

7<sup>th</sup> October 2021

ASX Announcement

## **ECLIPSE PROGRESSES GREENLAND DEVELOPMENT PLAN**

### **Highlights**

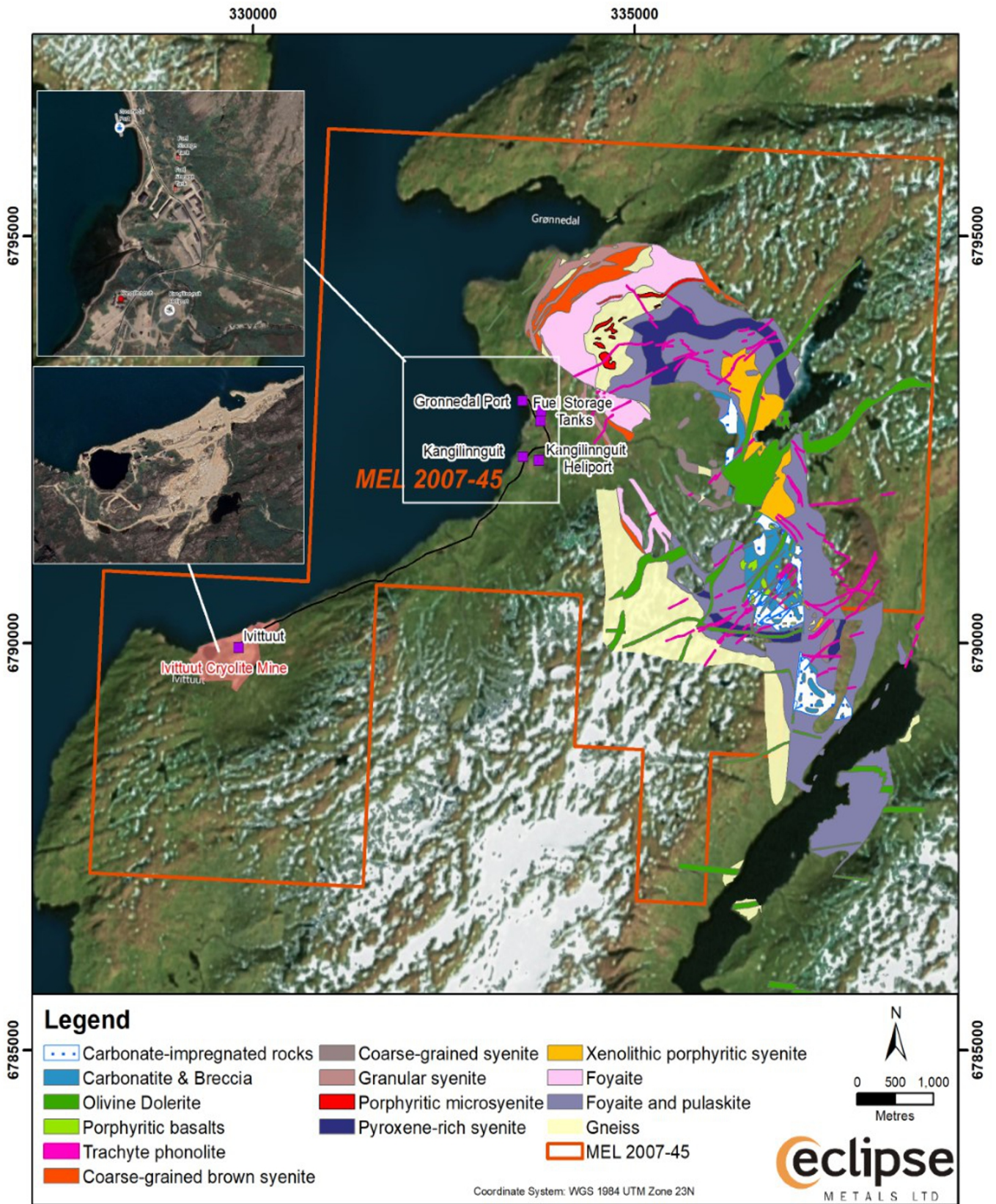
- **Historic diamond drill core samples from Ivittuut and Gronnedal-Ika in Greenland submitted to Perth laboratory for comprehensive chemical analysis**
- **These analyses are a step forward to enhance understanding of Ivittuut's quartz, cryolite and siderite mineralisation and potential for the Gronnedal-Ika carbonatite complex to host REE**
- **Eclipse has obtained samples from historic tailings dumps which are being prepared for despatch to import into Australia**
- **Significant Exploration Targets defined for the quartz mineralised zone which forms a flat roughly circular intrusive body predicted 220m in diameter with a true thickness of about 90m.**
- **Gronnedal-Ika carbonatite deposit historical grab samples returned total rare earth (TREE) grades of up to 34,400 ppm**
- **Strong correlation between REE mineralisation identified within olivine dolerite dykes and magnetic zones at Gronnedal-Ika**

