

New REE Projects near Laverton in WA

- Significant rare earth element (“REE”) potential at the new Irwin Project in the Laverton region of WA (100% ENR)
- Targets at Irwin are centred on a structural corridor that extends north-west from the Mt Weld carbonatite (100km SE), Lynas Rare Earths Ltd (ASX:LYC)
- Historical gold drilling intersected REE anomalism including 6m @ 0.55% TREO from 74m to end of hole in ELI0118
- Confirmation of undercover REE mineralisation initiated an evaluation of regional geophysics
- ~800km² secured over a series of interpreted intrusions prospective for REE mineralisation
- Reconnaissance sampling and ground truthing of geophysical anomalies has commenced

Encounter Resources Ltd (“Encounter”) is pleased to announce new REE projects have been secured (100% ENR) in the Laverton region of WA.

Commenting on the new projects, Encounter Managing Director Will Robinson said: “The Encounter generative team has a well-established track record of moving early into new mineral belts. We were early to identify copper opportunities in the Greater McArthur Superbasin in the NT and a BHP and South32 have joined us as project partners. Encounter also moved early into the emerging West Arunta region where mineralised carbonatites have been discovered recently.

REE projects have mounting strategic and economic importance for Australia. The confirmation of undercover REE mineralisation in historical drilling has important regional implications. Particularly given that the region contains the world-class Mt Weld REE mine. A series of geophysical anomalies have been identified and ground truthing of these anomalies has commenced.”

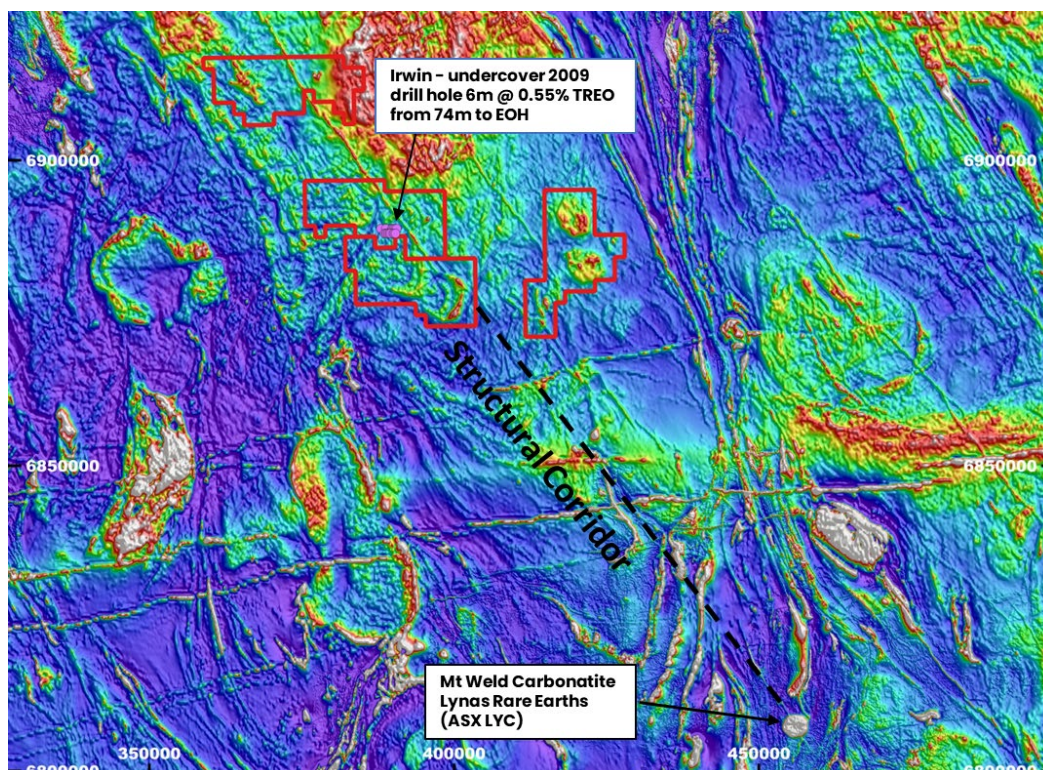


Figure 1 – RTP magnetic image of the Laverton region with Encounter Irwin project locations

Background

In 2009, Encounter completed an aircore drilling program near Lake Irwin located north-west of Laverton following up a gold trend identified in auger drilling. Two lines of aircore drilling were completed, totalling 18 holes to an average depth of ~65m. The program intersected anomalous REE in a felsic intrusion below a sequence of transported sands and clays.

