17th August 2023 ASX Announcement

ECLIPSE RETURNS HIGHLY ENCOURAGING BULK SAMPLE RESULTS FROM IVIGTÛT, GREENLAND

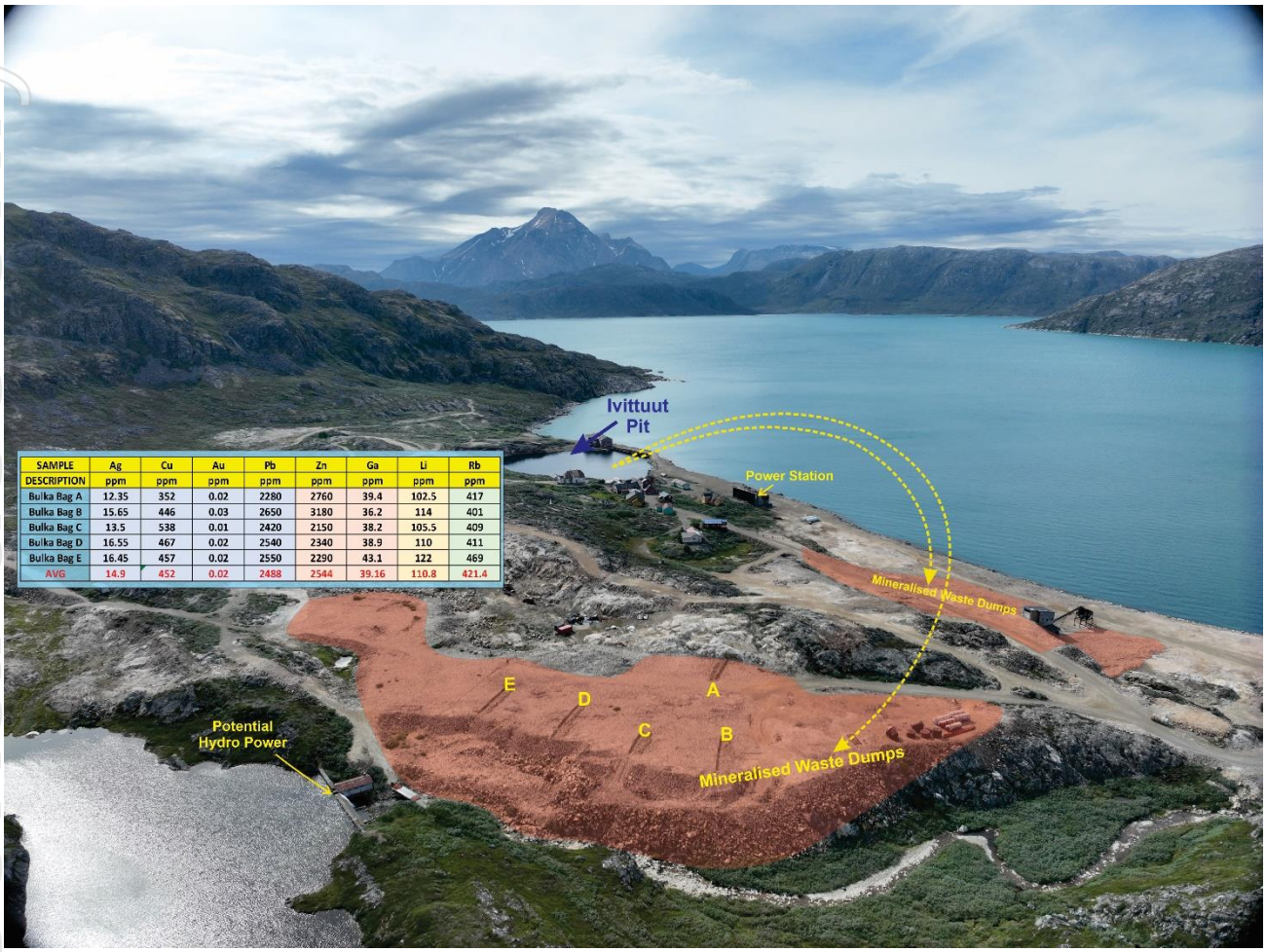
- **Potentially valuable polymetallic mineralisation identified in waste rock from the historic Ivigtût cryolite mine.**
- **The large volume of mineralised waste material could be processed to create concentrates containing silver, zinc, gallium, copper, lead and gold.**
- **Eclipse is conducting metallurgical test-work to identify processes to produce a saleable concentrate.**
- **Eclipse is considering a Ground Penetrating Radar (GPR) survey to determine the overall volume of mineralised waste material at Ivigtût.**
- **The project boasts the potential for an early restart, with the advantage of requiring a low initial capital investment.**

Eclipse Metals Ltd (**Eclipse** or the **Company**) (ASX: EPM) is pleased to announce assay results for bulk samples of mineralised waste material from the Ivigtût cryolite mine within its 100% owned multi-commodity project in SW Greenland.

