

3 June 2025

ASX Announcement

## ECLIPSE METALS UNVEILS TRANSFORMATIONAL 89MT RARE EARTHS RESOURCE INCREASE AT GRØNNEDAL

**Eclipse Metals Limited** (ASX: **EPM**) (Eclipse or the Company) is pleased to announce a significantly increased Inferred Mineral Resource of 89 million tonnes at a grade of 6,363 ppm Total Rare Earth Oxides (TREO) at the Grønnedal REE deposit, part of the Company's wholly owned lvigtût multi-commodity critical mineral project in southwest Greenland.

## **Highlights**

- The inferred Mineral Resource Estimate (MRE) has increased to 89 million tonnes at a grade of 6,363ppm TREO, containing 567,600 tonnes TREO, using a 2,000ppm TREO cut-off.
- This represents a more than 70-fold increase, significantly enhancing Grønnedal's scale, strategic value, and resource potential.
- The increased MRE incorporates analytical data from six diamond drill holes.
- With an average grade exceeding 6,000ppm (0.65%)TREO, the MRE positions Grønnedal amongst the highest-grade rare earth elements (REE) deposits globally.
- Notably, individual samples returned TREO values above 2%, including high concentrations of key magnetic REE such as: neodymium (Nd), praseodymium (Pr), dysprosium (Dy), and terbium (Tb).
- The mineralisation remains open in all directions, reinforcing Grønnedal's strong resource potential.
- The resource represents a small fraction of a large carbonatite intrusive defined by surface mapping, sampling, and electromagnetic surveys, with indications of continuous mineralisation from the surface to depths exceeding 500 meters.
- The MRE reinforces a compelling upside case for development, strategic investment and long-term value creation.

# Commenting on the transformational 89 Mt resource increase, Eclipse Metals Executive Chairman Carl Popal said:

"This is a transformational milestone for Eclipse and positions the Grønnedal REE deposit as a globally significant rare earths project. With 89 million tonnes now defined, and evidence suggesting we are only scratching the surface, Grønnedal REE has the scale and grade to become a cornerstone asset in global efforts to secure independent critical mineral supply chains. The MRE includes data from six deep historic diamond drill holes, all of which ended in mineralisation, indicating that the mineralisation potentially extends well beyond the current resource limits.

"Given the current geopolitical context and growing demand for clean energy technologies, we are fast-tracking plans for further drilling to delineate the broader potential of the Grønnedal carbonatite. As a small company entering a much larger strategic arena, we remain focused on delivering value to shareholders and progressing responsibly, with discipline and transparency."

**ECLIPSE METALS LTD** 



## **INTRODUCTION**

The resource is contained within rocks of the Proterozoic Grønnedal Complex that intrudes Archean basement gneissic rocks in the Gardar Province, Southwest Greenland (Figure 1). The Grønnedal REE complex is formed within a northerly trending 8km x 3km ovoid body of layered nepheline syenites which are intruded by a xenolithic syenite and a central plug of calcite and calcite–siderite carbonatite. These rocks have, in turn, been intruded by large north-east trending dolerite dykes. The concentration of rare earth elements is developed both in the carbonatite and surrounding rocks (Figure 1). With a high percentage of outcrop, the area has been mapped in detail and hence the extent of the geological units that host the REE mineralisation is very well understood and defined. To date, the carbonatite has been the focus of exploration efforts.



In 2024, Eclipse announced a maiden inferred resource of 1.18Mt grading 6,859ppm TREO at a 2,000ppm TREO cut-off. This estimate was based solely on shallow drilling and trenching. Subsequent to the maiden MRE, Eclipse undertook laboratory analyses of selected core intervals that were obtained from a series of historic diamond holes that are located in the southern portion



of the resource footprint. The results from this sampling program confirmed the presence of rare earth mineralisation grading over 2% TREO at a depth of 165m from the surface (Figure 3). Based on this confirmatory data, the inferred resource boundary has been extended to a depth of between 165m and 200m from surface. The updated MRE is summarised in Table 1.

