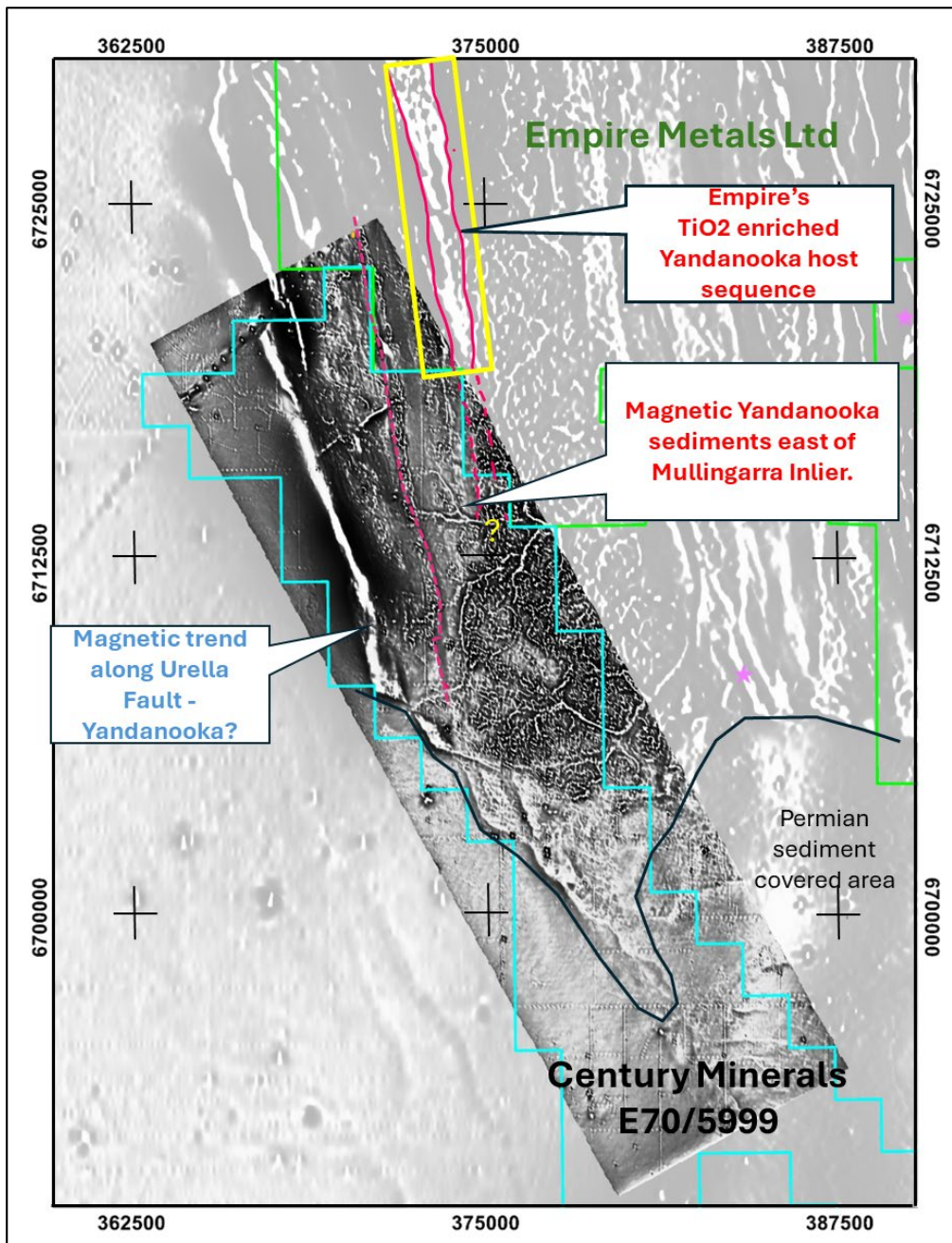


**E70/5999 – Eneabba East - Titanium and Heavy Mineral Prospect
Results of Detailed Magnetic - Radiometric Survey**

Enterprise is pleased to announce that its detailed MagSpec airborne magnetic-radiometric survey has been completed over 80% of E70/5999, which lies south of Empire Metals Ltd (EEE.LON) world class Pitfield titanium discovery. The MagSec survey has identified both Pitfield-style basement exploration opportunities, and conventional strand line Heavy Mineral (HM) opportunities with over 56km of sparsely or completely untested strand lines.

