5 December 2024 ASX Announcement

# Eclipse Metals Advances Gallium and Rare Earth Exploration at Ivigtût Unlocking Greenland Treasures

## HIGHLIGHTS

- **Gallium in Mineralised Waste: Bulk sample assays have confirmed the presence of significant concentrations of gallium of up to 43.1ppm with an average of 39.16 ppm across five samples. Gallium is a vital component for emerging technologies such as semiconductors and solar cells, positioning Ivigtût as a key asset in the global race for non-China-dependent gallium supply.**
- **Polymetallic Mineralisation: In addition to gallium, the samples contained notable amounts of silver (up to 16.55 ppm), copper (up to 538 ppm), zinc (up to 3,180 ppm), and lead (up to 2,650 ppm). These findings support the polymetallic potential of Ivigtût's mineralisation, offering a diversified resource that could be processed for multiple valuable metals.**
- **Ongoing laboratory analysis of historical diamond drill cores from Grønnedal reveals significant rare earth element (REE) and Gallium mineralisation at depth, indicating the potential to expand the current JORC mineral resource estimate significantly. The findings underscore the project's capability to deliver substantial long-term value through resource growth and enhanced critical mineral supply.**

Eclipse Metals Ltd (**ASX: EPM**) (**Eclipse** or the **Company**) is pleased to update shareholders on the growing strategic importance of its Ivigtût cryolite mine, focusing on the discovery of gallium and ongoing exploration into rare earth elements (REE) in the region. Recent analysis of bulk samples from the historical waste dumps at Ivigtût has revealed promising polymetallic mineralisation, reinforcing the project's potential as a source of critical minerals.

## REE Exploration Update

Eclipse has also made significant progress in exploring rare earth elements (REE) in the Grønnedal prospect within its broader Greenlandic project. Recent pXRF core scans from historical drill holes indicate widespread rare earth mineralisation, with neodymium (Nd) standing out as a key element of interest.

- Extensive Mineralisation: The rare earth mineralisation at Grønnedal covers a significant aerial extent of 5 km by 2 km, with an immediate target area of 3 km by 800 m focused on ferrocarbonatite.
- Medium REE Content: Preliminary pXRF results highlight the presence of elevated levels of medium rare earth elements (MREE) such as neodymium (Nd), praseodymium (Pr), dysprosium (Dy), and terbium (Tb), which are highly sought after for applications in magnets, electric vehicles, and renewable energy technologies.
- Deep-Seated Deposit: Initial findings suggest the presence of deep-seated rare earth deposits, with a depth potential of more than 500m, identified through interpretation of historical airborne electromagnetic surveys. These conductive targets are recommended for follow-up drilling, which could unlock significant new resource areas.

- Resource Confirmation: The consistency of neodymium ratios from surface to depths of at least 200m validates previous surface sampling and drilling efforts, confirming the continuity and resource potential of the mineralisation.
- Five bulk samples collected by trenching the mineralised waste dumps (refer to ASX Releases dated 17 August 2022, 1 November 2022), were blended and a sub-samples crushed and ground for analysis by the ME-MS61 method, returned the following summary results.

**Table 1: Trenching Bulk Samples**

| SAMPLE DESCRIPTION | Ag ppm | Cu ppm | Au ppm | Ga ppm | Zn ppm | Pb ppm | Li ppm | Rb ppm |
|---|---|---|---|---|---|---|---|---|
| Bulka Bag A | 12.35 | 352 | 0.02 | 39.4 | 2760 | 2280 | 102.5 | 417.0 |
| Bulka Bag B | 15.65 | 446 | 0.03 | 36.2 | 3180 | 2650 | 114.0 | 401.0 |
| Bulka Bag C | 13.50 | 538 | 0.01 | 38.2 | 2150 | 2420 | 105.5 | 409.0 |
| Bulka Bag D | 16.55 | 467 | 0.02 | 38.9 | 2340 | 2540 | 110.0 | 411.0 |
| Bulka Bag E | 16.45 | 457 | 0.02 | 43.1 | 2290 | 2550 | 122.0 | 469.0 |
| AVG | 14.9 | 452 | 0.02 | 39.16 | 2544 | 2488 | 110.8 | 421.4 |

## Strategic Importance

The combination of gallium in the Ivigtût waste dumps and the substantial rare earth mineralisation at Grønnedal positions Eclipse as a potential leader in the supply of critical minerals essential for global clean energy and technology transition. These findings further emphasize the strategic value of Eclipse's Greenlandic assets, which are increasingly recognized as important sources for vital metals in high-tech and renewable energy sectors.

