structural locations adjacent to the gravity anomaly and the Weddell Fault.

## Next Steps

Continuation of RC drilling at Green and Crean to define initial zones of thick, high-grade, near surface niobium oxide mineralisation.

Further assay results from aircore drilling at Emily and Joyce, and assays from RC drilling at Green and Crean will be returned during November-December 2024.

<sup>1</sup> **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. 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 carbonatite complexes.

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.

<sup>2</sup> **WA Resources Ltd (ASX:WA1) announcement 30 June 2024**

<sup>3</sup> **ENR ASX announcement 30 January 2024**

<sup>4</sup> **ENR ASX announcement 8 July 2024**

<sup>5</sup> **ENR ASX announcement 16 September 2024**

<sup>6</sup> **ENR ASX announcement 24 June 2024**

<sup>7</sup> **ENR ASX announcement 29 January 2024**

Hole ID	from (m)	to (m)	interval (m)	Nb2O5 %	TREO %	Nd + Pr (ppm)	P2O5 %	Prospect
EAL259	36	63*	27	3.7	1.2	2371	11.1	Emily
including	40	63*	23	4.2	1.4	2690	12.9	Emily
EAL739	66	68	2	0.6	0.1	300	1.0	Emily
and	72	74	2	0.3	0.1	132	2.8	Emily
and	92	94	2	0.3	0.1	209	3.6	Emily
EAL740	46	66	20	0.4	0.2	452	1.5	Emily
and	72	84	12	0.4	0.2	495	11.8	Emily
and	106	114*	8	1.1	0.4	884	21.2	Emily
including	108	112*	4	1.6	0.5	952	24.2	Emily
EAL741	46	48	2	0.6	0.6	1315	10.9	Emily
and	54	58	4	0.2	1.5	2926	24.1	Emily
EAL742	50	56	6	0.3	0.0	73	0.4	Emily
and	62	66	4	0.7	0.2	358	1.2	Emily
and	78	80	2	0.2	0.2	453	10.1	Emily
and	92	96	4	0.6	0.2	334	7.0	Emily
and	100	108*	8	0.3	0.1	204	7.2	Emily
EAL743	46	50	4	1.3	0.3	548	6.7	Emily
including	46	48	2	2.4	0.4	807	9.5	Emily
and	56	70	14	0.6	0.3	664	7.4	Emily
including	56	62	6	0.9	0.2	454	5.9	Emily
and	86	88	2	0.2	0.1	180	3.3	Emily
EAL744	82	84	2	0.7	0.1	338	0.9	Emily
and	102	104	2	0.3	0.1	376	7.6	Emily
EAL745	66	70	4	0.2	0.1	127	0.5	Emily
and	80	82	2	0.2	0.1	165	1.4	Emily
and	86	120*	34	0.5	0.1	126	13.9	Emily
including	100	102	2	2.0	0.0	109	22.6	Emily
EAL746	56	64	8	0.4	0.1	195	0.7	Emily
and	72	74	2	0.4	0.1	122	0.3	Emily
and	88	90	2	0.3	0.1	126	1.0	Emily
and	98	100	2	0.3	0.0	82	5.1	Emily
EAL110	60	73*	13	0.7	0.5	957	11.6	Hurley
including	60	64	4	1.2	0.9	1730	20.8	Hurley
EAL442	151	172	21	0.5	0.2	456	3.7	Hurley
including	159	161	2	1.4	0.5	965	7.9	Hurley
including	166	168	2	1.4	0.3	568	7.5	Hurley
and	192	194	2	0.4	0.2	401	4.6	Hurley
and	226	230	4	0.3	0.1	253	2.2	Hurley
and	279	280	1	0.4	0.2	289	2.6	Hurley
and	284	286	2	0.3	0.1	160	1.7	Hurley
and	287.4	288	0.6	0.2	0.1	144	2.0	Hurley
and	291.7	293	1.3	0.4	0.1	211	1.6	Hurley
and	299	299.37	0.37	0.6	0.1	227	2.7	Hurley
and	307	334	27	0.4	0.1	242	3.0	Hurley
including	312	313	1	1.3	0.1	257	3.2	Hurley
and	337	344.34	7.34	0.5	0.1	232	2.3	Hurley

