

02 February 2021

ASX Announcement

HISTORICAL EXPLORATION DATA OBTAINED FOR THE IVITTUUT PROJECT

Highlights

- Eclipse Metals Ltd recently acquired 100% ownership of the historical lyittuut cryolite, rare earth minerals (REE), high grade quartz and base metal mine located in southwestern Greenland.
- Definitive historical exploration data and analytical results demonstrate widespread mineralisation within the historical lyittuut mine environments.
- Gronnedal-lka Carbonatite Prospect supports REE enriched system together with a source of carbonate rock.
- Both lyittuut and Gronnedal-lka have been extensively faulted and fractured providing conduits for the volatile-rich REE mineralising fluids.
- The Gronnedal-lka area has REE mineral content, particularly europium Eu.

Eclipse Metals Ltd (ASX: **EPM**) (**Eclipse Metals** or the **Company**) is pleased to announce it is now in possession of definitive historical exploration data and analytical results which demonstrate widespread mineralisation within the historical lvittuut mine environments. The recently acquired lvittuut project tenement contains the world's largest (and only) historical cryolite mine.

ABOUT THE IVITTUUT PROJECT

Ivittuut is located near Cape Desolation in southwestern Greenland. The town has a power station and fuel supplies to service this station and local traffic and to support mineral exploration. About 5.5 km to the northeast of Ivittuut, the twin settlements of Kangilinnguit and Gronnedal, respectively provide a heliport and an active wharf with infrastructure. (Figures 1 and 3).

DRILLING AND CHEMICAL DATA

Original data derived from chemical analysis of 665 samples representing 1,943m of drill core are currently being assessed and qualified for JORC compliant reporting.

Analysis of core from holes drilled from the base of the pit by the mine operator, Kryolitselskabet Oresund, indicated the presence of cryolite, high grade quartz, fluorite (fluorite hosts significant rare-earth mineral content), siderite (iron carbonate) and sphalerite (zinc sulphide) within and below the historical open-pit.

Chemical analyses for cryolite, fluorite and total iron were carried out at Kryolitselskabet Øresund's own laboratory at lvittuut. The chemical analyses for Cu, Zn, Pb and S on 161 samples, representing a drill core length of 474m, was carried out at the laboratory of Outokumpu Oy in Finland. (Drill core Figure 4).



Figure 1: Image of Ivittuut cryolite mine in 1907, showing the historical ship loading facilities.

SURVEYING

In 1985, the mine operator, Kryolitselskabet Oresund, carried out a survey of the base of the open-pit and drill collar locations to prepare an updated, accurate model of the pit and to define spatial location for mineralised bodies below the pit floor. This survey data is now being digitised to enable assessment of mineral resources for planning future exploration and mining activities.

REGIONAL GEOLOGY IVITTUUT

Ivittuut consists of an alkali-granite stock with a microgranite roof capping of the cryolite orebody, whilst the Gronnedal-lka complex comprises nepheline syenite with a carbonatite plug.

lvittuut is one of the younger intrusions and approximately 300m in diameter. The granite itself exhibits alteration by albitization, metasomatism and greisenisation.

Note: - for a more detailed description of the Ivittuut Project background and geology, please refer to Bondham, J. 1991: The Ivigtut cryolite deposit in South Greenland. Short note on recent geoscientific developments. GEUS Open File Series Report No.21339 & Outokumpu Oy Mining Consultants, 1987, "The Planning of the Ivigtut Open Pit of Kryolitselskabet Oresund A/S Mining of the Fluorite Orebody GEUS Open File Series Report No.20236.

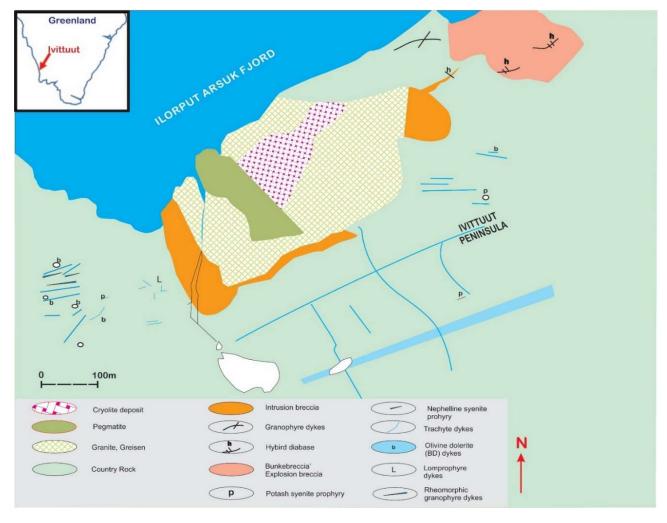


Figure 2: Geological Map of the Ivittuut Area (Greenland Government Minerals Occurrences Map, Stendal & Henrik, page 4)