As Eclipse continues to refine its exploration strategy and pursue further analytical work and ongoing sample analysis in Sweden, the company remains committed to unlocking the full potential of its multi-commodity project in Greenland, which has the potential to contain significant quantities of quality-critical material. Ivigtût is positioned to be a significant contributor to the global critical minerals market with its recognised content of strategic critical minerals. Eclipse will continue to provide updates as assay results from diamond drilling and metallurgical studies progress.

Approved by the board of Eclipse Metals Limited.

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## About Eclipse Metals Ltd (ASX: EPM)

Eclipse Metals Ltd is an Australian exploration company focused on exploring southwestern Greenland, Australia's Northern Territory and state of Queensland for multi-commodity mineralisation. Eclipse has an impressive portfolio of assets prospective for cryolite, fluorite, siderite, quartz (high-purity silica), rare earths, gold, platinum group metals, manganese, palladium, vanadium and uranium mineralisation. The Company's mission is to increase shareholders' wealth through capital growth and ultimately dividends. Eclipse plans to achieve this goal by exploring for and developing viable mineral deposits to generate mining or joint venture incomes.

## Listing Rule 5.23

The information contained in this report relating to exploration results, exploration targets and mineral resources has been previously reported by the Company as referenced above (Announcements). The Company confirms that it is not aware of any new information or data that would materially affects the information included in the Announcements.