and	347	348	1	0.3	0.1	119	1.1	Hurley
and	351	351.32	0.32	0.2	0.1	169	1.3	Hurley
and	353	354	1	0.4	0.1	260	3.3	Hurley
and	355	356	1	0.3	0.2	327	6.3	Hurley
and	359	360	1	0.4	0.1	229	2.0	Hurley
and	362	375	13	0.3	0.1	271	3.1	Hurley
and	381	382	1	0.2	0.1	198	2.8	Hurley
and	387.7	388	0.3	0.4	0.1	255	4.1	Hurley
and	391	392	1	0.2	0.1	272	2.6	Hurley
and	394	395	1	0.2	0.1	166	2.4	Hurley
and	396	397	1	0.4	0.1	229	3.2	Hurley
and	407	408	1	0.5	0.1	199	2.6	Hurley
and	413	414	1	0.8	0.1	202	2.6	Hurley
and	417	419	2	0.3	0.1	204	2.9	Hurley
and	429	452	23	0.3	0.1	184	2.8	Hurley
and	456.5	457	0.5	0.3	0.1	146	1.6	Hurley
and	460	462.7	2.7	0.4	0.1	127	1.5	Hurley
and	467	480	13	0.4	0.1	202	2.7	Hurley
including	478	479	1	1.0	0.1	184	2.9	Hurley
and	485	488	3	0.3	0.1	246	2.7	Hurley
and	492	504.5	12.5	0.3	0.1	224	2.7	Hurley
and	508	627	119	0.6	0.2	360	3.5	Hurley
including	525	529	4	1.3	0.2	274	3.4	Hurley
including	531	532	1	1.0	0.1	190	1.9	Hurley
including	537	546	9	1.1	0.2	314	4.4	Hurley
including	559	560	1	1.1	0.2	340	4.8	Hurley
including	592.7	593	0.3	1.6	0.4	878	19.7	Hurley
including	619	625	6	1.0	0.2	404	5.2	Hurley
and	632.5	649.7	17.2	0.6	0.1	281	2.9	Hurley
including	646	648	2	1.2	0.2	362	4.2	Hurley
EAL552	137	148.8	11.8	0.5	0.2	345	2.5	Hurley
including	141	142	1	1.4	0.2	440	4.8	Hurley
and	162	163	1	0.5	0.1	202	1.0	Hurley
and	170	171	1	0.2	0.1	91	1.2	Hurley
and	175	182	7	0.5	0.1	262	2.6	Hurley
including	178	179	1	1.2	0.2	336	4.6	Hurley
and	186	190	4	0.2	0.1	202	1.9	Hurley
and	201	202	1	0.3	0.2	422	5.5	Hurley
and	211.6	213	1.4	0.2	0.1	264	1.0	Hurley
and	231	232	1	0.2	0.1	251	1.2	Hurley
and	234	235	1	0.2	0.1	159	1.2	Hurley
and	235.6	236	0.4	0.2	0.1	231	1.4	Hurley
and	303	312.5	9.5	0.3	0.1	250	3.1	Hurley
and	315	316	1	1.0	0.0	84	0.8	Hurley
and	350.4	353	2.6	0.3	0.1	221	3.2	Hurley
and	376	377	1	0.2	0.2	325	3.6	Hurley
and	401	401.47	0.47	0.2	0.1	300	3.5	Hurley

Table 1. Drillhole assay intersections above 0.2% Nb<sub>2</sub>O<sub>5</sub>. Intervals greater than 2% Nb<sub>2</sub>O<sub>5</sub> have been reported as included intervals. \* denotes intersection to the end of hole.

Hole ID	from (m)	to (m)	interval (m)	Cu (ppm)	TREO %	Nd + Pr (ppm)	Prospect
EAL140	124.3	124.77	0.47		0.2	439	Perce
EAL140	211.85	212.5	0.65		0.1	228	Perce
EAL140	291.85	291.95	0.1	2,300			Perce

Table 2. Drillhole assay intersections from Perce above 0.1% TREO or 1000ppm Cu.