GEOLOGY GRONNEDAL-IKA

The Gronnedal-lka carbonatite is the oldest of the complexes in the region being faulted and cut by dolerite dykes. This complex belongs to the Gardar intrusive suite emplaced into the regional Archaean gneiss.

It comprises four, steeply dipping ring structures of nepheline syenite with late-stage central plugs of xenolitic syenite and carbonatite over an area of approximately two square kilometers. The carbonatite was formed by fractional crystallisation of the source magma (Secher, Karsten Greenland Mineral Occurrence Map – Occurrence data sheet, page 1, Figure 5)

Both Ivittuut and Gronnedal-lka have been extensively faulted and fractured providing conduits for volatile-rich mineralising fluids.



Figure 3: Satellite Map of Ivittuut deposit and Gronnedal, 5km west from the Carbonatite complex)



Figure 4: Quartz intersection in diamond drill core

GEOPHYSICAL DATA

Recently acquired historical geophysical data is presently being assessed by a Perth based geophysicist and will be reported soon.

Results from this geophysical study will be coordinated with drill and chemical data to prepare definitive plans and cross sections to assist with resource determinations and planning future exploration for updated resource definition.

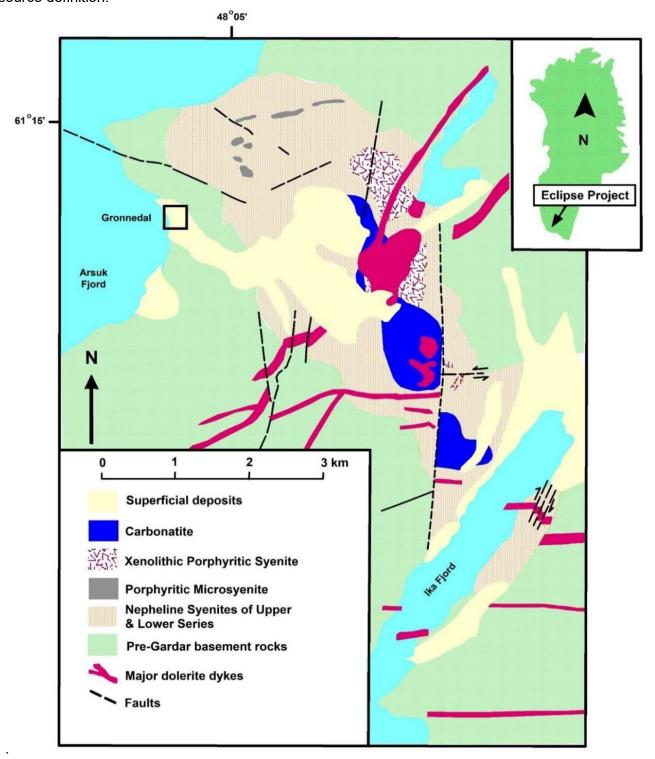


Figure 5: Generalised Geological Map of the Gronnedal-Ika Carbonatite area (Halama, Vennemann, Siebel, Marel, 2005 Journal of Petrology, page 3)

FIELDWORK

Fieldwork is being planned utilising qualified Greenlandic personnel to conduct coordinated sampling exercises on the low-grade dumps and tailings from cryolite mining and treatment and the Gronnedal-lka carbonatite deposit to confirm historically recorded results.

A recently acquired report on rare earth minerals in Greenland is being assessed as a guide for exploration, with the Company's technical team scheduling an exploration program for late 2021.

FORWARD STRATEGY

Eclipse will undertake a detailed re-logging of the 19,000m of drill core stored in Greenland. Much of the diamond drill core in storage represents vertical drill holes from the bottom of the pit plus downward inclined and horizontal drilling in the foot of the walls. Further recent data will be sought whilst the Company is working on the extensive geological and GIS database over the Project area and surrounding known mineralisation.