Olassi	Tonnage		Gr	ade			Containe	d Materia	al	Pr+No	d Summa	ary
Classi- fication	ronnage	TREO	LREO	HREO	MREO	TREO	LREO	HREO	MREO	Pr+Nd	Pr/Nd %	Pr/Nd Ratio
	Mt	ppm	ppm	ppm	ppm	Kt	Kt	Kt	Kt	(ppm)	70	Ratio
Inferred	89.2	6,363	5,941	422	2,497	567.6	529.9	37.7	23	1,815	29	1:4

Table 1: Grønnedal Mineral Resource Estimate at 2,000ppmTREO Cut Off

## **RESOURCE ESTIMATE**

## **Resource Limits**

The Grønnedal REE mineralisation has been defined in the northern parts of a central block of carbonatite that measures approximately 1,400m north-south and 750m east-west. The carbonatite is truncated to the northwest by a dolerite dyke. Dolerite dykes which intrude the carbonatite have been mapped in detail and modelled from historic drill logs to depths of about 200m. These dykes have been excluded from the mineral resource estimate. It is likely that this carbonatite extends to a depth exceeding 500m below the surface. However, the updated resource area is restricted to a relatively small portion of the carbonatite that has been tested by trench sampling and drilling and is extended to a depth of 200m, which is near the vertical limit of the deepest mineralised diamond hole.

## **Drilling Techniques**

A combination of recent open hole percussion drilling and historic NQ diameter diamond drilling has been completed at Grønnedal. In 2022 Eclipse completed 415m of percussion drilling in 33 holes in the northern portion of the carbonatite (Figure 2). The holes were generally drilled to blade refusal and a maximum depth of 22m was achieved with an average depth of 12m (Table 4). The drilling program was completed in October 2022 with samples from 27 holes shipped from Greenland to Australia for laboratory assessment. Several holes that intersected dolerite dyke were not sampled.

In 1951, Cryolite Company (Sweden) drilled six NQ diameter diamond holes in the vicinity of the Grønnedal resource to test for a potential iron ore deposit (Figure 1) (refer to ASX announcement January 2025). In late 2024 Eclipse was granted permission to extract small specimens from selected core intervals from 23 intervals representing key lithologies for analytical test work. Sample treatment was carried out by SGS Lakefield, Canada (refer to ASX announcement April 2025).

Drilling comprised 33 vacuum holes and six diamond drillholes (Table 4). All holes that were located within the carbonatite intersected rare earth mineralisation. Dyke intersections are unmineralised and are modelled as a waste domain.

## Cut-off Grades

The Mineral Resource Estimate is reported above a cut-off grade of 2,000ppm TREO. This is a generally accepted industry standard reporting cut-off and represents a net smelter return calculated based on saleable rare earth element oxides: La2O3, Nd2O3, Pr6O11, Sm2O3,



Dy2O3, and Tb4O7. The net smelter return value demonstrates that a 2,000 ppm TREO cutoff grade meets the typical conditions for reporting of a Mineral Resource with reasonable prospects of eventual economic extraction.



Figure 2: Plan view of Grønnedal Resource Area

## Sample Analysis Method and Sub-sampling

Percussion hole samples bagged on site and relocated to secure off-site premises for riffle splitting to produce an assay sample of approx. one third of the drill sample, with balance stored in lockable shipping container. Assays samples sent by sealed and locked sea container to Australia for analysis. Samples analysed by ALS Laboratory using the ME-MS 61-REE procedure with conventional laboratory QA/AC practices in secure premises. In 2024 Eclipse extracted small specimens from 23 intervals from six historic diamond holes for analytical test work. Sample treatment was carried out by SGS Lakefield, Canada using a sodium peroxide ( $Na_2O_2$ ) digestion followed by ICP-MS (Inductively Coupled Plasma Mass Spectrometry). These point samples are useful in confirming the development of wide-spread high-grade REE mineralisation and are regarded suitable indicators for an inferred resource.

## **Classification**

The resource is classified as 100% inferred. Mineralisation is not structurally controlled and is pervasive throughout the sampled areas of the carbonatite body. The results of rock chip sampling indicate that there is significant mineralisation elsewhere both within the carbonatite and external to the carbonatite where mineralisation is associated with nepheline syenite rocks (Figure 1).



The resource footprint is defined by a combination of rock chip sampling, trench sampling and drilling results. Trench sampling was carried out of a regular north-west oriented 15m by 20m grid over a 300mx150m area within the carbonatite intrusive. TREO results of the trenching show pervasive mineralisation over the sampled area with significantly higher grades located towards the southern and eastern areas. It is also notable that mineralisation is spatially open-ended in all directions to the limits of the carbonatite (Figure 1). Drill hole spacing is irregular due to the steep topography and varies from several metres to a maximum spacing of100m. Nevertheless, there is good consistency of REE grades throughout the drilling. In plan view the inferred limits are extrapolated approximately 40m beyond the data points that comprise diamond hole X and V, approximately 100m beyond diamond hole T and approximately 30m beyond the carbonatite rock sample

The vertical extents of the resource are extrapolated from surface to a depth of approximately 200m which is approximately 25m beyond the end of the mineralisation that has been intersected in the historic holes (Figure 3). Given that all intersections of carbonatite to date have returned high grade REE grade Eclipse is confident that further drilling will upgrade the inferred resource.