Only the lower portions of the holes, close to the cover/basement geological boundary, were analysed for REE. Significant REE anomalism was identified in the 2009 drilling which included 6m @ 0.55% TREO from 74m to end of hole in ELI0118, which was one of the deepest holes in the program. A number of the 2009 drillholes terminated in cover and are considered ineffective.

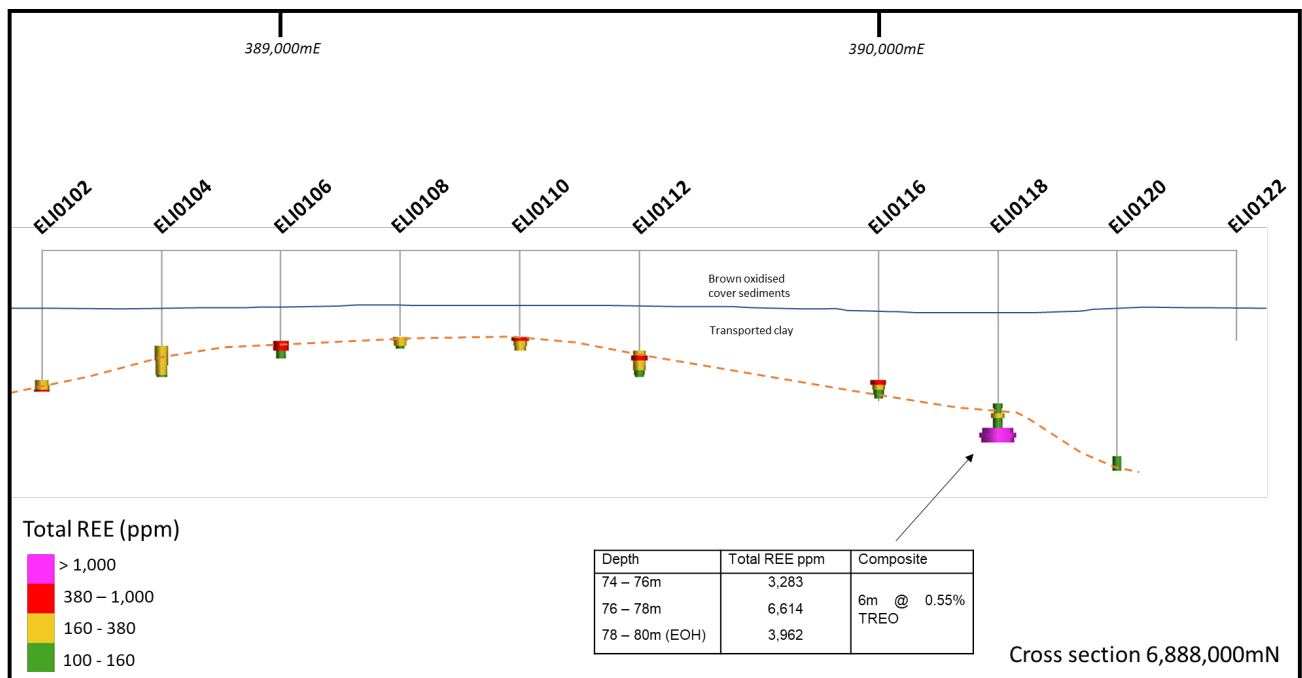


Figure 2: Lake Irwin 2009 drilling cross-section with anomalous REE around the base of cover

With only moderate gold anomalism intersected in the aircore program, the Lake Irwin tenement was relinquished by Encounter in 2010.

