1 November 2022

ASX Announcement

ECLIPSE PROGRESSES DRILLING AND SAMPLING PROGRAM AT IVIGTÛT

Highlights

- **Eclipse has drilled a total of 538m in 40 holes as part of its Greenland program**
- **31 percussion holes for 427m drilled and 51 pits and trenches excavated on Grønnedal REE project.**
- **9 percussion holes for 111m drilled at the Ivigtût mine, targeting host rocks**
- **5 trenches excavated on the Ivigtût waste dumps, 20m long, on 25m spacing**
- **5 tonnes of trench samples prepared for shipment to Australia for analysis**
- **XRF sampling continues on material from Ivigtût and Grønnedal.**

Eclipse Metals Ltd (**Eclipse** or the **Company**) (ASX: EPM) is pleased to provide an update on the first stage of exploration at its Ivigtût Project, including activities in the Ivigtût mine precinct and Grønnedal carbonatite in southwest Greenland, where its maiden drill program is underway.

Eclipse's Executive Chairman Carl Popal has been supervising activities with assistance from Greenlandic geological consultants, drilling and earthmoving contractors. Using recently produced geophysical and remote sensing models as a guide, the program aims to collect sub-surface samples of the REE bearing carbonatite formation and to obtain samples of the Ivigtût mine wall rocks.

Figure 1: Exploration underway at Eclipse's Ivigtût project in Greenland

Eclipse is also pitting and trenching waste dumps at the historic Ivigtût cryolite mine to assess the variety of mineralisation styles, host lithologies and grades of material mined to better understand their geochemical nature. The dumps will also be prioritised according to their grade and tonnage potential as a future source of saleable product.

GRØNNEDAL CARBONATITE

The Gronnêdal Carbonatite was partially drill-tested in the mid-1900s to evaluate small-scale magnetite seams. More recently, surface samples collected by Eclipse returned significant values for a range of rare earth element (REE) bearing minerals (ASX Release 24 March 2022). No systematic exploration has been conducted in the area until the current program.

Figure 2: Drilling at the Grønnedal carbonatite complex

On the Grønnedal carbonatite complex, Eclipse has completed 31 drill holes over a ~3.0km by ~1.5km area to depths between 3m and 22m. A grid pattern was utilised where surface features permitted, with ground conditions varying from very broken to solid rock. Trenches were excavated in areas where drilling was not practicable.

The aim of Eclipse's drilling program was to re-test known magnetite mineralisation and to obtain fresh samples of carbonatite and a magnetic dolerite dyke at depth to assess content of rare earth elements. Trenching in rubble covered areas has provided samples of in-situ rock formations. Sub-samples from several tonnes of trench samples are being prepared for shipment to Australia.

Also on the Gronnêdal Carbonatite complex, Eclipse's drilling and trenching in an area of 200 metres by 200 metres has confirmed the highly altered magnetic dolerite dyke to be widespread and deep seated. This is based on the drilling and geophysical interpretation that a vertically extensive magnetite-hematite-carbonate alteration system containing REE is now confirmed in rock chip descriptions and visually in trenches and drill holes. Results from previous surface samples from the dykes confirmed enriched REE with up to 4.66% total rare earth oxides (refer ASX announcement 19 May 2022).

Figure 3: L5-9 Trench and drill hole image at Grønnedal showing altered magnetite with pink mineral, possible bastnasite. Similar to samples sent to St Andrews University.

In August 2022, Eclipse sent samples of the dyke containing pink-coloured minerals to St Andrews University in the UK for assessment. XRD examination of the sample indicated the pink mineral as possibly being bastnasite enriched in REE carbonates.

Figure 4: Image of sample sent to St Andrews university for assessment

Figure 5: Trench samples showing altered dolerite dyke with pink mineral and highly altered carbonatite with magnetite (similar to samples sent to St Andrews University).

IVIGTÛT MINE PRECINCT

Historical production from the Ivigtût mine is recorded as 3.8Mt of high-grade cryolite for use as a flux in alumina smelting (Bondam, J. 1991). An exploration target of between 870,000t and 916,200t of cryolite mineralisation grading between 16.0% and 17.7% Cy has been estimated as remaining within the old workings, based on historical drilling results (ASX 10 March 2021).

Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration work conducted to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared based on actual exploration results described in an earlier report including historical drilling data and geological modelling. The exploration target is based on historical drill results.

Eclipse has also identified the unique mineral cryolithionite which has only been recognised at Ivigtût, providing encouragement for further exploration of the project's potential for lithium mineralisation.

Visual estimates indicate there is substantial tonnage potential for mine waste-rock on surface containing visible cryolite, fluorite and quartz. Presence of the zinc mineral sphalerite and lead mineral galena was also noted in these dumps, which will also be assessed for content of other potentially economic minerals, including REE, lithium and tin.

Eclipse has collected and prepared ~5 tonnes of bulk samples from five trenches in the dumps for shipment to Australia. The presence of REE in host rocks of the cryolite and fluorite deposit has previously been recorded.

Nine holes were drilled in proximity to the mine during the latest program to obtain fresh samples for assessment of the geological setting and potential REE content of these formations.

Figure 6: Collecting trench samples at Ivigtût

Figure 7: Typical mine waste dump at Ivigtût

Eclipse looks forward to updating the market with the results of this exploration program.

Authorised for release by the Board

Carl Popal
Executive Chairman

Oliver Kreuzer
Non-Executive Director

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.

Competent Persons Statement

The information in this report / ASX release that relates to Exploration Results and Exploration Targets is based on information 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.