Figure 3: Cross Section Through the Grønnedal Resource



## **Density**

Bulk densities were determined by ALS Laboratory using procedure OA-GRA08d. Bulk density measurements range 2.62 to 3.42 gm/cm<sup>3</sup>, with an average 3.2 gm/cm<sup>3</sup>

## **Reasonable Prospects for Economic Extraction**

Rare earth mineralisation defined by the MRE extends from surface to depths of at least 200m over an area measuring 500m east-west and 400m north-south. Although no open pit optimisation studies have been carried out there is potential for a very low strip ratio open pit mining operation given the high-grade characteristics of the deposit combined with the high concentration of the "in-demand" magnetic rare earths such as Nd and Pr (Figure 4). The deposits proximity to transport infrastructure combined with mining-supportive jurisdiction further enhance the development potential of the deposit.

No metallurgical recovery work has been undertaken. However, Eclipse believes that there are reasonable prospects for eventual economic extraction based on flotation followed further downstream specialist processing as used on similar operational carbonatite-hosted REEs deposits (Table 2). The Grønnedal deposit characterised by its ferro-carbonatite host rock and is believed to have comparable mineralogy to several prominent rare earth element (REE) deposits worldwide.

Deposit	Location	Host Rock Type	Primary REE Minerals
Grønnedal	Greenland	Ferro-carbonatite	Monazite, Bastnäsite*
Bayan Obo	China	Dolomitic Carbonatite	Monazite, Bastnäsite
Kangankunde	Malawi	Ferro-carbonatite	Monazite, Strontianite
Mount Weld	Australia	Lateritized Carbonatite	Monazite, Bastnäsite

Table 2: Host Rock and Primary REE Mineralogy Comparison of Selected Deposits \*to be confirmed in forthcoming mineralogical and metallurgical test work

TIMA (TESCAN Integrated Mineral Analyser) mineralogical analysis of Grønnedal samples is currently ongoing. In parallel, preparations for in-depth metallurgical test work are progressing, with results from the integrated program anticipated by the end of 2025.

## Grade-Tonnage Estimate

The MRE was carried out using an inverse distance squared interpolation of downhole REE oxide analytical data was within an indicator radial bias function (Indicator RBF) constraint. Geological mapping, rock chip and trench sampling data were used to confirm the spatial extent of mineralisation but were not used in the grade estimation. The block model contains attributes pertaining to resource block, resource category, grade class, geologic domain and the estimated numerical attributes for TREO, rare earth oxides of all rare earth elements.

No open pit optimisation work has been carried and thus the MRE is reported on a global basis. The MRE is reported in Table 2 using a 2,000ppm TREO cut off.

The resource classified as inferred and is considered by the Competent Person to be appropriate for a project at this level of development. Resource upgrades may be possible with the adoption of either reverse circulation (RC) or diamond core sampling together with additional holes.



#### **GRØNNEDAL STRATEGIC ADVANTAGE**

The Grønnedal project is located in a geopolitically stable jurisdiction with deep-water access, offering a secure, long-term supply of critical rare earth elements outside of dominant global suppliers.

Focused on magnetic REE, an essential material for electric vehicles and renewable energy technologies, the Project is uniquely positioned to benefit from increasing global demand. The presence of both light and heavy REE aligns with global demand trends in renewable energy, the defense industry, and electrification.

Classification	Inferred	Total
Tonnage	89,193,300	89,193,300
Element	Grade	Material Content
Element	(ppm)	Tonnes
TREO	6,363	567,569
LREO	5,941	529,889
HREO	422	37,680
MREO	2,497	222,705
CeO2	2,826	209,735
Dy2O3	74	6,717
Er2O3	18	2,039
Eu2O3	84	7,478
Gd2O3	179	16,535
Ho2O3	9	1,080
La2O3	827	105,912
Lu2O3	1	105
Nd2O3	1,734	152,002
Pr6O11	391	36,927
Sm2O3	292	25,313
Tb2O3	18	1,746
Tm2O3	2	203
Y2O3	216	26,115
Yb2O3	8	889

Table 3: Grønnedal Classified Resource Estimate at 2,000ppmTREO Cut Off

#### **NEXT STEPS**

- Eclipse is planning to undertake further drilling to expand the resource base and fully realise the potential of the Grønnedal carbonatite complex.
- The updated MRE represents only 6% by volume of the estimated carbonatite rock mass and further exploration will assess the full potential of the Grønnedal Complex.
- Technical studies and metallurgical test work are now underway.
- Engagement with strategic partners and government stakeholders in Europe and North America.