With the knowledge that undercover REE mineralisation had been intersected in historical drilling, an evaluation of regional geophysics was recently initiated and highlighted a series of anomalies that are interpreted to be intrusions. In late 2022, Encounter applied for four tenements (>800 sq kms) to cover the REE targets identified at Irwin.

REE Targets

Irwin

This target captures the historical drilling that contained anomalous REE up to 0.55% TREO and contains two arcuate magnetic features located south of the historical drilling. These features may represent alteration on the margins of intrusive bodies under cover (Figure 3).

Irwin also covers a series of bullseye magnetic anomalies north of the historical drilling.

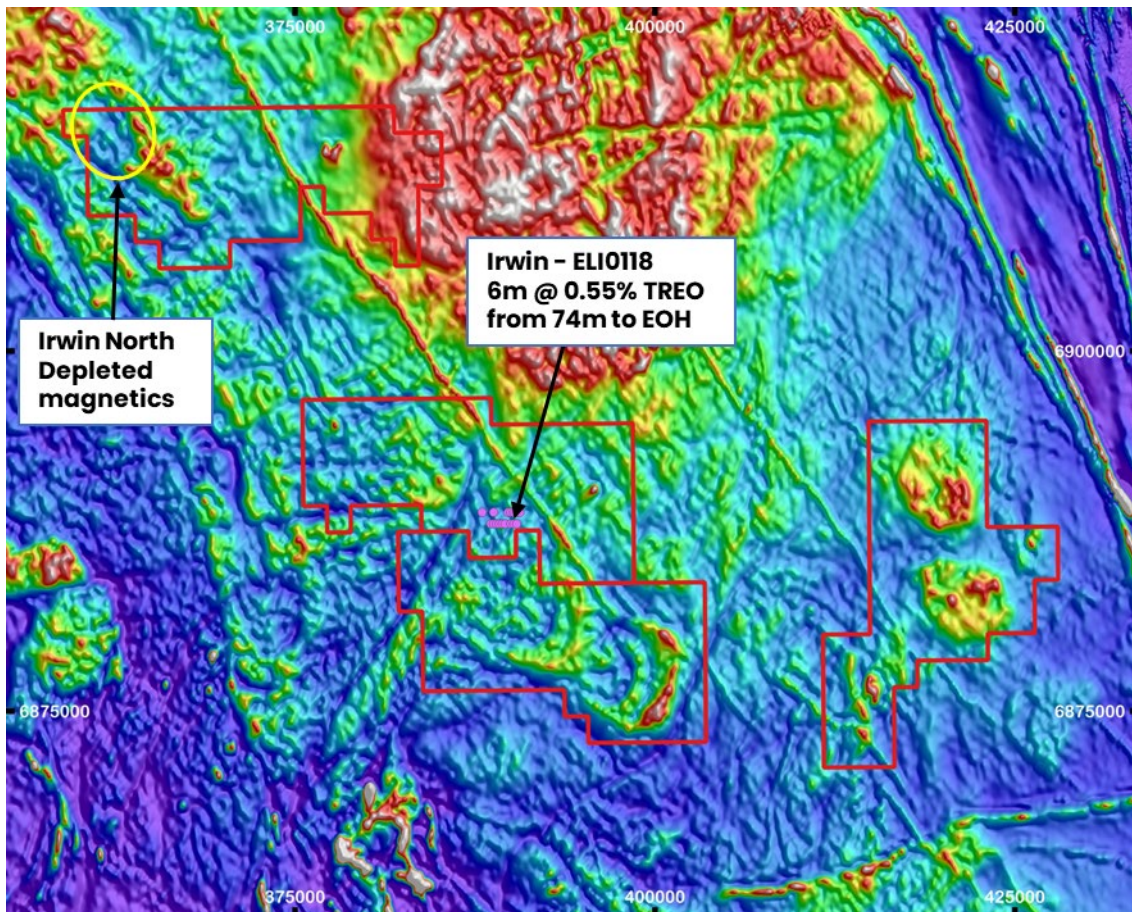


Figure 3 – RTP magnetic survey image highlighting the Irwin targets. Encounter tenements & historical aircore drillholes are shown

Irwin North

Reviews of magnetic and radiometric data identified discrete magnetic features as well as a significant radiometric anomaly in the north-west of Irwin North.