Executive Chairman Carl Popal commented:

"We're excited by the potential of the Ivigtût cryolite mine's mineralised waste dump. Our recent findings point to valuable polymetallic material that can be quickly leveraged. Our ongoing efforts include rigorous metallurgical test-work aimed at identifying the most effective processes to produce market-ready concentrates. The convenience of readily processable minerals, along with the advantage of existing infrastructure, positions us for an early restart, underpinned by a low initial capital investment."

Metallurgical test-work has been initiated to evaluate potential for producing a saleable mineral concentrate on site. This concentrate could be readily shipped with minimal additional infrastructure to provide an early cashflow. The mineralised waste was produced during the extraction of 3.8 million tonnes of high grade cryolite from the 60m deep Ivigtût open pit mine over a period of 120 years (Reference: Greenland Mineral Occurrence Map & Occurrence data sheet). Materials other than cryolite were not of interest to the historic mine operator and were discarded on extensive mine dumps (Figure 1).



SAMPLE	Ag	Cu	Au	Pb	Zn	Ga	Li	Rb
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Bulka Bag A	12.35	352	0.02	2280	2760	39.4	102.5	417
Bulka Bag B	15.65	446	0.03	2650	3180	36.2	114	401
Bulka Bag C	13.5	538	0.01	2420	2150	38.2	105.5	409
Bulka Bag D	16.55	467	0.02	2540	2340	38.9	110	411
Bulka Bag E	16.45	457	0.02	2550	2290	43.1	122	469
AVG	14.9	452	0.02	2488	2544	39.16	110.8	421.4

Figure 1. Mineralised waste dumps and trenches

Five bulk samples collected by trenching of the mineralised waste dumps (refer to ASX Release dated 1 November 2022), were mixed and a sub-sampled crushed and ground for analysis by the ME-MS61 method, returned the following summary results.

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
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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

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

Specimens from the waste dumps were observed to contain visible sulphide minerals, including galena (Pb sulphide), chalcopyrite (Cu sulphide), sphalerite (Zn sulphide) and pyrite (Fe oxide), as well as fluorite and the iron carbonate mineral siderite.

Gallium (Ga) is usually associated with zinc, silver (Ag) with lead (Pb) and gold (Au) with all sulphide minerals. The lithium (Li) content can likely be attributed to micas and the mineral cryolithionite, which has been identified at Ivigtût (refer to ASX Release dated 23 March 2022). The source of rubidium (Rb) is yet to be identified but is likely to be hosted by mica or feldspar.

Eclipse is considering a Ground Penetrating Radar (GPR) survey for the Ivigtût precinct to assess the potential volume of mineralised waste material. By calculating the size of the open pit and access tunnels and subtracting the cryolite that has been exported, it can be estimated that in the order of three (3) million tonnes of ROM waste was deposited in the dumps as well as for landfill purposes during a century of mining. There has been no comprehensive commercial assessment for other critical metals.