Hole_ID	Hole_Type	Grid_ID	MGA_East	MGA_North	MGA_RL	Azimuth	Dip	EOH Depth	Prospect
EAL110	AC	MGA94_52	432642	7548714	378	180	-80	74	Hurley
EAL263	AC	MGA94_52	431607	7548349	377	180	-75	98	Hurley
EAL264	AC	MGA94_52	431606	7548507	377	180	-75	84	Hurley
EAL265	AC	MGA94_52	431605	7548749	377	180	-75	102	Hurley
EAL140	DDH	MGA94_52	482973	7551820	368	0	-60	556	Perce
EAL302	DDH	MGA94_52	470998	7547112	379	180	-60	518.9	Mawson
EAL198*	AC	MGA94_52	434801	7541309	381	180	-60	74	Emily
EAL199*	AC	MGA94_52	434795	7541472	381	180	-60	51	Emily
EAL200*	AC	MGA94_52	434798	7541629	381	180	-60	60	Emily
EAL201*	AC	MGA94_52	434796	7541797	381	180	-60	57	Emily
EAL202*	AC	MGA94_52	434801	7541957	382	180	-60	60	Emily
EAL203*	AC	MGA94_52	434401	7541310	380	180	-60	51	Emily
EAL204*	AC	MGA94_52	434400	7541477	381	180	-60	89	Emily
EAL205*	AC	MGA94_52	434415	7541630	381	180	-60	65	Emily
EAL206*	AC	MGA94_52	434403	7541798	381	180	-60	61	Emily
EAL207*	AC	MGA94_52	434401	7541954	381	180	-60	61	Emily
EAL210*	AC	MGA94_52	433993	7541520	380	180	-60	49	Emily
EAL213*	AC	MGA94_52	434003	7541675	381	180	-60	55	Emily
EAL218*	AC	MGA94_52	433603	7541517	380	180	-60	42	Emily
EAL220*	AC	MGA94_52	433602	7541628	381	180	-60	76	Emily
EAL222*	AC	MGA94_52	433600	7541717	381	180	-60	51	Emily
EAL259	AC	MGA94_52	433210	7541236	380	0	-90	63	Emily
EAL261	AC	MGA94_52	433597	7541319	380	180	-60	40	Emily
EAL731	AC	MGA94_52	432810	7541311	381	180	-60	96	Emily
EAL732	AC	MGA94_52	432809	7541391	382	180	-60	103	Emily
EAL733	AC	MGA94_52	432804	7541477	382	180	-60	102	Emily
EAL734	AC	MGA94_52	432808	7541558	382	180	-60	114	Emily
EAL736	AC	MGA94_52	432807	7541707	383	180	-60	90	Emily
EAL738	AC	MGA94_52	432808	7541857	384	180	-60	45	Emily
EAL739	AC	MGA94_52	432997	7541322	381	180	-60	98	Emily
EAL740	AC	MGA94_52	433003	7541400	381	180	-60	114	Emily
EAL741	AC	MGA94_52	433001	7541477	381	180	-60	130	Emily
EAL742	AC	MGA94_52	433005	7541560	382	180	-60	108	Emily
EAL743	AC	MGA94_52	433002	7541629	382	180	-60	108	Emily
EAL744	AC	MGA94_52	433006	7541710	382	180	-60	108	Emily
EAL745	AC	MGA94_52	433007	7541787	382	180	-60	120	Emily
EAL746	AC	MGA94_52	433011	7541857	383	180	-60	102	Emily