Figure 4: Plan and Oblique Views of the Grønnedal Inferred Resource Model



Hole ID	Hole Type	x	У	RL	Depth	Dip	Azimuth	From (m)	To (m)	Interval (m)	TREO (ppm)
L1-10	percussion	658904	6791196	371	6.5	-90	0	0.5	6.5	6	8,61
L1-12	percussion	658883	6791216	365	12.5	-90	0	2	11	9	3,16
L1-4	percussion	658963	6791131	393	2	-90	0	0.5	2	1.5	16,58
L2-9	percussion	658891	6791166	377	8	-60	140	0.5	8	7.5	8,79
L3-1	percussion	658942	6791059	408	20	-90	0	dyke/nsr	-		<b>•</b> ,• •
L3-3	percussion	658928	6791090	397	3.5	-45	140	dyke/nsr			
L3-4	percussion	658920	6791098	394	3	-90	0	1	3	2	13,03
L3-9	percussion	658872	6791149	378	11.5	-70	140	1	11.5	10.5	4,51
L5-10	percussion	658843	6791149	374	10	-90	0	1	10	9	5,64
L5-4	percussion	658965	6791079	405	8	-60	100	0.5	8	7.5	2,6
L5-8	percussion	658863	6791129	380	5.5	-60	130	1	5.5	4.5	7,16
L5-9	percussion	658851	6791136	378	14.5	-60	120	1	14.5	13.5	6,44
LX	percussion	659011	6791096	409	20	-43	160	0	6	6	1,8
TL1-1	percussion	659012	6790963	400	20	80	320	0	2	2	1,0
161-1	percussion	003012	0730303	400	22	00	520	2	22	20	dyke/ns
TL1-2	percussion	659030	6790982	413	6.9	80	40	dyke/nsr	22	20	uyke/na
TL1-2 TL1-3				413							
	percussion	659036	6790991		20	-80	40	dyke/nsr	00	00	4 7
TL2-1	percussion	659001	6790991	423	22	-80	320	0	22	22	4,7
TIOC		050004	0700004	400	~ ~ ~	-90	0	dyke/nsr	00	00	
TL2-2	percussion	659001	6790991	423	6.9	-80	40	0	20	20	7,1
					20	-60	290	dyke/nsr			
TL2-3	percussion	659001	6790991	417	3	-45	290	dyke/nsr			
TL2-4	percussion	659001	6790991	436	20	-60	110	0	8	8	5,0
	percussion							16	18	2	1,1
TL3-1	percussion	658993	6790991	436	22	-85	20	3.5	22	18.5	9,9
TL3-2	percussion	659012	6791001	436	20	-80	320	dyke/nsr			
TLX2-1	percussion	659013	6790979	441	11.5	-90	0	1	11.5	10.5	4,5
TLX2-2	percussion	658994	6790959	441	11.5	-65	300	1	11.5	10.5	1,8
TLX2-3	percussion	658994	6790959	441	11.5	-90	0	dyke/nsr			
TLX2-4	percussion	658998	6790959	439	11.5	-60	90	7	11.5	4.5	3,7
TLX2-5	percussion	659013	6790950	441	12.5	-90	0	2	8	6	3,7
TLX2-6	percussion	658994	6790959	441	12.5	-90	270	2	12.5	10.5	3,8
TLX2-7	percussion	659013	6790954	427	12.5	-60	140	2	5	3	3,1
TLX7-1	percussion	659022	6790977	421	10.5	-80	340	dyke/nsr			- /
TLX7-2	percussion	659023	6790976	435	10.5	-80	30	dyke/nsr			
TLX7-T	percussion	659003	6790959	440	11	-80	245	dyke/nsr			
TLX7-T2	percussion	659005	6790954	440	11.2	-80	300	dyke/nsr			
R	diamond	658997	6791046	440	200.8	-50	160	2.8	2.9	0.1	21,9
IX	diamona	000001	0101040	-++0	200.0	-00	100	25.5	25.8	0.3	20,0
								40.1	40.5	0.4	11,9
								40.1	40.3	0.4	12,8
										0.2	23,1
								169.1	169.2		
<u>^</u>		050007	0704040	40.4	00.4	70	400	195.1	195.5	0.4	5,6
S	diamond	658997	6791046	424	99.4	-70	160	14.7	15.2	0.5	17,5
								32.8	32.9	0.1	11,3
								48.8	49.3	0.5	9,1
							ļ	52.2	52.3	0.1	11,7
								71.4	71.9	0.5	12,3
								71.7	71.8	0.1	8,5
Т	diamond	659086	6791056	421	175.6	-50	160	0.5	1.8	1.3	13,6
								1.8	4.1	2.3	11,3
								15.9	16.6	0.7	5,8
								32.3	33.1	0.8	9,7
								165.9	166.4	0.5	2,1
U	diamond	659002	6790970	439	155.1	-50	160	21.5	22	0.5	15,5
								36.7	37.2	0.5	13,0
				l	l	l		40.9	41.3	0.4	4,6
			İ					109	109.3	0.3	5,0
			1					133	133.1	0.0	1,8
V	diamond	658887	6790944	434	61	-50	160	20.2	20.7	0.1	4,8
•	aidmond	000007	0100044	-10-	01	50	100	21.3	21.4	0.0	4,0
								46.7	47.2	0.1	4,4
v	diamond	658870	6790970	423	58.1	-50	340	34.2	34.6	0.5	10,9
Х	ulamonu	000070	0190910	423	00.1	-50	340	<u> </u>	<u>34.6</u> 44.7		3,9
										0.1	3,9 5,4
								52.7	52.9	0.2	