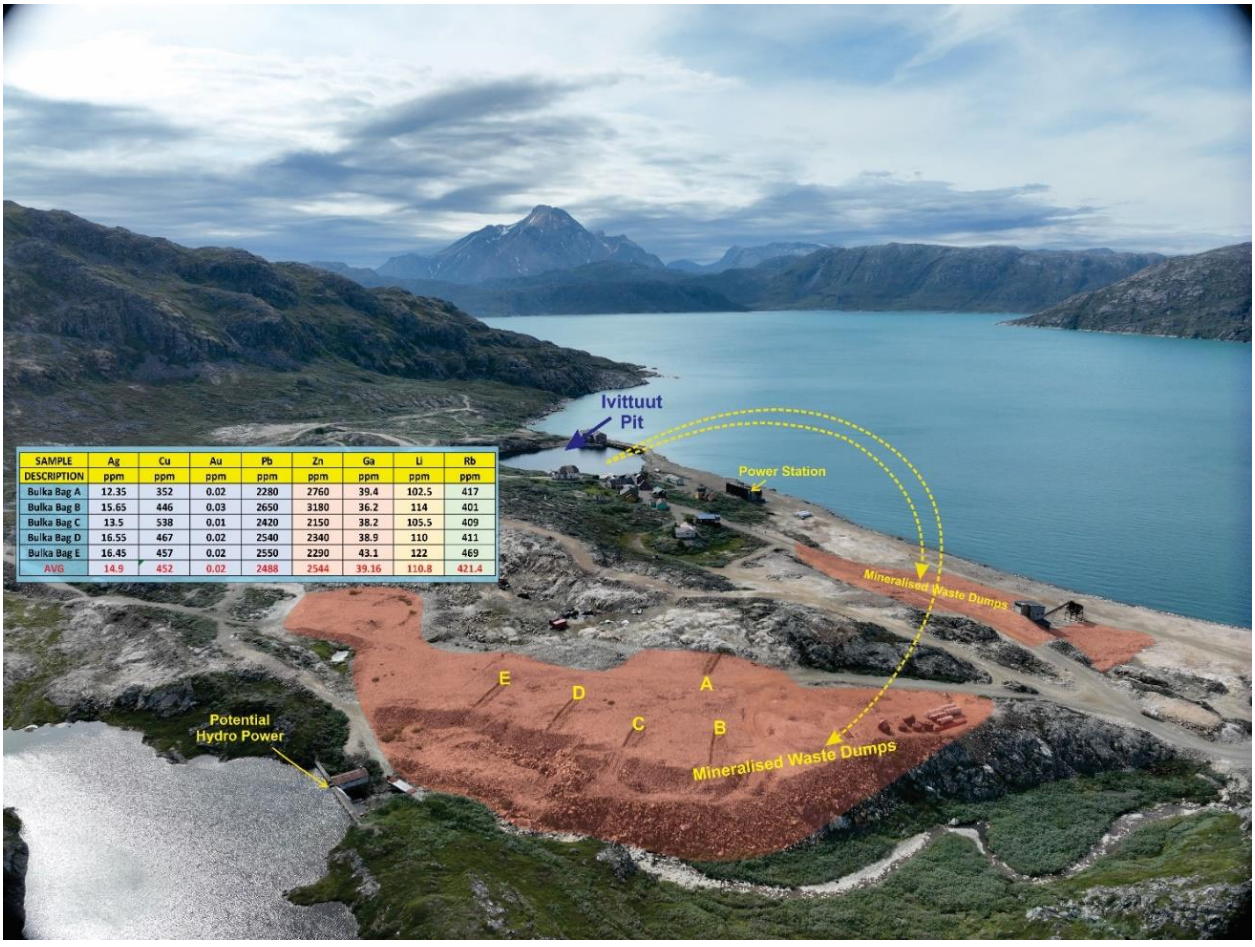


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***Figure 1. Mineralised waste dumps and trenches***

*Figure 2: Collecting several tonnes of bulk samples from 5 trenches in the mineralized waste dumps at Ivigtût in 2022*

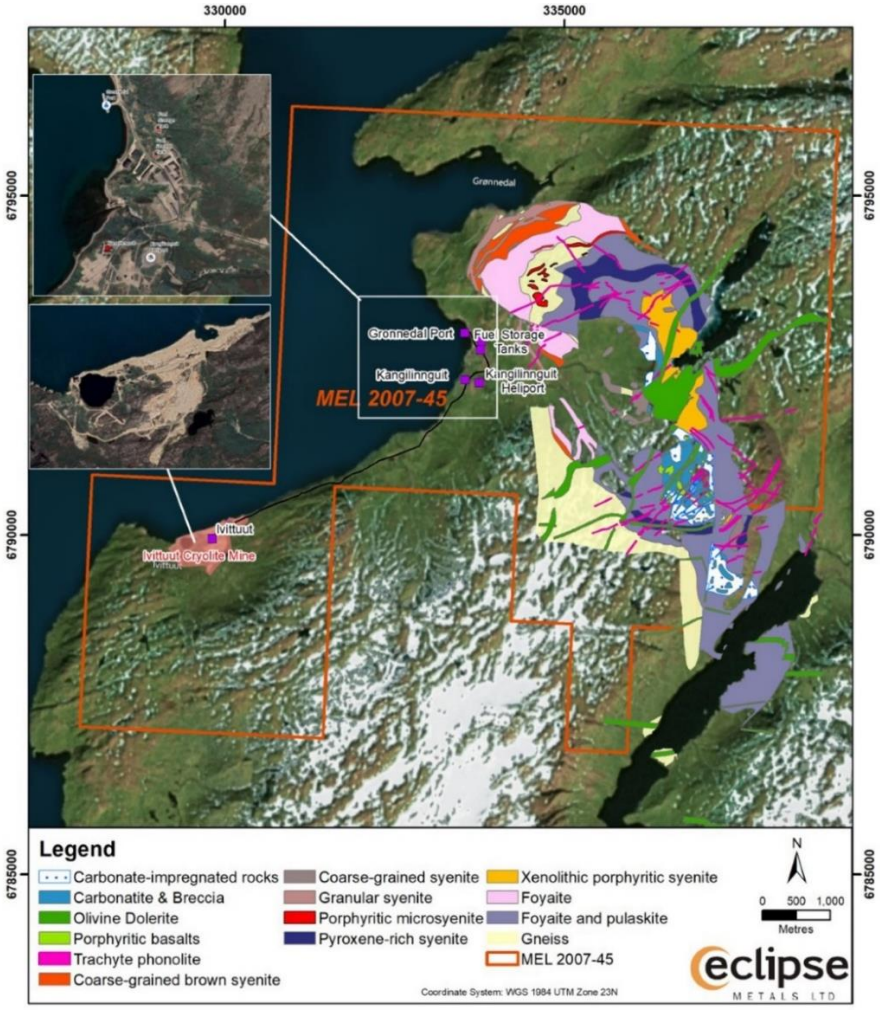


*Figure 3. MEL 2007-45 Location Map, showing the geology of Grønnedal with nepheline syenite with carbonatite plug.*