A discrete thorium radiometric anomaly (Figure 4) is located within an area of subdued magnetic signature. Thorium is often associated with REE mineralisation. The ovoid shape seen in magnetics may represent potential magnetic destruction or an intrusive body undercover.

Four aircore holes were drilled by WMC in the 1990s to the south-west of the thorium anomaly. Encouragingly, this historical drilling intersected rocks logged as lamprophyres and carbonate weathering products which suggests the presence of primary carbonatites.

A reconnaissance sampling and ground inspection visit was completed in March 2023. Surface samples were collected for geochemical analysis. There was no obvious surface feature to explain the discrete thorium anomaly.

Irwin East

Irwin East captures a series of magnetic features located 10km east of Irwin and within the same structural corridor. A review and assessment of Irwin East is underway.

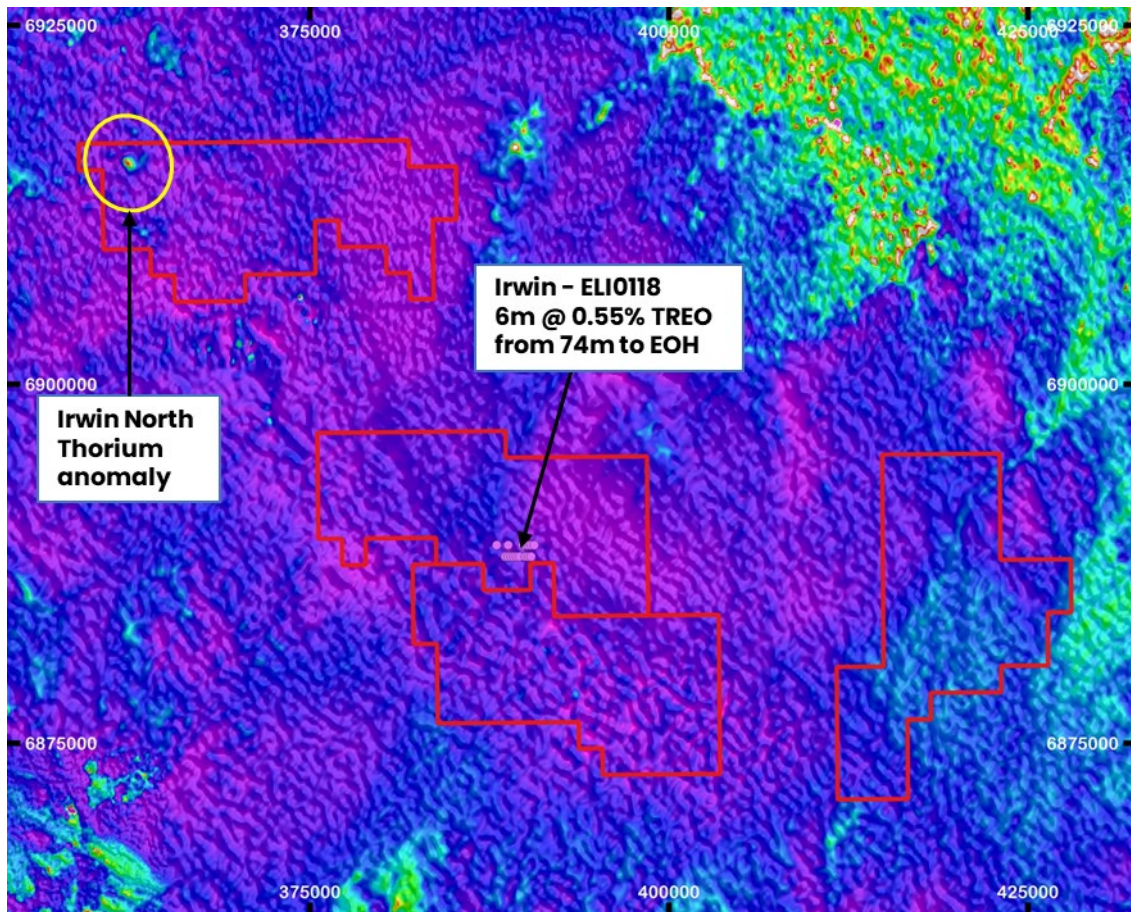


Figure 4 - Th-K isotope survey image with zones of higher amplitude thorium

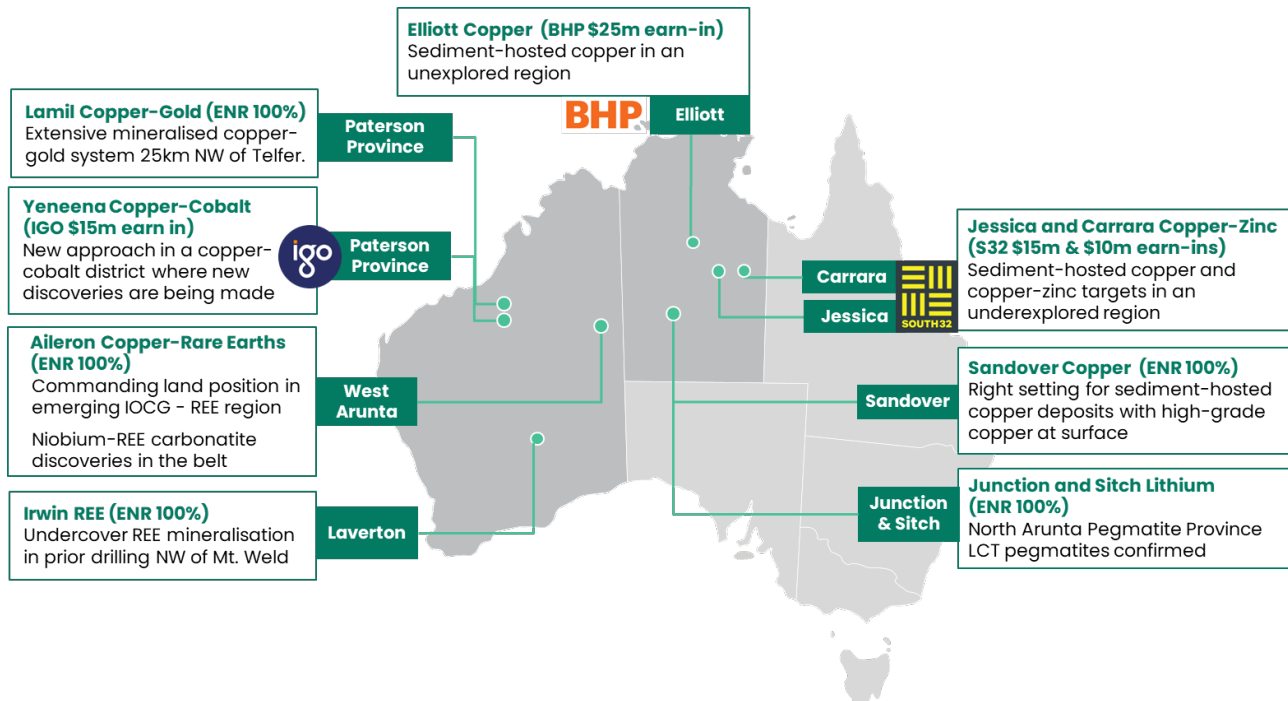
Upcoming Activity

Reconnaissance samples taken from the thorium anomaly at Irwin North and from around the collar location of ELI0118 completed in March 2023 have been submitted for analysis.

Petrography is also planned for some of the samples collected to determine mineralogy and infer protolith rock types.

On ground exploration is expected to commence later in 2023 upon tenement granting.