Enterprise’s processed magnetic data has defined magnetic stratigraphy on the sheared western and eastern margins of the gneissic rocks of the Precambrian Mullingarra Inlier. These sheared contact zones are considered to be potential pathways for hydrothermal fluids containing titanium, copper and iron and have not been previously drill tested.

Figure 1. Northern Part E70/5999: Magnetic Data, Reduced to the Pole, Total Magnetic Intensity, 1st Vertical Derivative Image

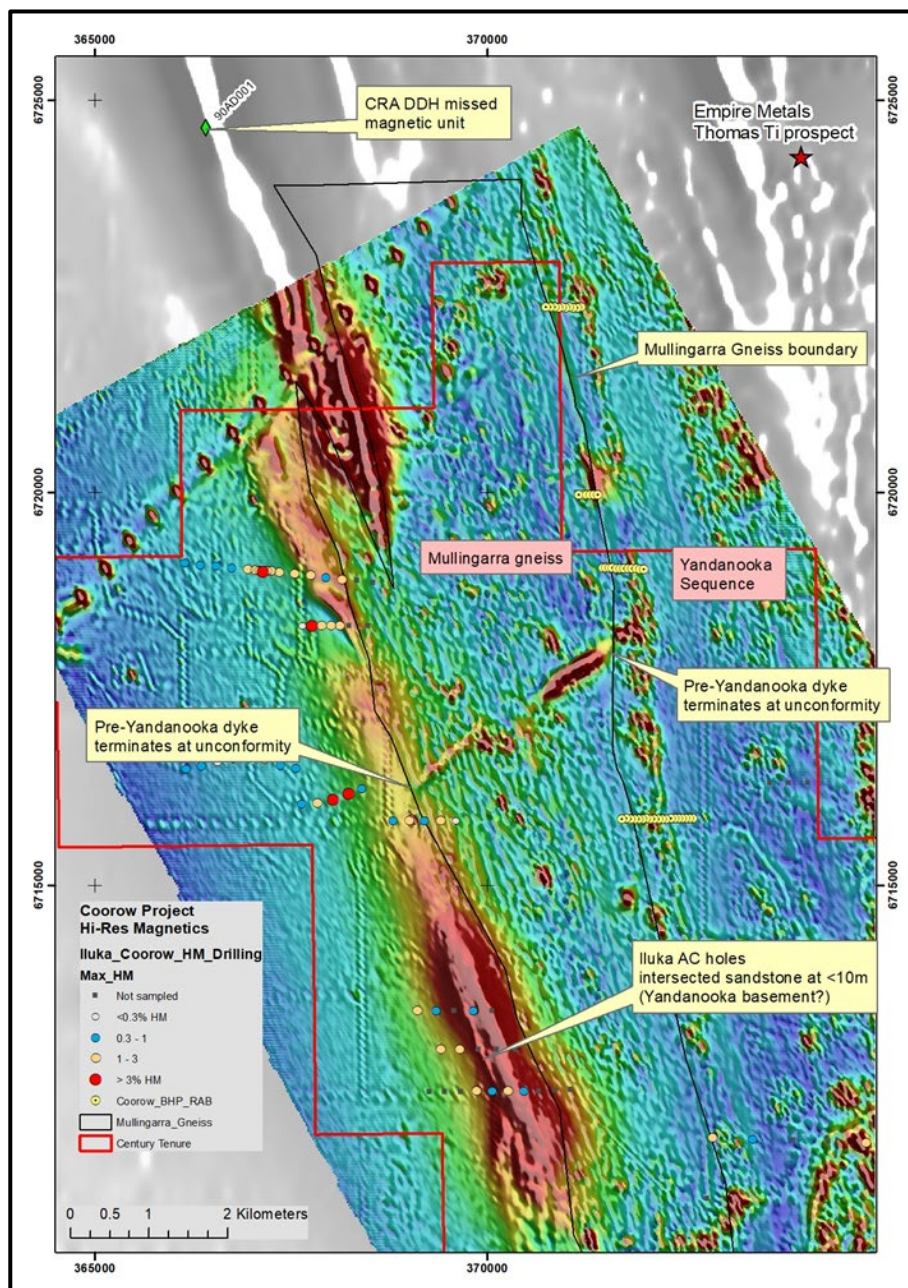


The survey has provided striking detail of the basement geology, including strongly magnetic units along the western margin of the Mullingarra gneiss which appears to broaden to the south where they are segmented by a series of later WNW trending faults. The resolution of the basement geology in the magnetic data demonstrates shallow cover extends further south than expected, before disappearing beneath younger Perth Basin rocks. The areas of shallow cover should be amenable to testing with low-cost aircore drilling.

One important geological feature in the magnetic data is an ENE-trending magnetic dyke intruding the Mullingarra Inlier. This dyke does not continue across the unconformity between the gneiss to the west and the Yandanooka sediments to the east, and thus the dyke is pre-Yandanooka timing, and helps position both eastern and western boundaries of this older (and lower prospectivity) geological unit.

Further evidence for the location of the Mullingarra-Yandanooka unconformity occurs in historic BHP Minerals RAB drilling. Iluka drilled a number of aircore holes to blade refusal over the Urella Rise (fault) on the western margin of the Mullingarra Inlier and intersected probable Yandanooka sediments in very shallow (3-6m deep) aircore holes. Iluka's aircore holes were not intended to identify the source of the magnetic anomaly. (Refer Figure 2, BHP Wamex a16047 & CRAE Wamex a36570)

Figure 2. Northern Part E70/5999: Coloured Magnetic, Total Magnetic Intensity, Analytical Signal