Eclipse will also assess the potential for rare earth elements outside the immediate lvittuut mine area and over the Gronnedal-lka carbonatite / rare earth prospect area.

CONCLUSION

The Company is working through a wealth of recently acquired data to commence work on this world class unique opportunity with a vision of developing producing mines on the project tenement.

Authorised for release by the Board.

Carl Popal Executive Chairman Pedro Kastellorizos Non-Executive Director







Competent Persons Statement

The information in this report that relates to Exploration Results and non-JORC historical estimates together with any related assessments and interpretations is based on information compiled by Mr. Petro Kastellorizos and Mr Rod Dale, both Non-Executive directors of Eclipse Metals Limited, and Mr. Alfred Gillman, Director of independent consulting firm, Odessa Resource Pty Ltd. Mr. Gillman, a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy (the AusIMM), Mr Kastellorizos, a Member of the AusIMM, and Mr Dale, a Fellow of the AusIMM, have 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.

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 (high purity silica), 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.

ANNEXURE A - REFERENCE

The below document is classified as an open file report which can be downloaded from the internet

The following reference has been cited in this report: -

Bondham, J. 1991: The Ivigtut cryolite deposit in South Greenland. Short note on recent geoscientific developments. GEUS Open File Series Report No.21339, Grønlands Geologiske Undersøgelse 91/4, 29 pp.



Annexure D

JORC Code, 2012 Edition - Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	section apply to all succeeding sections) JORC Code explanation	Commentary
Criteria	JONE Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg 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. 	 Historical exploration and drilling were conducted in various stages by various different companies. The exploration data undertaken by several exploration/mining and academic studies – most of the exploration conducted was from the 1980's until mid-2014.
	 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 	 A total of 19,000 metres has been drilled with 98% of core still available in Greenland and other 2 diamond holes in Denmark. All historical drill holes are core drilling.
	 the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge 	There is no information regarding the metres assayed and weight of samples. None of this information has been provided within the reports and academic papers.
	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 (eg submarine nodules) may warrant disclosure of detailed information.	 All information regarding the project has been downloaded from the Geological Survey of Greenland and Denmark (GEUS). Open file reports and academic papers have been downloaded from University websites and from the internet.
		Some drill samples were analysis for Cy, Fl, Fe, Sio2, Zn, Eu, Ca and minor REE. Assays results are given in % or ppm as appropriate. It's assumed that all reported assays are potentially representative of the various assay method during this period.

Criteria	JORC Code explanation	Commentary
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	All information sourced from the literature have stated diamond drilling was completed for a total 19,000 drilled metres. No details of the drilling methods have been identified in the historic data. From the information reviewed there was no information regarding core orientated or down hole surveys taken during drilling programs
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. 	 No information has been provided if the drilled metres were weighted with no sample recovery numbers given within the reports. Absence of core recovery/sample data – yet to be determined Relationship between sample recovery and grade is unknown – no information has been stated within the historical reports.
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. 	 All diamond holes were geologically logged – no geological logs provided in the historical reports as yet. Eclipse is currently working to source these information – unknown timeframe by which the information will be sourced. No information has been provided regarding if logging is qualitative or quantitative in nature. No available photos have been located. No information regarding total length/percentages of relevant intersections logged.
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. 	 Historical approach was to sample where cryolite was over 20% within the core - some core has been sawn in half and some quartered. No details have been provided of the sub-sampling or sample preparation methods. Based on the absence of data, cannot comment on the appropriateness of the sample preparation techniques historically undertaken. No evidence of control/procedures adopted for sub-sampling stages.

Criteria	JORC Code explanation	Commentary
	 Measures taken to ensure that the sampling is 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. 	Specific Gravity measures were also taken over certain core intervals. Unknown sample weight was measured for specific gravity. No duplicate samples have been stated within historical reporting or whether the sample are appropriate to the grain size of the material 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels 	 The nature and quality of the assaying labs is unknown – no specific mention of the analysis is mentioned within the reports. No information has been supplied regarding duplicates and laboratory checks. No information provided regarding quality control procedures adopted by the various exploration companies.
Verification of sampling and assaying	 of accuracy (ie lack of bias) and precision have been established. 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. 	 Based on historical results reported, verification of significant intersections by independent/company personnel cannot be assumed. There is no historic data that can verify significant intersections. No data has defined any twinned holes in the project area. No documentation or records of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols have been identified Cannot comment of adjustment to assay data based on lack of historical information.
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. Quality and adequacy of topographic control. 	 Method of recording collar coordinates by historical exploration/mining companies has not been identified as yet. The collars were collared on a local grid system with the accuracy of reported drill holes not been determined. No quality or adequacy topographic control has been assessed.