Table 3- Drillhole collar table

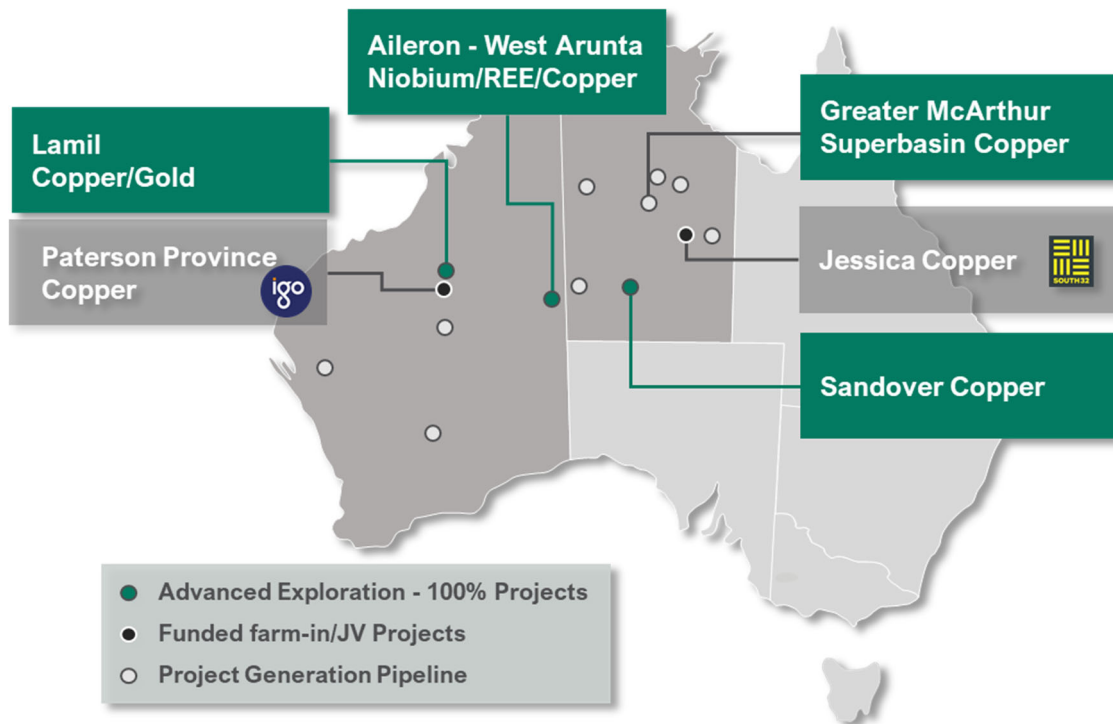
\* denotes previously announced planned collars with updated final co-ordinates and RLs



## 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 and niobium/REE 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 including the Aileron project in the West Arunta region of WA. Complementing this, Encounter has numerous large scale copper projects being advanced in partnership and funded through farm-in agreements.



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*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 Person’s 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.*

## SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>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.</i></p>	<p>Aircore drilling has been completed to obtain samples for geological logging and assaying.</p> <p>Aircore drilling was used to obtain samples at 1 metre intervals. 2 metre composite samples were created using a scoop to collect a composite sample in a pre-numbered calico. This composite sample was sent for lab analysis.</p> <p>AC samples underwent routine pXRF analysis using a Bruker S1 TITAN to aid in logging and identifying zones of interest.</p> <p>Four diamond holes at Aileron are being reported in this announcement. Assays reported in this announcement are from two diamond holes at Hurley, and one diamond hole each at Perce and Mawson.</p> <p>Diamond core undergoes routine pXRF analysis using a Bruker S1 TITAN to aid in logging and identifying zones of interest..</p>
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i></p>	<p>Drill hole collar locations were recorded by handheld GPS, which has an estimated accuracy of +/- 5m.</p>
	<p><i>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</i></p>	<p>AC drilling was used to obtain 2m composite samples each approximately 1.5-2kg.</p> <p>Diamond drill core was sampled as half and quarter core samples of HQ and NQ sized core.</p> <p>All samples were submitted to ALS Laboratories in Perth or Adelaide where they were crushed and pulverised for analyses.</p> <p>Samples from all holes other than Perce and Mawson were submitted for ALS method ME-MS81hD with overlimit determination via ME-XRF30. (ME-MS81hD 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.)</p> <p>Samples from Perce and Mawson diamond holes were analysed using ALS method ME-MS61L (4-Acid digest on 0.25g sample analysed via ICP-MS and ICP-AES) and ALS method Au-TL43 (Au by aqua regia extraction with ICP-MS finish.)</p>
<b>Drilling techniques</b>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, 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).</i></p>	<p>Results reported in this announcement refer to samples from AC and Diamond drilling.</p> <p>Diamond holes were pre collared through cover sequences with RC drilling or by rock roller. From the base of the pre-collar drilling method switched to HQ3 and NQ2 sized diamond drilling. Where ground conditions determined HQ3 (triple tube) was used to enable increased core recovery but this was limited. All diamond core was oriented.</p>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed</i></p>	<p>AC sample recoveries were estimated as a percentage and recorded by Encounter field staff.</p>

Sections of lost core were minimal and were noted by the diamond drillers and recorded by Encounter staff.

*Measures taken to maximise sample recovery and ensure representative nature of the samples*

Drillers used appropriate measures to minimise downhole and/or cross-hole contamination in AC drilling. Where contamination of the sample was suspected this was noted by Encounter field staff as a percentage.

In diamond core, oxidised and heavily broken sections were drilled with HQ3 to maximise samples recoveries. The remainder of the holes were HQ/NQ diamond drilled with core recovery +95%.