Eclipse Metals Ltd (ASX: **EPM**) (**Eclipse Metals** or the **Company**) is pleased to provide an update on its ongoing examination of historical diamond drill core from the Ivittuut cryolite mine environ and Gronnedal-Ika carbonatite intrusive within its MEL2007/45 exploration licence located in south-western Greenland.

Eclipse has received an initial batch of samples from historical drill-core from the project and has submitted this to Perth-based laboratories for chemical and petrological evaluation. The samples are from both the Gronnedal-Ika carbonatite and Ivittuut cryolite mine precincts.

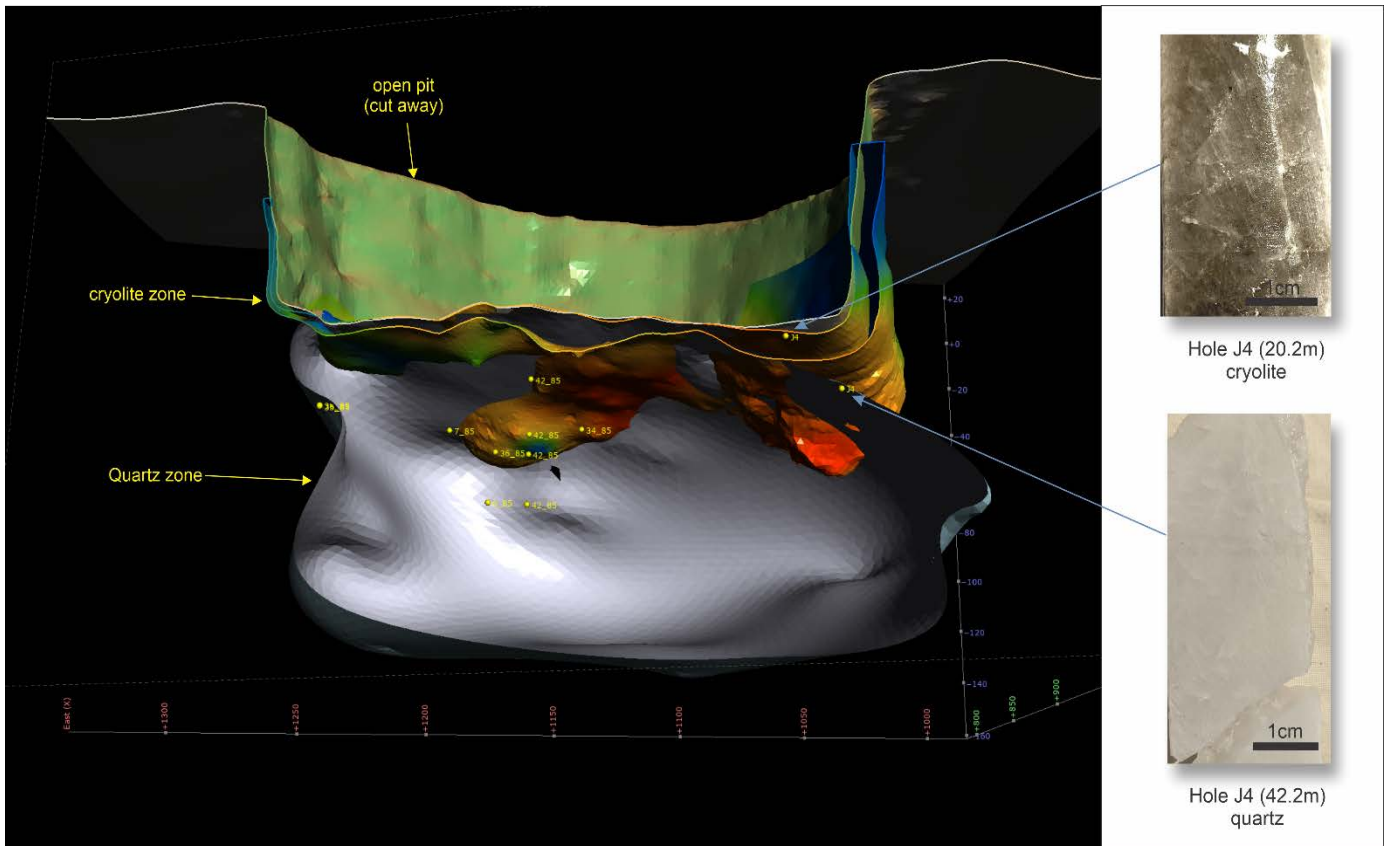
Historical drill core from Ivittuut and Gronnedal-Ika had been stored in a Greenland Government facility in Kangerlussuaq (Sondre Stromfjord) approx. 320km north from the capital Nuuk. The Company collected samples for preliminary testing and plans to cut and assay all the core utilising appropriate QA/QC protocols.