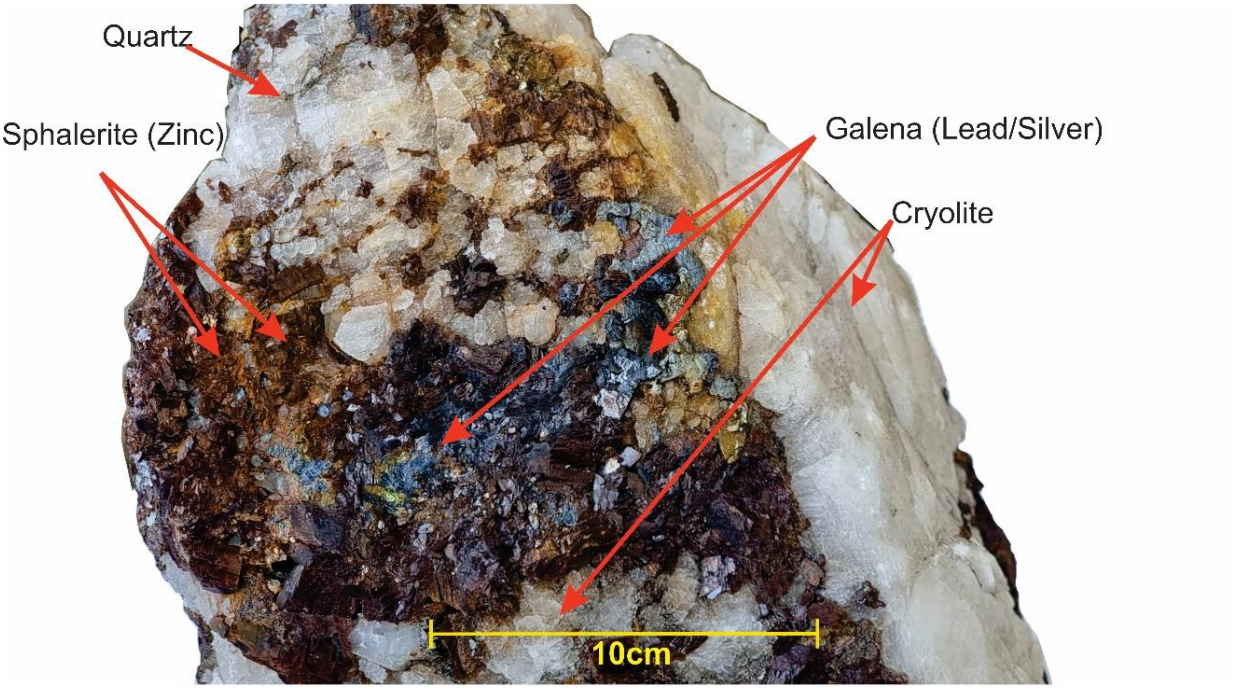

Figure 3. Mineralised waste dump specimen visually estimated to consist of 60% cryolite and quartz; 20% Sphalerite; 10% Galena; 5% Chalcopyrite and 5% Siderite.

Figure 4. Mineralised waste dump specimen visually estimated to consist of 70% Galena; 10% Chalcopyrite; 10% Sphalerite and 10% Quartz

Figure 5. Mineralised waste dump specimen visually estimated to consist of 90% siderite and 10% cyrolite.