*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 drilling.

Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<i>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.</i>	Encounter geologists have completed geological logs on all holes where assays are reported. All reported holes have been logged in full with lithology, alteration and mineralisation recorded.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Geological logging is qualitative in nature and records interpreted lithology, alteration, mineralisation and other geological features of the samples.
	<i>The total length and percentage of the relevant intersections logged</i>	Encounter geologists have completed geological logs on all holes reported in this announcement
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Samples submitted from the diamond drill holes were either half core or quarter core samples.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	AC samples were collected on the rig using a cone splitter. Samples were recorded as being dry, moist or wet by Encounter field staff.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Sample preparation was completed at ALS Laboratories in Perth and Adelaide and analysed in the Perth laboratory. Samples were crushed and pulverised to enable a subsample for analyses. This is considered appropriate for the analysis undertaken.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Field QC procedures involve the use of commercial certified reference materials (CRMs) and inhouse blanks. The insertion rate of these is at an average of 1:33.
	<i>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.</i>	Field duplicates were taken during RC drilling and were collected on the rig via a riffle splitter at a rate of 1:50.  The results from these duplicates are assessed on a periodical basis.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	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.

Assays from Emily and Hurley have been reported from ALS package ME-MS81hD (package of methods ME-MS81h + ME-ICP06).

ALS method ME-MS81h reports high grade rare earth elements via fusion with lithium borate flux followed by acid dissolution of the fused bead coupled with ICP-MS analysis. It provides a quantitative analytical approach for a broad suite of trace elements. This method is considered a complete digestion allowing resistive mineral phases to be liberated. Elements reported:

Ba, Ce Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sc, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tm, U, V, W, Y, Yb, Zr.

Additionally whole rock oxides are reported by method ME-ICP06 by analysing the same digested solution by ICP-AES and include LOI. Oxides reported:

Al<sub>2</sub>O<sub>3</sub>, BaO, CaO, Cr<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub>, SiO<sub>2</sub>, SrO, TiO<sub>2</sub>, LOI

Additionally base metals are reported from ALS method ME-4ACD81, a separate four-acid digestion and ICP-AES. Elements reported:

Ag, As, Bi, Cd, Co, Cu, Li, Mo, Ni, Pb, S, Ti, Zn.

Niobium overlimit determination (>50,000ppm Nb) completed via ALS method ME-XRF30. Assays have been reported from ME-XRF30 when completed.

Assays from Perce have been reported from ALS method ME-MS61L (low detection level 4-Acid digest on 0.25g sample analysed via ICP-MS and ICP-AES) and ALS method Au-TL43 (Au by aqua regia extraction with ICP-MS finish.)

Standard laboratory QAQC was undertaken and monitored.

*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.*

AC samples underwent routine pXRF analysis every second metre using a Bruker S1 TITAN to aid in geological logging and identifying zones of interest. All pXRF readings were taken in GeoExploration mode with a 30 second 3 beam reading.

Diamond core underwent routine pXRF analysis at 1 metre intervals using a Bruker S1 TITAN to aid in logging and identifying zones of interest.

OREAS supplied standard reference materials were used to check the pXRF instrument.

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. 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 carbonatite complexes.

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.

*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. A formal review of this data is completed on a periodic basis.

**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 uploaded 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  $\text{La}_2\text{O}_3 + \text{CeO}_2 + \text{Pr}_2\text{O}_3 + \text{Nd}_2\text{O}_3 + \text{Sm}_2\text{O}_3 + \text{Eu}_2\text{O}_3 + \text{Gd}_2\text{O}_3 + \text{Tb}_2\text{O}_3 + \text{Dy}_2\text{O}_3 + \text{Ho}_2\text{O}_3 + \text{Er}_2\text{O}_3 + \text{Tm}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Y}_2\text{O}_3 + \text{Lu}_2\text{O}_3$

Conversion factors

$\text{La}_2\text{O}_3$	1.1728
$\text{CeO}_2$	1.2284
$\text{Pr}_2\text{O}_3$	1.1703
$\text{Nd}_2\text{O}_3$	1.1664
$\text{Sm}_2\text{O}_3$	1.1596
$\text{Eu}_2\text{O}_3$	1.1579
$\text{Gd}_2\text{O}_3$	1.1526
$\text{Tb}_2\text{O}_3$	1.151
$\text{Dy}_2\text{O}_3$	1.1477
$\text{Ho}_2\text{O}_3$	1.1455
$\text{Er}_2\text{O}_3$	1.1435
$\text{Tm}_2\text{O}_3$	1.1421
$\text{Yb}_2\text{O}_3$	1.1387
$\text{Y}_2\text{O}_3$	1.2699
$\text{Lu}_2\text{O}_3$	1.1371
$\text{Nb}_2\text{O}_5$	1.4305

**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 (accuracy +/-5m).

No downhole surveys were collected during aircore drilling.