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, rare earths and lithium. 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-Rare Earths Project –WA

- Targeting IOCG style copper and carbonatite-hosted REE mineralisation
- Falcon airborne gravity survey May 2023
- Diamond drilling commencing April-June 2023

Sandover Copper Project – NT

- Outcropping shale units that contain copper mapped for >20km
- Major gravity survey completed at Sandover, planning for 2023 drilling

Junction Lithium Project – NT

- Highly anomalous lithium & critical minerals
- Confirmed LCT pegmatites

Lamil Copper-Gold Project – Paterson Province WA

- High-grade copper-gold reefs, up to 6.5% copper and 21.5g/t gold, intersected in Sep 2022

Copper Farm-in Partners

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

Elliott Copper Project – NT

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



- 2 diamond drill holes (1,655m) Nov 2022
- Awaiting geochemical and petrophysical results for both holes

Jessica and Carrara Projects – NT

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



- Diamond drilling commencing May 2023
 - 4 holes (3,500m) at Jessica
 - 3 holes (3,000m) at Carrara

Yeneena Project – Paterson Province WA

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



- 2022 diamond drill program included:
 - 6 diamond holes (3,988m)
 - Seismic survey and airborne geophysics

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The information in this report that relates to Exploration Results 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.

Hole_ID	Hole_Type	MGA_Grid_ID	MGA_North	MGA_East	MGA_RL	Collar_Dip	Azimuth	EOH Depth (m)
ELI0070	Aircore	MGA94_51	6888799	388001	414	-90	360	87
ELI0078	Aircore	MGA94_51	6888799	388801	414	-90	360	89
ELI0082	Aircore	MGA94_51	6888803	389203	412	-90	360	66
ELI0084	Aircore	MGA94_51	6888801	389405	414	-90	360	30
ELI0088	Aircore	MGA94_51	6888802	389813	414	-90	360	60
ELI0090	Aircore	MGA94_51	6888801	389999	410	-90	360	85
ELI0092	Aircore	MGA94_51	6888792	390195	409	-90	360	88
ELI0094	Aircore	MGA94_51	6888798	390393	410	-90	360	90
ELI0096	Aircore	MGA94_51	6888798	390614	412	-90	360	90
ELI0102	Aircore	MGA94_51	6888000	388600	425	-90	360	59
ELI0104	Aircore	MGA94_51	6888000	388800	425	-90	360	53
ELI0106	Aircore	MGA94_51	6888000	389000	425	-90	360	45
ELI0108	Aircore	MGA94_51	6888000	389200	425	-90	360	41
ELI0110	Aircore	MGA94_51	6888000	389400	425	-90	360	42
ELI0112	Aircore	MGA94_51	6888000	389600	425	-90	360	53
ELI0116	Aircore	MGA94_51	6888000	390000	425	-90	360	63
ELI0118	Aircore	MGA94_51	6888000	390200	425	-90	360	80
ELI0120	Aircore	MGA94_51	6888000	390400	425	-90	360	92
ELI0122	Aircore	MGA94_51	6888000	390600	425	-90	360	38

Table 1: Collar locations and drill hole information of completed aircore holes at Irwin

Hole ID	mFrom	mTo	TREO ppm	NdPr ppm	Total REE ppm
ELI0070	66	68	1478	307	1,261
ELI0070	70	72	577	136	492
ELI0070	72	74	602	140	513
ELI0070	74	76	502	114	427
ELI0070	78	80	464	126	395
ELI0070	84	86	771	192	657
ELI0070	86	87	1066	300	908
ELI0088	52	54	459	90	390
ELI0090	70	72	628	100	534
ELI0102	56	58	481	111	408
ELI0102	58	59	559	123	475
ELI0106	38	40	565	154	480
ELI0106	40	42	642	149	546
ELI0108	36	38	483	134	411
ELI0110	36	38	769	241	655
ELI0112	44	46	613	122	521
ELI0116	54	56	550	116	467
ELI0118	74	76	4035	841	3,437
ELI0118	76	78	7581	1,640	6,454
ELI0118	78	80	4975	1,020	4,231

Table 2: Irwin aircore drill hole REE assay results (+380ppm Total REE cut off). Only the lower portions of the holes, close to the cover/basement geological boundary, were analysed for REE.

SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i></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>The Lake Irwin prospect was sampled via Aircore (AC) drilling by Encounter Resources in March 2009. An 18-hole program was completed for a total of 1,161m drilled at an average depth of 64.5m. The locations were drilled at 100m spacings across a northern and southern line.</p> <p>Drill hole collar locations were recorded by handheld GPS and are considered to be an approximation.</p> <p>Aircore drilling was used to obtain chip samples at every 2m interval. Analysis was completed via Aqua Regia digest (AR-GAAS) for Au, and 4-Acid digest ICP – ES and ICP – MS for multi-element suite.</p> <p>Only the lower portions of the holes, close to the cover/basement geological boundary, were analysed for REE</p>
Drilling techniques	<p><i>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).</i></p>	<p>Results reported in this announcement refer to samples from 2009 aircore drilling.</p>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i></p> <p><i>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</i></p>	<p>Aircore sample recoveries were estimated as a percentage and recorded by Encounter field staff.</p> <p>Driller's used appropriate measures to minimise down-hole and/or cross – hole contamination in aircore drilling.</p> <p>To date, no detailed analysis to determine the relationship between sample recovery and/or and grade has been undertaken for this drill program.</p>
Logging	<p><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></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged</i></p>	<p>Geological logging has been completed on all drill holes, with lithology, alteration, mineralisation, structure and veining recorded.</p> <p>Geological logging is qualitative in nature and records interpreted lithology, alteration, mineralisation, structure, veining and other features of the samples and core.</p>

Sub-sampling techniques and sample preparation

If core, whether cut or sawn and whether quarter, half or all core taken.

If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.

For all sample types, the nature, quality and appropriateness of the sample preparation technique.

Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.

Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.

Whether sample sizes are appropriate to the grain size of the material being sampled.

No core drilling was completed in this program

Aircore samples were collected on the rig using a cone splitter.

Sample preparation was completed at Actlabs Pacific Pty Ltd Laboratories in Redcliff, Perth. Samples were dried, crushed, pulverised (90% passing at a $\leq 75\mu\text{m}$ size fraction) and split into a sub – sample for analysis. Analysis was completed via Aqua Regia digest (AR-GAAS) for Au, and 4-Acid digest ICP – ES and ICP – MS for multi-element suite.

Field QC procedures involve the use of commercial certified reference materials (CRMs) and in house blanks. The insertion rate of these will be at an average of 1:33.

Field duplicates were taken during aircore drilling and were collected on the rig via a cone splitter at a rate of 1:50. The results from these duplicates are assessed on a periodical basis.

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.

For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.

Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.

N/A – no geophysical or handheld XRF instruments were used to determine information reported in this report.

Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of in-house procedures.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>The intersections included in this report have been verified by Sarah James (Exploration Manager).</p> <p>No twinned holes have been drilled.</p> <p>Geological logging is completed using in-house logging data systems. All data entry is carried out by qualified personnel. Standard data entry is used on site and is backed up on external hard drives and then to a cloud based database.</p> <p>Adjustments made to the assay data were limited to the conversion of reported elemental assays for a range of elements to the equivalent oxide compound as applicable to rare earth oxides. In all instances the original elemental data will be stored in the database and the equivalent oxide values loaded into appropriately labelled fields identifying them as calculated values. The oxides were calculated from the element according to the following factors: CeO₂ –</p>

1.2284, Dy₂O₃ – 1.1477, Er₂O₃ – 1.1435, Eu₂O₃ – 1.1579, Gd₂O₃ – 1.1526, Ho₂O₃ – 1.1455, La₂O₃ – 1.1728, Nd₂O₃ – 1.1664, Pr₆O₁₁ – 1.2082, Sm₂O₃ – 1.1596, Tb₄O₇ – 1.1421, Tm₂O₃ – 1.1421, Y₂O₃ – 1.2699, Yb₂O₃ – 1.1387.