This initial assessment of the core provides a greater understanding of quartz, cryolite and siderite mineralisation within the pit environ and a preliminary understanding of the Gronnedal-Ika carbonatite complex located less than 10km from Ivittuut and only 5km from the port of Gronnedal (Refer to Figure 1). A further surface sampling program has been conducted and additional samples are expected to be despatched in November 2021.

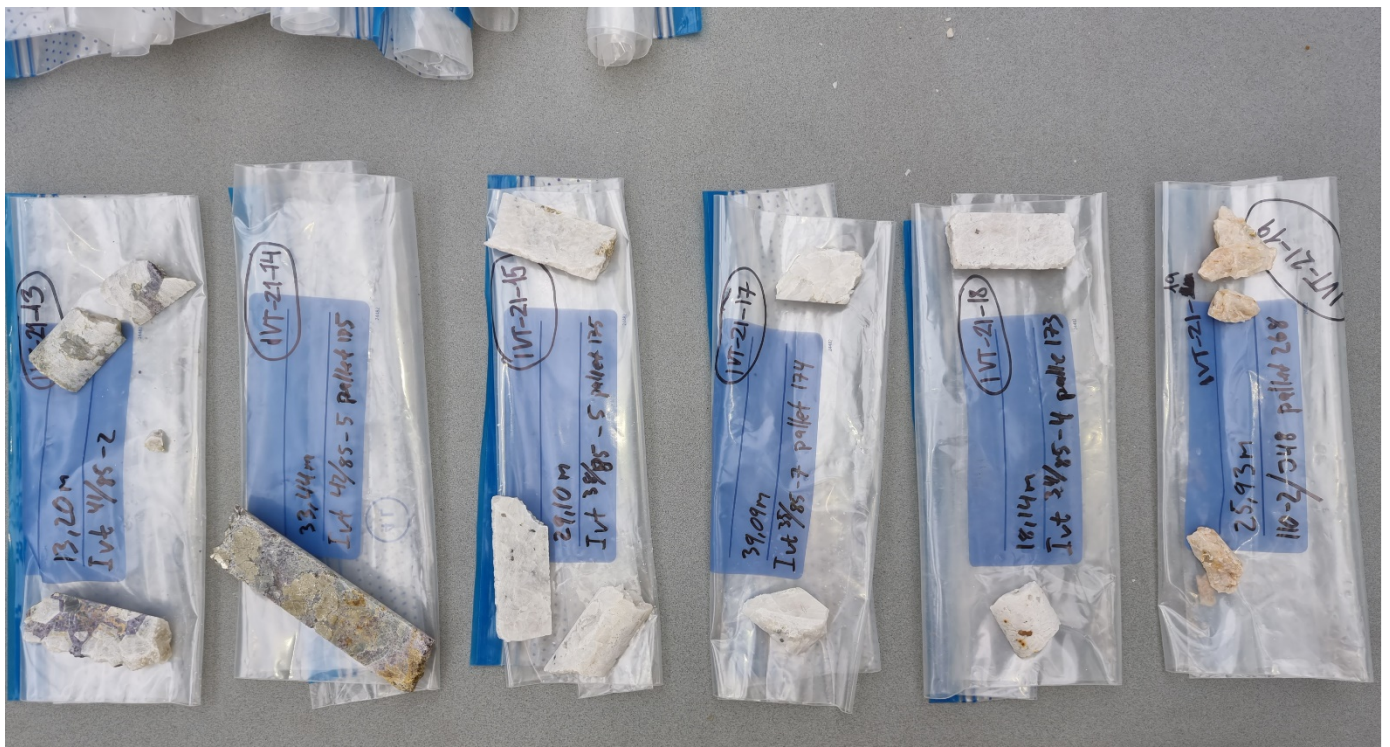


**Figure 1. – Gronnedal-Ika Geology map showing Carbonatite and Intrusive Dykes.**

The Company has plotted the drill core samples received recently in the 3D resource model of the pit environment (refer to Figure 2). As previously announced to ASX on 3 March 2021, the quartz zone