Analysis of the MagSpec Radiometric Data for Conventional Beach Sand Heavy Minerals

Enterprise believes a likely genetic relationship exists between the hard rock titanium mineralisation as a source rock for the reworked accumulations of heavy mineral sand mineralisation in the Eocene sediments mantling the Coorow licence. Image Resources Ltd recently released a BFS for the development of the Yandanooka HMS Deposit (ASX: IMA, 19 April 2024) which showed a leucoxene-rich mineral suite with robust and compelling economics.

The heavy mineral sand mineralisation in the Coorow District has been known since the late 1970's when "John Baxter" and "RGC" identified HM mineralisation at the Yandanooka, Arrino and Durack locations. At the time, this HM mineralisation was deemed inferior to that recognized at Eneabba and was not investigated further until Iluka Resources Ltd explored this Eocene scarp (named the "*Urella Rise*") between 2001 and 2008.

Iluka undertook broad spaced exploratory AC drilling on sections with line spacings varying from 500 metres to over 8 km apart, including over parts of the Coorow licence. More detailed work resulted in maiden mineral sand resources being defined at Yandanooka and Durack prospects, but Iluka subsequently surrendered the ground in 2008.

Sheffield Resources Ltd drilled out the Yandanooka and Durack Deposits between 2011 and 2016 but did not undertake additional drilling on the area of the current Coorow licence during this period.

Sheffield relinquished all ground outside the Yandanooka and Durack Deposits in 2016 and subsequently sold the remaining Yandanooka and Durack Retention Licences to Image Resources Ltd in 2021. Image is currently preparing to commence mining the Durack and Yandanooka deposits.

No material exploration has been completed over the Coorow licence since the Iluka work which identified three prospects with the project: Durack South, Aeolian and Yarra Yarra, with mineral sand mineralisation present along and to the west of the Urella Rise (Scarp).