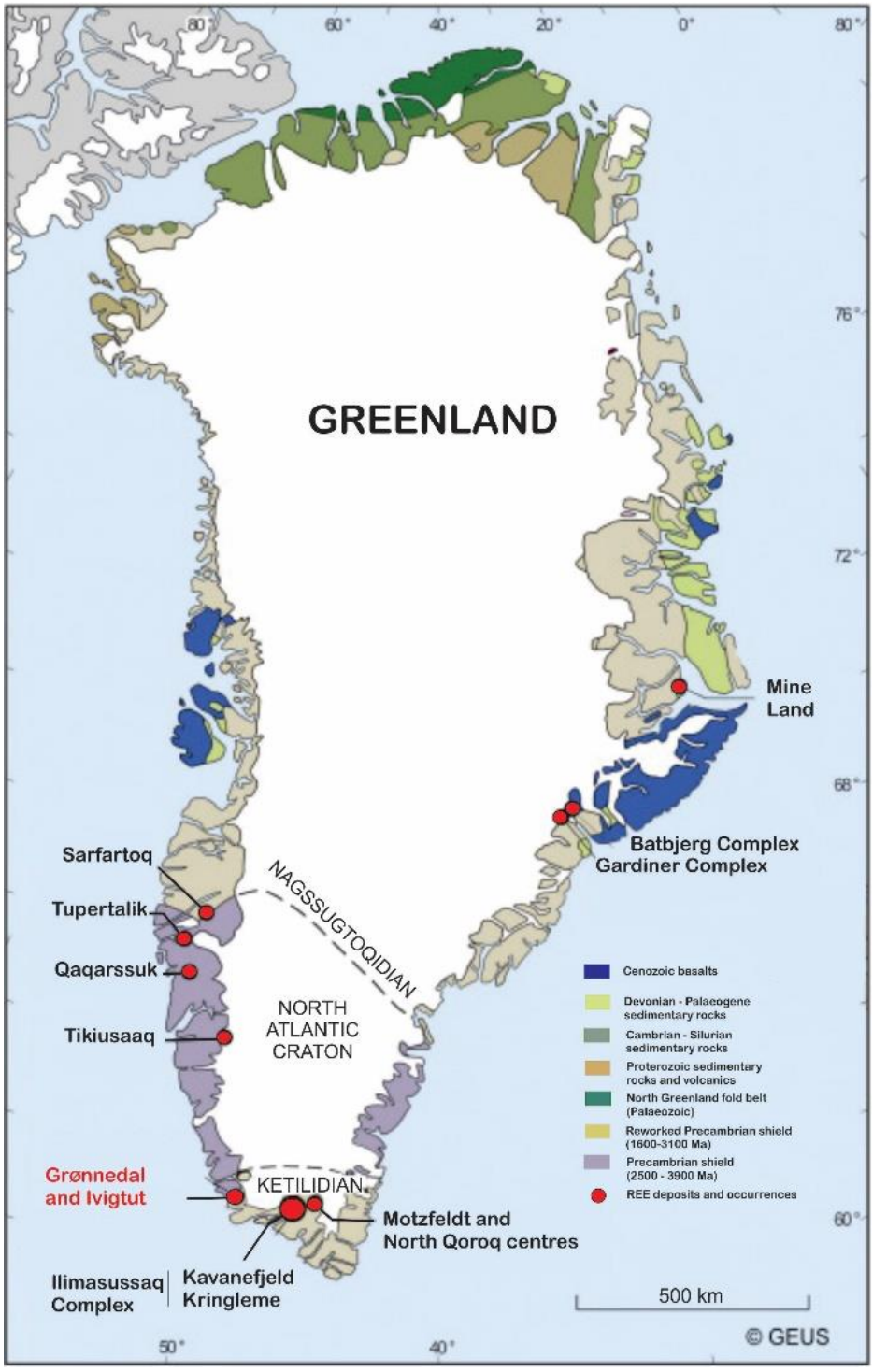


***Figure 4. Greenland REE Deposits and location of Grønnedal and Ivigtût***