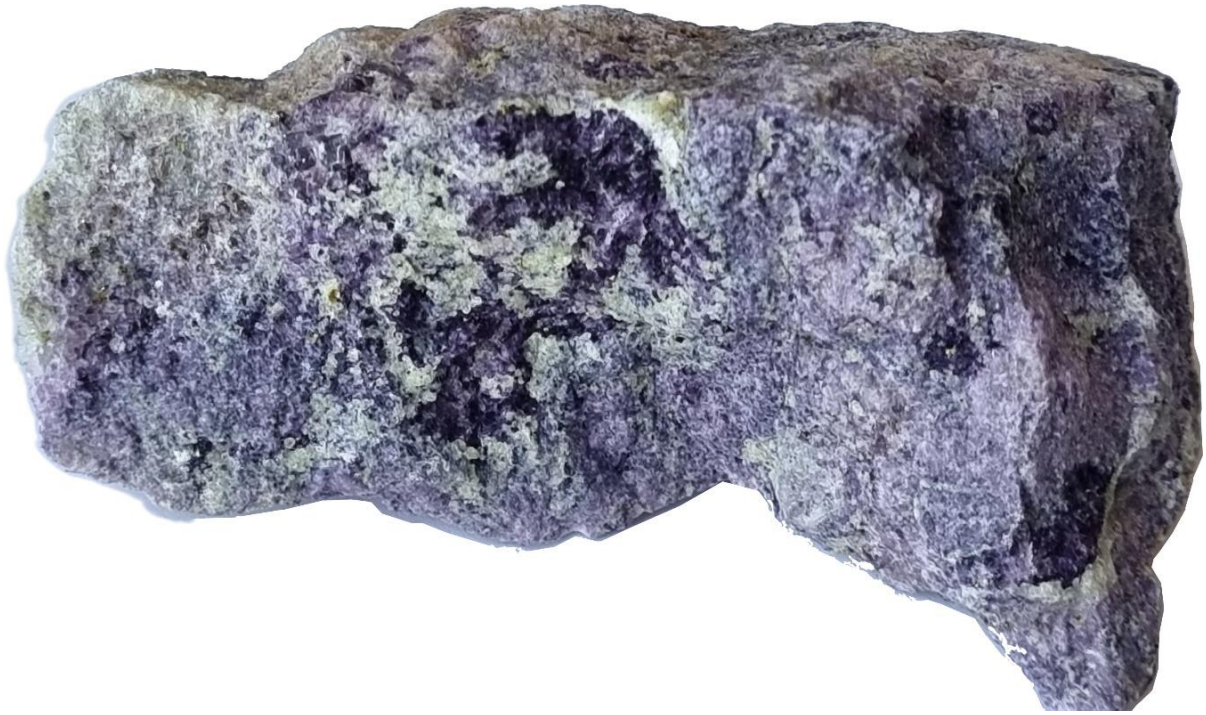

Figure 6: Mineralised waste dump specimen visually estimate to consist of 70% Purple Fluorite; 25% Green Fluorite; and 5% Cryolite.

Discussion

During 2022 grab sample G21011 from the Ivigtût prospect returned 430ppm Li_2O. Identification of the unique mineral Cryolithionite, which has only been recognised at Ivigtût, is encouraging for further exploration of the lithium potential of the project. Cryolithionite (Li3Na3Al2F12) is a globally rare lithium-bearing fluoride mineral first described from Ivigtût (refer to ASX Release dated 23 March 2022).

Cryolithionite at Ivigtût is known to occur as crystals up to 19cm-long in massive cryolite and siderite/cryolite, cryolite veins, and fluorite/cryolite breccia. Anomalous lithium concentrations at Ivigtût are known to be associated with cryolithionite, jarlite, muscovite, biotite and zinnwaldite.