Analysis of the new detailed magnetic and radiometric data has revealed a high degree of correlation between anomalous HM in Iluka's drilling results and the survey data attributes (K, U, Th, Magnetics, & DTM) considered important for prioritising exploration for HM deposits. Firstly, the surveyed ground could be separated into '**low plateau**' areas with broadly elevated radiometric responses and broad '**shallow valleys**' with diminished radiometric response.

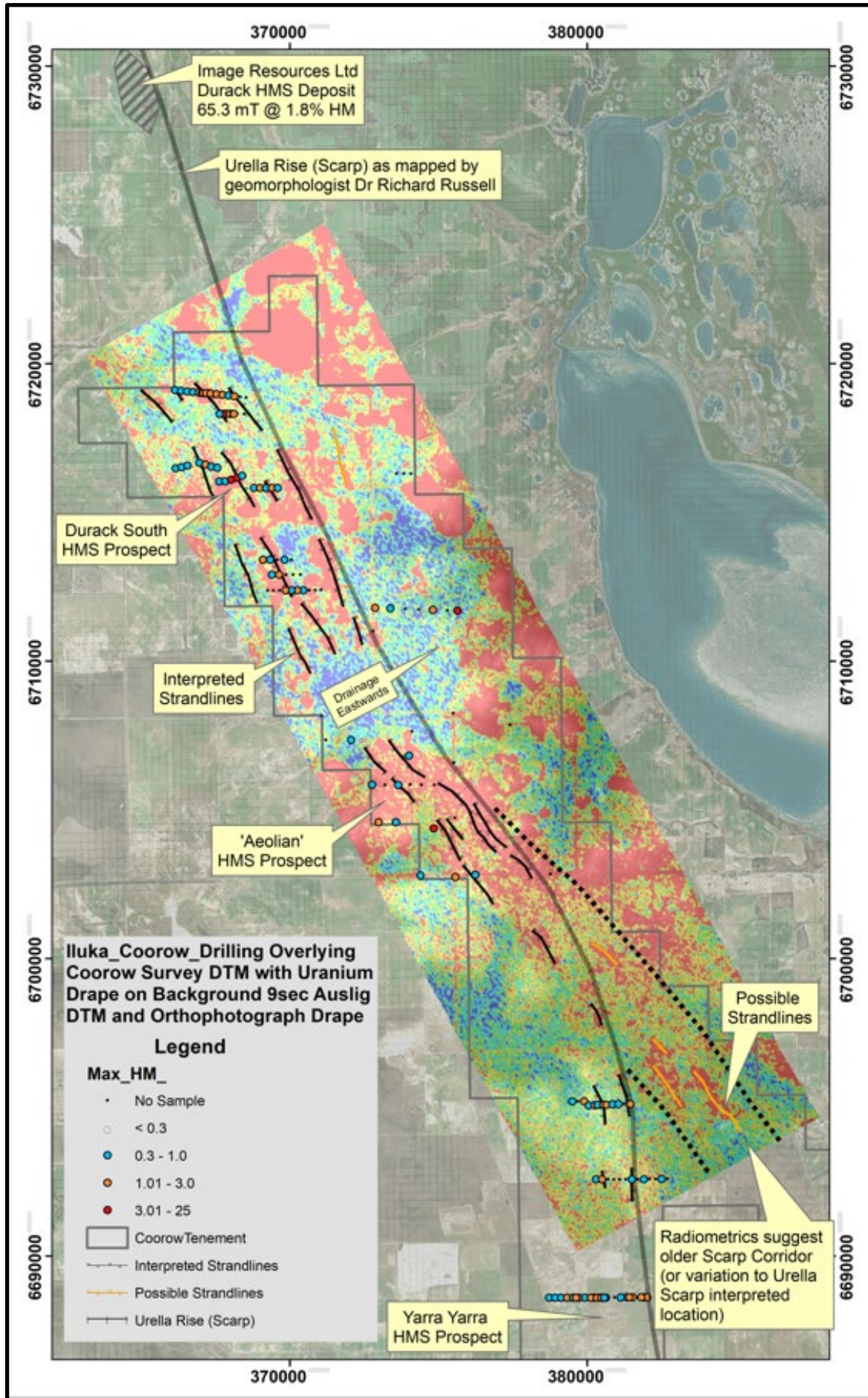
The '**low plateaus**' are in turn comprised of stacked low ridges with coincident Thorium and Uranium channel responses, evident as linear features on those datasets (indicative of mineral sand species zircon, monazite and xenotime). These radiometric anomalies have in places coincident weak magnetic anomalies and also brown staining (iron oxides?) visible in Google Earth satellite images. This is consistent with the weathering of ilmenite and other Fe-bearing heavy minerals concentrated in strandlines. A total extent of 48 kilometers of either lightly drilled or undrilled '**low ridges**' / '**interpreted strandlines**' have been identified and shown in Figure 3.