Rare earth oxide is the industry accepted form for reporting rare earths. The TREO (Total Rare Earth Oxide) is calculated from addition of La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃ and Y₂O₃. Note that Y₂O₃ is included in the TREO calculation.

Location of data points

Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.

Specification of the grid system used.

Quality and adequacy of topographic control.

Drill hole collar locations are determined using a handheld GPS.

Downhole surveys are projected to end of hole from planned dip and azimuth at collar position.

The grid system used is MGA_GDA94, zone 51.

Estimated RLs were assigned during drilling and are to be corrected at a later stage using the best available DTM.

Data spacing and distribution

Data spacing for reporting of Exploration Results.

Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.

Whether sample compositing has been applied.

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.

Orientation of data in relation to geological structure

Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.

If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.

This is early-stage drilling and the orientation of sampling to the mineralization is not known

Sample security

The measures taken to ensure sample security.

The chain of custody was managed by Encounter Resources in 2009.

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 the Irwin data

SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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>	<p>The Lake Irwin project is located within the tenement applications of E37/1518, E38/3794, E38/3811 and E38/3797 which are held 100% by Encounter Resources.</p> <p>The Encounter historical aircore drilling areas are located within the Nambi Pastoral lease.</p> <p>The tenement applications sit within the bounds of the Wutha and Wongatha Native Title Claims.</p> <p>No known historical or environmentally sensitive sites have been identified in the work area.</p>
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Exploration by other parties within the current tenement applications is summarised here.</p> <p>Diamond exploration was conducted by Western Mining in 1989 and a subsequent aircore drilling program was undertaken.</p> <p>Voyager Gold underwent an RC program in 1998, coupled with hydrogeochemical sampling across new holes, as well as pre-existing water boreholes.</p> <p>Western Areas NL undertook a small four RC hole drilling program in 2005 targeting nickel/gold in an eastern tenement that overlapped E 38/3797, as part of the Windarra project.</p> <p>Venture Minerals undertook a soil sampling and ground based radiometric survey program in early 2008 to confirm uranium anomalies from airborne survey maps.</p> <p>BHP held neighboring tenements in the early 2010s for the purpose of exploration for calcrete-hosted carnotite (uranium) deposits.</p>
Geology	<i>Deposit type, geological setting and style of mineralisation</i>	<p>The project is situated in the Yilgarn Craton between the Yandal Greenstone Belt to the west and the Duketon Greenstone Belt to the east. Recent surface sediments that comprise the paleochannel accumulations are dominantly alluvium, colluvium, lacustrine sediments, and minor calcrete of Cenozoic age. Basement rocks underlying these sediments are interpreted from aeromagnetic data to comprise Archaean felsic gneiss and granitic rocks.</p> <p>Falling within the same regional structural trend as the Lynas Rare Earths Mt. Weld deposit, the area is considered prospective for carbonatite-hosted REE deposits.</p>
Drill hole information	<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"> • <i>Easting and northing of the drill hole collar</i> • <i>Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</i> • <i>Dip and azimuth of the hole</i> 	<p>Refer to tabulation in the body of this announcement.</p>

- Down hole length and interception depth
- Hole length

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<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>	All reported assays have been length weighted, with a nominal 380ppm Total REE lower cut-off over a minimum of 2m. No upper cuts-offs have been applied.
	<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>	Higher grade intervals that are internal to broader zones of REE mineralisation are reported as included intervals, using lower cut-off of 3,000ppm Total REE.
	<p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	No metal equivalents have been reported in this announcement
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of exploration results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></p>	The geometry of the mineralisation is not yet known due to insufficient drilling.
Diagrams	<p><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></p>	Refer to the body of this announcement.
Balanced Reporting	<p><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></p>	All significant intervals are reported with a 380ppm Total REE lower cut-off with 2m minimum width (with internal higher grade intervals quoted using a lower cut-off of 3,000ppm Total REE)
Other substantive exploration data	<p><i>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.</i></p>	No other meaningful and material results to report
Further Work	<p><i>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.</i></p>	On ground exploration is expected to commence later in 2023 upon tenement granting.