forms a flat, roughly circular intrusive body 220m in diameter with a thickness of approximately 90m. The modelled domain represents in-situ mineralisation that could be accessed 5m to 10m below the central cryolite-fluorite zone. Immediately below the open pit, the quartz domain bulges out to the east and west.



**Figure 2. Drill core sample ID's plotted within pit environ received from Greenland**



**Core Samples received from Greenland**

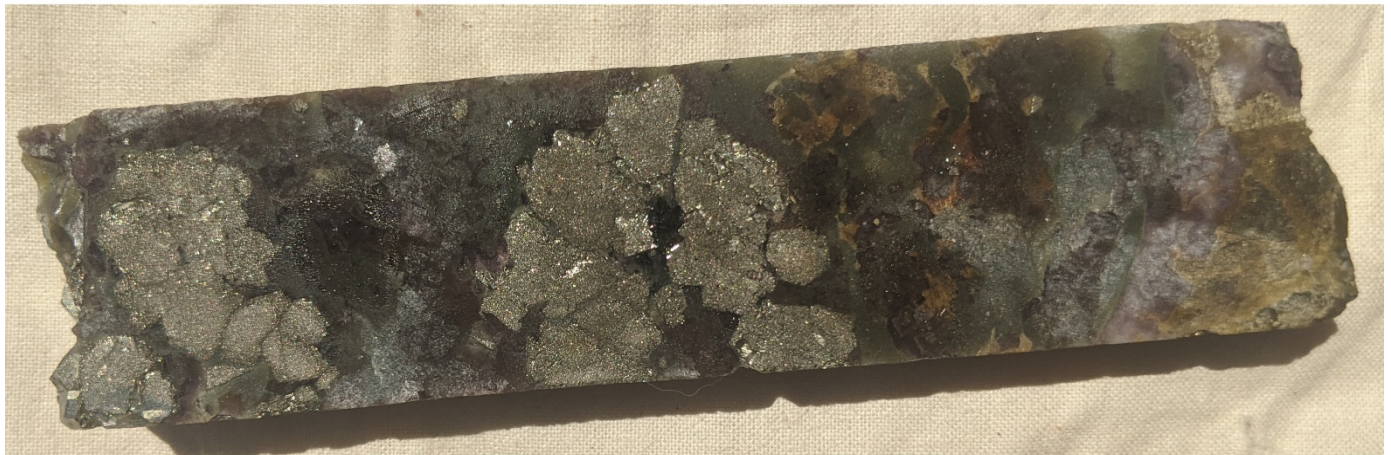
Further comprehensive testing will be conducted in an Australian laboratory. Of particular interest to Eclipse is the carbonatite intrusive where historical exploration has identified anomalous rare earth element content in dolerite dykes intruding the carbonatite.