To the east of the Urella Rise there are several radiometric anomalies that look like '**possible strandlines**'. In particular, as the Urella Rise (Scarp) trends towards the SSE, a bend towards the south has been suggested from geomorphology interpretation. However, a corridor of elevated radiometric responses continues in the same SSE direction where a further 8km of totally undrilled '**possible strandlines**' has been highlighted in Figure 3.

Figure 4 demonstrates the cyan colour coincident with the interpreted strandlines (comprising equal Thorium/Uranium content of minerals such as zircon, monazite and xenotime) west of the Urella Rise (Scarp) versus the more white and pink character of the circular pans and lunettes (containing K rich salts) and to the east of the Urella Rise (Scarp).

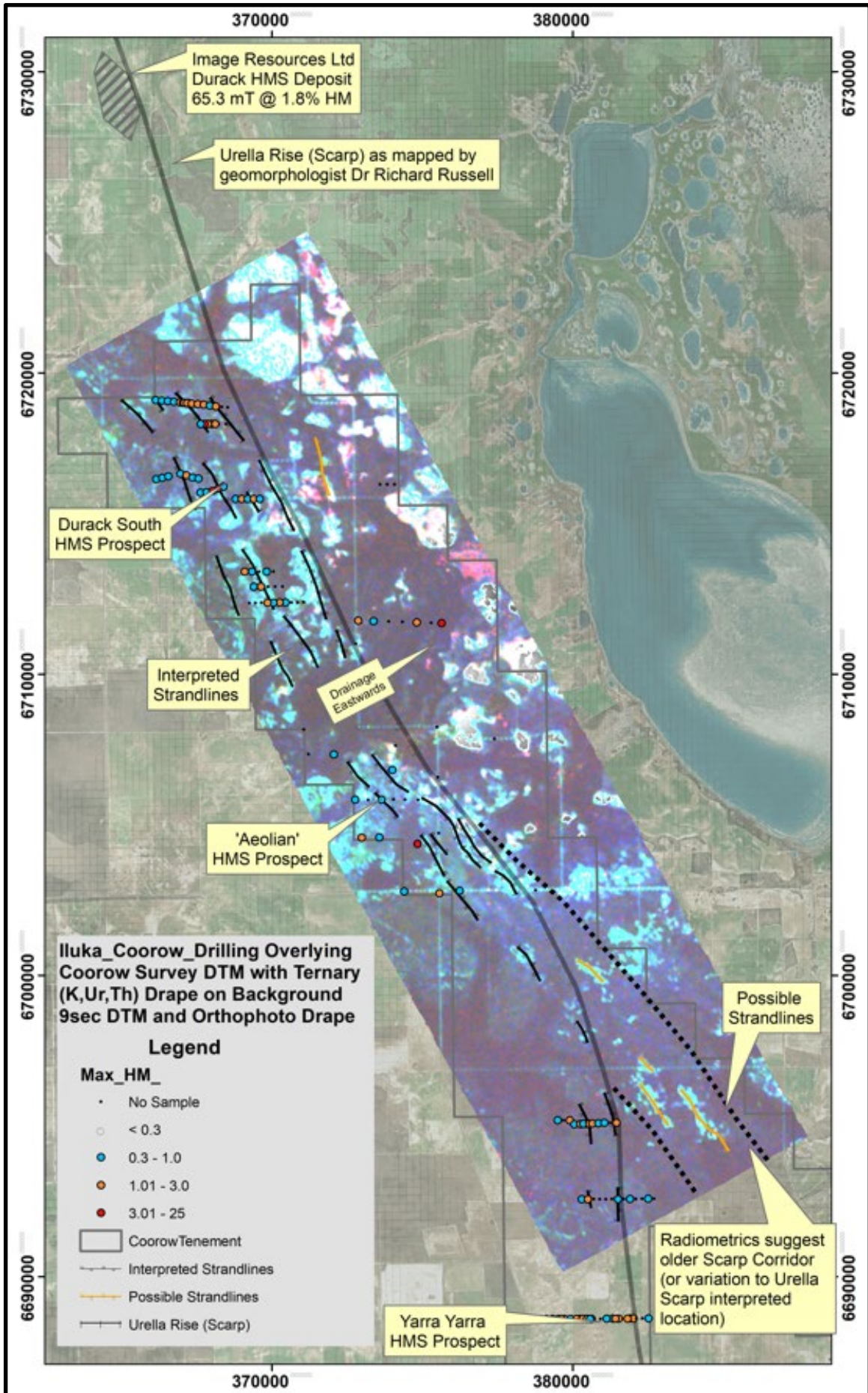
For the '**shallow valley**' areas drainage and erosion of prospective units has occurred back towards the Yarra Yarra Lakes to the east of the licence and then southwards sub-parallel to the Darling Scarp. Enterprise believes in some instances the prospective sediments have been eroded away but in other instances the radiometric responses may be attenuated through the presence of water and moist soil or may continue under a thin veneer of Recent sediments.