Criteria	JORC Code explanation	Commentary
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. 	 The majority of drill holes are located on a local grid system with some scout diamond drill holes east of the historic mined pit. The data spacings and distribution at this stage has not been made in the estimation of a Mineral Resource or Ore Reserve, as the quality of the drill hole data precludes its use for these estimations. Not known if sample compositing has been applied.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling a possible structures and the extent to which this is known, consider 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 in material. 	 information; some at steep declines. No information is known if the core sampling in the historic campaigns has introduced any significant bias
Sample security	The measures taken to ensure sample security.	No information relating to the sample security have been identified.
Audits or reviews	The results of any audits or reviews of sampling techniques and do	ta. • Not applicable as no audits were conducted

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 land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, 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. 	 MEL27007-45 will, subject to such regulatory approvals in Greenland (if any) as are necessary to transfer the Tenement, be transferred to Eclipse Metals Limited. The total area of the MEL is 50 sq km. No current security over the tenure

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	In 2011, the undiscovered REE deposits endowment of Greenland was examined by a resource assessment workshop hosted by the Geological Survey of Denmark and Greenland ("GEUS") and the Greenlandic Bureau of Minerals and Petroleum (now Ministry of Mineral Resources). The aim was to assess the potential for REE deposits in Greenland in the uppermost kilometre of the crust (GEUS MiMa Report 2015/2, pages 15). It was concluded that the Ivittuut Project Tenement Area (MEL2007-45) has the potential to host 3 of Greenland's rare earth deposits., they include:
		 Ivittuut cryolite mine - contains fluorite which host heavy rare earths mineralisation (GEUS classification known as tract A17), Exploration ground around Ivittuut which contains potentially mineralised dykes (GEUS classification known as tract 8.1) and Gronnedal-lka carbonatite geological unit known as (GEUS classification tract C8)
Geology	Deposit type, geological setting and style of mineralisation.	Granitic Intrusive Deposits, Vein hosted
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 	Refer to Figure 6 – No information can be provided regarding the drill collar position, azimuth and intersection of mineralisation.
	 elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	 Details of the geographical location, elevation and specification of drill holes in the 1980's drilling program shown in Figure 6 are not found in available literature.
	• 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	

Criteria	JORC Code explanation	Commentary
	explain why this is the case.	
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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. 	 No records relating to the use of weighted averaging techniques, maximum and / or minimum grade truncations has been identified. No metal equivalent grades have been sourced from historic reports.
Relationship between mineralisatio n 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 (eg 'down hole length, true width not known'). 	 Due to the mineralization style which is almost massive in its nature, the absence of historical data of the orientated core, true widths cannot be reports from the historical drilling. Interval widths are not reported or unknown from historical reports
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.	The information in this announcement release does not refer to a significant discovery however maps and figures have been included to illustrate the location of the results historic reported.
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.	No historical reporting can provide this information.
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.	• In 2011, the undiscovered REE deposits endowment of Greenland was examined by a resource assessment workshop hosted by the Geological Survey of Denmark and Greenland ("GEUS") and the Greenlandic Bureau of Minerals and Petroleum (now Ministry of Mineral Resources). The aim was to assess the potential for REE deposits in Greenland in the uppermost kilometre of the crust (GEUS)

Criteria	JORC Code explanation	Commentary
		 MiMa Report 2015/2, pages 15). It was concluded that the Ivittuut Project Tenement Area (MEL2007-45) has the potential to host 3 of Greenland's rare earth deposits., they include: 1. Ivittuut cryolite mine - contains fluorite which host heavy rare earths mineralisation (GEUS classification known as tract A17), 2. Exploration ground around Ivittuut which contains potentially mineralised dykes (GEUS classification known as tract 8.1) and 3. Gronnedal-Ika carbonatite geological unit known as (GEUS classification tract C8)
Further work	 The nature and scale of planned further work (eg 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. 	 Upon completion of Tenement transfer to Eclipse Metals Ltd, exploration work will commence with accumulation of all available historical exploration, mining and academic studies as a basis for planning future activities.