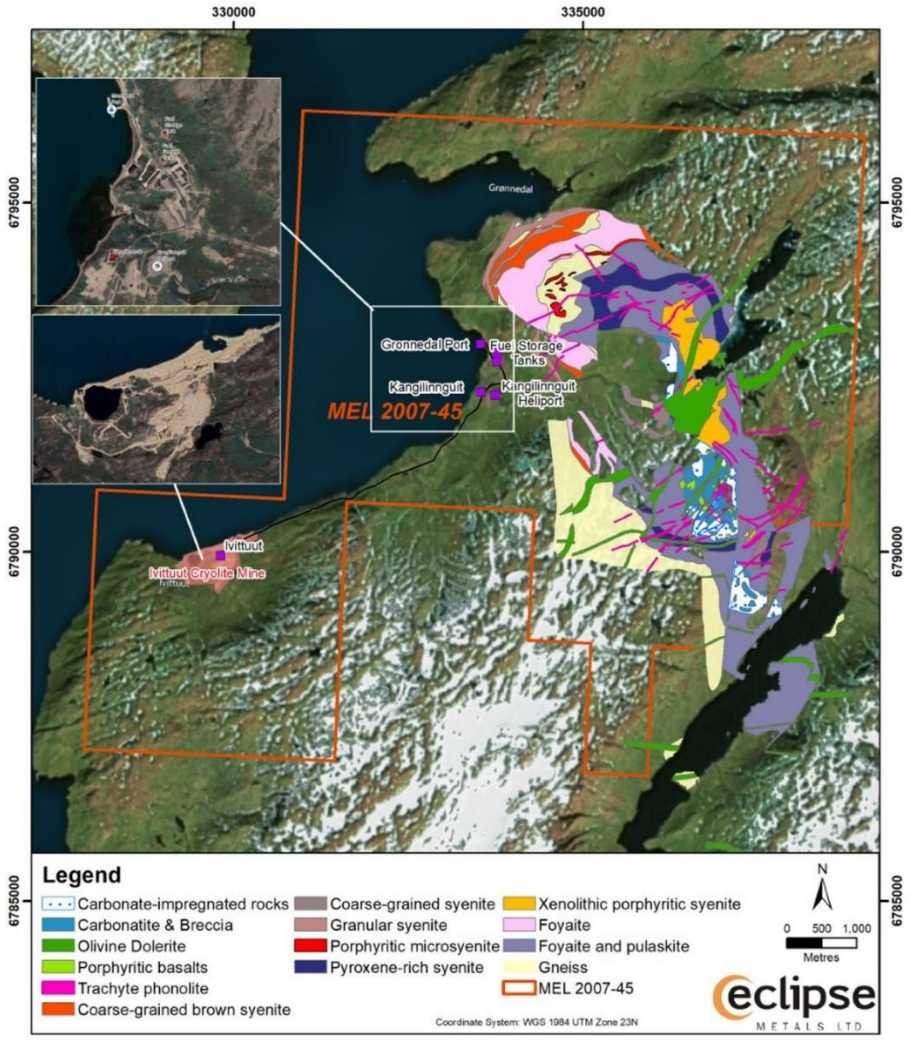

Figure 7. MEL 2007-45 Location Map, showing the geology of Grønnedal with nepheline syenite with carbonatite plug.

Authorised for release by the Board of Eclipse Metals Ltd.

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Executive Chairman

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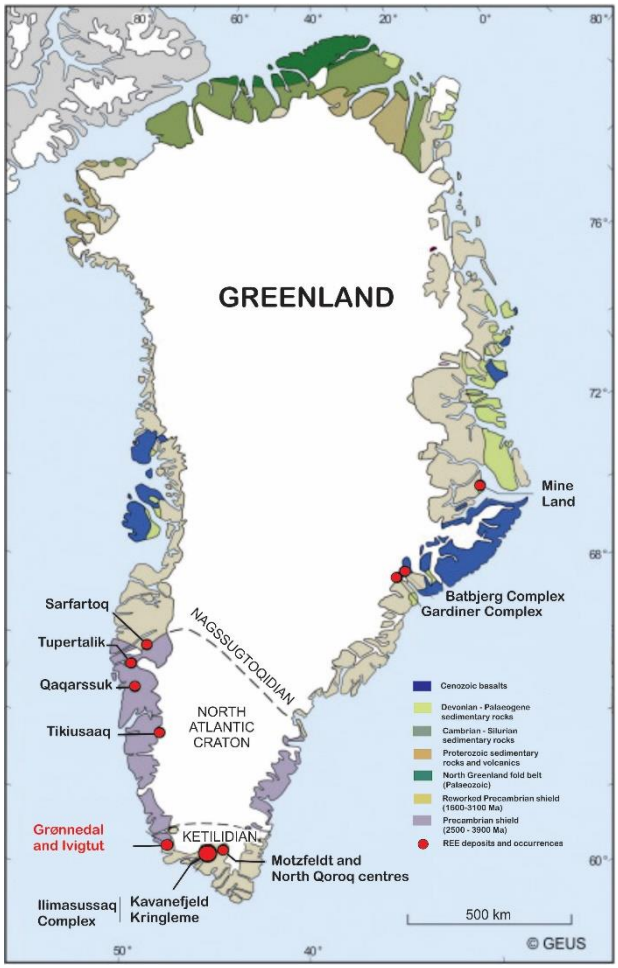

Figure 8. Greenland REE Deposits and location of Grønnedal and Ivigtût

About Eclipse Metals Ltd (ASX: EPM)

Eclipse Metals Ltd is an Australian exploration company focused on mineral exploration in 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.

Estimates by experienced, competent geoscientists are considered to be reliable and reproducible semi-quantitative estimates of the abundance of minerals present in a sample. Visual estimates of sulphide mineral abundance should, however, never be considered a proxy or substitute for laboratory analyses where metal concentrations or grades are the factor of principal economic interest. Visual estimates also provide no information regarding potential impurities.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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 sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	• Ivigtut mineralised waste dump samples are from 5 trenches. • Several tonnes of sample collected with digger and loaded into 5 bulka bags for shipping to Australia. • Samples are indicative of mineral content only, not used for resource calculation. • Initial field tests by hand-held XRF assumed to be indicative only. Instrument not calibrated. • Chemical analyses to assess levels of elements contained, not for ore-grade estimates.
Drilling techniques	• *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*	• No drilling.

Criteria	JORC Code explanation	Commentary
	tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Not applicable.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Samples geologically logged before submission for analysis for identification only. Not quantitative.
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*	• Samples for geological determination and identification only. Not quantitative. • Bulked samples riffle split in secure storage facility. • Split sub-samples crushed and ground to prepare sample for laboratory analysis. • Duplicates collected for back-up.