Figure 3. Iluka's Coorow Drilling (Maximum HM in Hole) Overlying Coorow Survey DTM with Uranium Channel Drape on Background of 9 second Auslig DTM with Orthophotograph Drape.



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Figure 4. Ternary (K Ur Th) Radiometric Image Based on 2024 MagSpec Detailed Magnetic - Radiometric Survey.



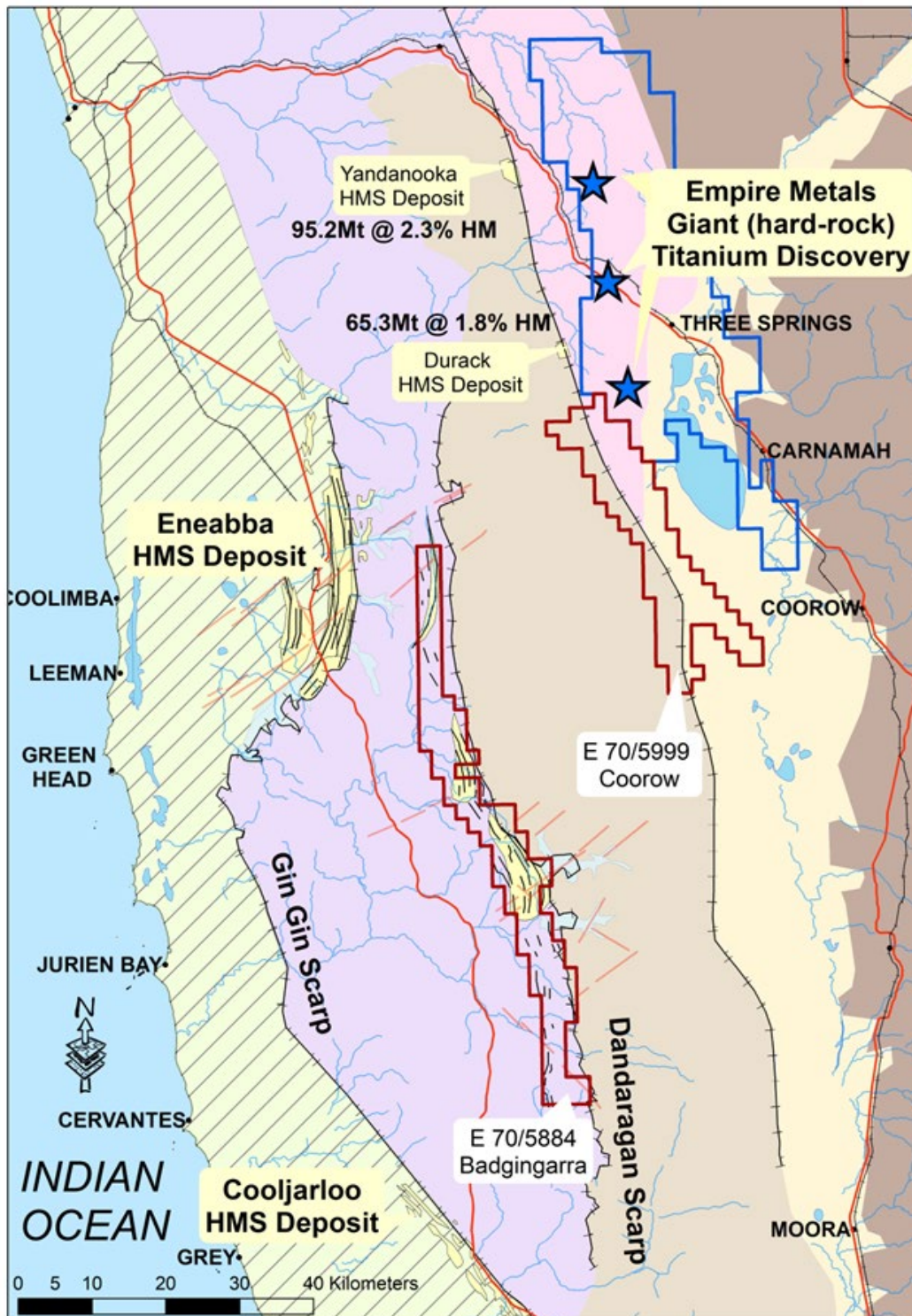
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Previous exploration by Iluka Resources Ltd in the area now covered by E70/5999 has focused solely on shallow air core drilling to test for heavy minerals in unconsolidated surficial sediments.

In addition to following up HM targets outlined by Iluka and additional prospective strandlines, highlighted by the new high-resolution geophysics, Enterprise intends to complete the first deeper RC or diamond drilling of the magnetic anomalies associated with basement rocks in E70/5999.

Figure 5 below shows the location of E70/5999 (Coorow) and E70/5884 (Badgingarra) which comprise the Eneabba East Project, and the location of Empire Metals Ltd's recent giant titanium discovery in the Yandanooka Basin (shown in pink).