**Sample IVT-21-6 of Cryolite from 20.15m.**



**Sample IVT-21-5 of Quartz from 42.18m**



**Sample Ivt-21-14 of pyritic fluorite from 33.44m**

Results will be announced in due course, however due to high demand from mineral exploration in Australia, it is unclear when they will be available.

### **ABOUT THE IVITTUUT PROJECT**

Ivittuut is in southwestern Greenland and has a power station and fuel supplies to service this station and some infrastructure to support mineral exploration. About 5.5km northeast of Ivittuut, the twin settlements of Kangilinnuit and Gronnedal provide a heliport and an active wharf with infrastructure. The Gronnedal-ka carbonatite complex is less than 10km from Ivittuut and only 5km from the port of Gronnedal.

The carbonatite complex is contained in one of the 12 larger Gardar alkaline intrusions in Greenland and is recognised as one of the prime REE targets in Greenland by GEUS along with Kvanefjeld and Kringlerne (Tanbreez).

## GRONNEDAL-IKA CARBONATITE COMPLEX

The Gronnedal-Ika carbonatite, nepheline syenite complex and later dolerite dykes are intruded into crystalline Archean basement rocks, about 10km to the northeast from Ivittuut.

The drill holes examined during the first visit were originally sited to obtain samples of nepheline syenite for ceramic manufacture but intersected contact areas of later olivine dolerite dykes carrying magnetite.

REE occurs throughout the carbonatite complex, especially in late-stage veins where it occurs as various strontium REE carbonate minerals. Europium (Eu) has been recorded from the whole intrusion at several times greater values than average for similar rock formations elsewhere in the Gardar Province and many times more than normally found in carbonatite.

Minerals identified within the complex include apatite, monazite, stronianite and synchysite which host LREE, as well as zircon and monazite which host HREE (LREE = light rare-earths. HREE = heavy rare-earths).

Carbonate rock from this complex could also provide a neutralising agent for mine and process water for other operations in the region.

Geophysical analysis of the Gronnedal-Ika carbonatite/dyke geological units has confirmed this complex to be far more extensive than previously known which is further encouragement for potential REE and sulphide mineralisation. A Dighem survey defined seven conductive targets which are recommended for follow up exploration and ground truthing.

## FORWARD STRATEGY

Eclipse's initial evaluation of drill core samples has provided additional significant information on the prospectivity of both the Ivittuut mine environ and the carbonatite occurrence and mafic dykes. Availability of an extensive core library from this project area will save considerable future costs in delineating this REE prospect.

Eclipse's team on-site proposes to dispatch further surface samples from Gronnedal-Ika and from the Ivittuut low-grade and tailing dumps to Australia or other locations for laboratory analysis for REE elements, cryolite and quartz. The Company will announce progressive results from testing in due course.

Given the continued advancement of the Greenland development plan, the Company is continuing to review its asset portfolio to assess ways to best extract value from its projects for shareholders, including a potential repositioning of assets to ensure an appropriate exploration and development focus can be maintained in relation to the Ivittuut Project.

As part of that review, the Company is in early-stage discussions with third parties with respect to potential joint venture partnerships and other opportunities that will further advance our Australian projects and add value for Shareholders. The Company will keep the market updated as these discussions progress.

### Authorised for release by the Board

Carl Popal  
*Executive Chairman*

Rodney Dale  
*Non-Executive Director*



*The information in this report / ASX release that relates to Exploration Results and Exploration Targets includes information provided by Angunguak Thomas Jepsen, consulting geologist, compiled and reviewed by Mr. Rodney Dale, Non-Executive Director of Eclipse Metals Ltd. Mr. Dale holds a Fellowship Diploma in Geology from RMIT, is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM) and has sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Dale consents to the inclusion in this report / ASX release of the matters based on information in the form and context in which it appears. Additionally, Mr Dale confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.*

### **About Eclipse Metals Ltd (ASX: EPM)**

Eclipse Metals Ltd is an Australian exploration company focused on exploring South-western Greenland, Northern Territory and Queensland for multi commodity mineralisation. Eclipse Metals Ltd has an impressive portfolio of assets prospective for cryolite, fluorite, siderite, quartz, REE, 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 Metals Ltd plans to achieve this goal by exploring for and developing viable mineral deposits to generate mining or joint venture incomes.