Criteria	JORC Code explanation	Commentary
	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.*	
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.*	• Standard laboratory procedures for sample preparation, elemental determination, QA / QC. • Standard laboratory procedures with blanks and duplicates. No external laboratory checks warranted at this stage.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No drilling, only bulk sample collection for geological and chemical determinations.
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.*	• Handheld GPS locations: - Ivigtut – within 200m of 652300mE: 6788970mN (map zone 22V). • No grid. Handheld GPS only and correlation with hard-copy maps.

Criteria	JORC Code explanation	Commentary
	• *Quality and adequacy of topographic control.*	• UTM
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.*	• Each trench location recorded by hand-held GPS. • No assumption of continuity or resource estimation. • Samples Crushed, riffle- split and bagged.
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.*	• Shallow exploration trenches not oriented.
Sample security	• *The measures taken to ensure sample security.*	• Samples secured on-site, transported to private, lock-up building, processed, transported in locked shipping container and shipped to Perth, Australia under normal security procedures.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits have been completed yet.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures,*	• MEL 2007 / 45 granted to Eclipse Metals in February 2021 for a period of 3 years with extensions subject to activities and expenditure.

Criteria	JORC Code explanation	Commentary
land tenure status	*partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Granted by Government of Greenland.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	**GEUS Report File No. 20236** Planning of the Ivigtût Open Pit of Kryolitselskabet Oresund A/S - Mining of the Flouritic Orebody"; Outokompu OY Mining Consultants, 1987. This report provided 18 cross sections showing drill traces with cryolite (kry), fluorite (fs) and siderite (sid) values together with pit profiles, resource blocks and tabulated tonnage estimates on each section with an SG of 2.95. **GEUS Report File No. 20238** "The Planning of the Ivigtût Open Pit of Kryolitselskabet Oresund A/S – Report of the First Phase, Investigation of the Quantity and Quality of Extractable Ore from the Ivigtût Open Pit"; Outokompu OY Mining Consultants, 1986. This report contained 23 sections showing drillhole traces and contoured cryolite/fluorite grades with an overlay of resource blocks. These sections were used to check positions of drillholes relative to those shown in the above report (GEUS 20236). Resource tonnages are provided. **GEUS Report File No. 20335** Kryolitselskabet Oresund A/S, De Resterende Mineralreserver I Kryolitforekomsten Ved Ivigtût,

Criteria	JORC Code explanation	Commentary
		Ultimo 1987" This report is the most useful of the reports. It provides: - Drillhole location plan - Complete cross section locations - Pit survey points - Plans of underground and in-pit ramp - 38 cross section showing drillhole traces, geological interpretation and ore blocks - Tabulated ore blocks with cryolite, fluorite and siderite grades and tonnages (back-calculated blanket SG of 3) **GEUS Report File No. 21549** "Ivigtût Mineopmaaling, 1962" This report is a survey record of the open pit and includes 28 sections, each of which show the pit profile together with drillhole traces and, on some sections, underground workings. **GEUS Report File No. 20241** Kryolitselskabet Oresund A/S, Lodighedsdistribution I, Ivigtût Kryolitbrud, 31.12.1985" (Danish) 108 pages of drillhole analytical data in %: hole ID, from to, cryolite, fluorspar, Fe, Cu, Zn, Pb, S
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Late stage granitic / syenitic / carbonatite intrusions into crystalline basement.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole*	• Results not related to drilling.

Criteria	JORC Code explanation	Commentary
	○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *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.* • *Where aggregate 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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable.
Relationship between mineralisation widths and intercept lengths	• *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').*	• Not applicable.

Criteria	JORC Code explanation	Commentary
Diagrams	• *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 plan view of drill hole collar locations and appropriate sectional views.*	• An appropriate image of the sampled area is provided in the body of the text.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Sample source and location in body of report.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; 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.*	• Exploration by Eclipse Metals of the Ivigtût prospect is at an early stage with field work to date consisting of reconnaissance sampling, trenching and a maiden drilling program. The Company expects to be able to report substantive exploration data once it has completed it's 2023 field season at the prospects.
Further work	• *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.*	• Geological mapping; remote sensing; trenching and drilling. • Detailed geological assessments planned for 2023 field season. • Diamond drilling.