Figure 5. Location of Century Minerals Ltd's licences E70/5884 and E70/5999, Empire Metals Ltd's new Hardrock Titanium Discoveries, and Image Resources' Yandanooka and Durack HMS Deposits over Geology



Details of Coorow Exploration Licence 70/5999 and Next Steps

E70/5999 was granted to Century Minerals Pty Ltd for 5 years on 9 October 2023, has an area of 312km² and an annual minimum expenditure commitment of \$105,000.

Following the flying and processing of the detailed MagSpec (magnetic & radiometric survey) over the majority of E70/5999, Enterprise plans to:

- undertake ground gravity surveys over certain anomalous magnetic features, and
- undertake Induced Polarization (IP) surveys over coincident gravity/magnetic anomalies, and
- undertake Reverse Circulation (RC) drill testing of IP anomalies
- undertake AC drilling of heavy mineral strandline targets

Refer to Previous Enterprise ASX Releases

- 6 May 2024: *Enterprise - Century Minerals Pty Ltd Option Agreement, and previous Iluka Resources AC HM results. (Includes JORC Competent Person Statement)*
- 18 June 2024: *Eneabba East Project- Exploration Planning*
- 26 July 2024: *Detailed Magnetic - Radiometric Survey on E70/5999 Titanium and Heavy Mineral Prospect Commenced*