Down hole surveys were collected during diamond drilling at approximately 30m intervals downhole.

*Specification of the grid system used.*

Horizontal Datum: Geocentric Datum of Australia 1994 (GDA94)  
Map Grid of Australia 1994 (MGA94) Zone 52.

*Quality and adequacy of topographic control.*

RLs were assigned using a DTM created during the detailed geophysical surveys.

<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Diamond drillholes at Perce and Mawson are single drillhole tests with no drilling within kilometres of each hole.  Drilling at Emily has been completed on 200m section spacing with nominal 80m spaced drillholes along the section lines.  Two diamond drillholes at Hurley have been completed 140m apart on an existing AC section. Hurley cross sections are spaced 320- 800m between sections.
	<i>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.</i>	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.
	<i>Whether sample compositing has been applied.</i>	Intervals have been composited using a length weighted methodology.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	This is early-stage exploration drilling and the orientation of the holes with respect to key structures is not fully understood. Reported results are downhole length. True width geometry of the mineralisation is not yet known due to insufficient drilling in the targeted area.
	<i>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.</i>	This is early-stage exploration drilling and the orientation of the holes with respect to key structures is not fully understood. Reported results are downhole length. True width geometry of the mineralisation is not yet known due to insufficient drilling in the targeted areas.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	The chain of custody is managed by Encounter. Samples were transported by Encounter personnel and reputable freight contractors to the assay laboratory.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	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
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	The Aileron project is located within the tenements E80/5169, E80/5469, E80/5470 and E80/5522 which are held 100% by Encounter Resources  The tenements are contained within Aboriginal Reserve land where native title rights are held by the Parna Ngururpa and the Tjamu Tjamu.

<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Prior to Encounter Resources, no previous on ground exploration has been conducted on the tenement other than government precompetitive data.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation</i>	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.
<b>Drill hole information</b>	<p><i>A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>• <i>Easting and northing of the drill hole collar</i></li> <li>• <i>Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</i></li> <li>• <i>Dip and azimuth of the hole</i></li> <li>• <i>Down hole length and interception depth</i></li> <li>• <i>Hole length</i></li> </ul>	Refer to tabulation in the body of this announcement
<b>Data aggregation methods</b>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>All reported assays have been length weighted, with a nominal 0.2% Nb<sub>2</sub>O<sub>5</sub> lower limit and a maximum of 3m of internal dilution. Selected intervals greater than 1% Nb<sub>2</sub>O<sub>5</sub> have been reported separately. No upper cutoffs have been applied.</p> <p>All reported assays have been length weighted, with a nominal 0.2% Nb<sub>2</sub>O<sub>5</sub> lower limit and a maximum of 3m of internal dilution. Selected intervals greater than 1% Nb<sub>2</sub>O<sub>5</sub> have been reported separately. No upper cutoffs have been applied.</p> <p>No metal equivalents have been reported in this announcement.</p>
<b>Relationship between mineralization widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of exploration results.</i></p> <p><i>If the geometry of the mineralization 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').</i></p>	Reported results are downhole length. True width geometry of the mineralisation is not yet known due to insufficient drilling in the targeted areas.
<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Diagrams</b>	<i>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.</i>	Refer to body of this announcement
<b>Balanced Reporting</b>	<i>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.</i>	All reported assays have been length weighted, with a nominal 0.2% Nb <sub>2</sub> O <sub>5</sub> lower limit and a maximum of 3m of internal dilution. Selected intervals greater than 1% Nb <sub>2</sub> O <sub>5</sub> have been reported separately. No upper cutoffs have been applied.

At Perce and Mawson assays are reported above 1000ppm Cu and 0.1% TREO.

**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.

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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*

Additional AC, RC and Diamond drilling are planned to test the depth extent and define the parameters of high-grade zones established at the project