Also, refer to previous LON: *EEE release:*

- 12 June 2024: *Empire Metals Ltd, Target for Pitfield Titanium Project.*

Wamex References for Historic Exploration on area of Current E70/5999

SURMAN, S. & GUNN, M.J, 1984: Exploration Licence 70/25. Arrino, WA Final Report. BHP Minerals Exploration Dept. *Wamex a16047.*

MANINI, A. 1992: 1991/92 Annual Report on E70/449-450 Arrino. SH50-06. Perenjori, WA CRAE Report 17781. *Wamex a36570:*

CHAPMAN A, 2006, Annual Report on Exploration of E70/2773 Yarra Yarra for the Period 07/10/05 to 06/10/06, (Iluka Report No. 14844, Perenjori). *Wamex a73759*

CHAPMAN A, 2006, Iluka Resources. Technical Report Iluka-Tr-T14992, Group C110/ 2002 Annual Report for The Period 1/12/05 To 30/11/06 Carnamah, Date: 29 January 2007 Carnamah North, Three Springs, Arrino, Durack, Yandanooka, Heavy Minerals, Rutile, Zircon And Ilmenite, E70/2886, E70/2772, E70/2533, E70/2454.

OLIVER R, 2001, Annual Technical Report ILUKA TR-01-93 Exploration Licence E70/2091. 20/4/00 - 19/4/01. *Wamex a62625*

OLIVER R, 2022, Annual Technical Report ILUKA TR 02/77 Exploration Licence E70/2091, Carnamah, WA Annual Technical Report 20/4/01 - 19/4/02. *Wamex a64943*

PARKER, S. 2006, Iluka Resources, Technical Report Iluka-Tr-T12887 Group C110/ 2002 Annual Report For The Period 1/12/04 To 30/11/05 Carnamah, 29 January 2006. *Wamex a71858.*

WORTH, M. 2003, Iluka-T9594 Partial Surrender Report for Carnamah E70/2091, 20 June 2003 *Wamex a6684.*

WORTH M, 2004, Technical Report Iluka-TR-T10506 Group C110/2002 Annual report for the period 1/12/02 to 30/11/03 Carnamah. *Wamex a67942*

WORTH M, 2004, Iluka Resources, Technical Report Luka-T10845 Final Surrender Report for Carnamah E70/ 2091 20/04/ 2000 To 14/4/2004: 31 May 2004. *Wamex a68700*

WORTH M, 2008, Carnamah Project, Iluka, Final Surrender Report for the period 11th September 2003 to 11th August 2008, E70/2533, E70/2454, E70/2772 & E70/2886. [C110/2002] *Wamex a79428.*

Enterprise Metals Limited Agreement with Century Minerals Pty Ltd.

Enterprise Metals Limited has the right to explore for all minerals on Exploration Licences 70/5999 (Coorow) and 70/5884 (Badgingarra) under the Eneabba East Option Agreement with Century Minerals Pty Ltd. The focus of exploration includes titanium and heavy minerals (HM) such as zircon, monazite, rutile, ilmenite, rare earths (REE) and base metals. The two tenements are located approximately 270km north of Perth and are well serviced with road and rail. (Refer ENT: ASX 6 May 2024)

Enterprise is a West Australian based exploration company with wholly owned projects at Doolgunna north of Meekatharra, at Murchison north of Cue, and Mandilla, just north of Widgiemooltha. The Company also has a 30% free carried interest to completion of bankable feasibility in the Orpheus Project in the Fraser Range with Constellation Resources Ltd. The Company is focused on applying world-class exploration technologies and experience to proven mineralised tenure to generate shareholder wealth through discovery and production.

This ASX Announcement has been approved in accordance with the Company's published continuous disclosure policy and authorised for release by the Enterprise Metals Ltd Board of Directors.

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Forward Looking Statements: *Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management. Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements.*

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future.