Table 4: Sample Intersections Used to Inform the MRE



Authorised by the board of Eclipse Metals Ltd.

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## About Eclipse Metals Ltd (ASX: EPM)

Eclipse Metals Ltd is an Australian exploration company focused on exploring for REE, cryolite, fluorite, siderite and quartz at its lvigtût and Grønnedal prospects in South-western Greenland. Its impressive portfolio which also includes assets in the Northern Territory and Queensland and is prospective for gold, platinum group metals, manganese, palladium, vanadium, and uranium mineralisation. The Company's mission is to increase shareholder wealth through the successful identification, exploration, and development and/or monetisation of our targeted mineral deposits.

#### **Competent Persons Statement**

The information in this report / ASX release that relates to Mineral Resource Estimates and Exploration Results is based on information compiled and reviewed by Mr. Alfred Gillman, who is the Principal Geologist of the Independent Consulting firm Odessa Resources Pty Ltd. Mr. Gillman is a Fellow and Chartered Professional 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 Gillman 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 Gillman 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.



#### References

- MULTIPLE GEOPHYSICAL ANOMALIES IDENTIFIED ON IVITTUUT PROJECT, ASX Announcement, 9 February 2021
- STRONG RARE EARTH MINERALISATION IN GRONNEDAL-IKA AREA GREENLAND PROJECT, ASX Announcement, 2 March 2021
- DRILL SAMPLES FROM ECLIPSE'S IVITTUUT PROJECT CONFIRM HIGHGRADE RARE EARTH RESULTS, ASX Announcement, 22 November 2021
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- TRENCHING RESULTS CONFIRM NEODYMIUM-RICH REE MINERALISATION AT GRØNNEDAL, GREENLAND, ASX Announcement, 25 July 2023
- HIGH GRADE REE RESULTS FROM MAIDEN DRILLING PROGRAM AT GRØNNEDAL, GREENLAND, ASX Announcement, 8 August 2023
- RARE EARTHS IDENTIFIED OVER 5 KM STRIKE AT GRØNNEDAL DEPOSIT, GREENLAND, ASX Announcement, 1 December 2023
- DRILL CORE ASSESSMENT CONFIRMS WIDESPREAD DEEP-SEATED REE MINERALISATION, ASX Announcement, 15 October 2024
- MAIDEN INFERRED RESOURCE DECLARED FOR THE GRONNEDAL RARE EARTH PROJECT, GREENLAND, ASX Announcement, 9 February 2024

#### 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	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Geochemical and Trench Samples</li> <li>Initial field tests by hand-held XRF assumed to be indicative only. Instrument not calibrated.</li> <li>Chemical analyses to assess levels of elements contained,</li> <li>Analyses not used for grade estimate but assisted in defined geological domain of the resource.</li> <li>Percussion Samples</li> <li>Open-hole, rotary percussion drilling carried out to Eclipse in 2022</li> <li>Drill samples collected over 1.5m intervals with 0.5-kg samples collected depending on recovery.</li> <li>The majority of samples weighed about 3kg.</li> <li>Samples riffle split twice to approximately 1kg or average the vacuum-sealed and kept in a secur storage facility until shipped to ALS Malaga.</li> <li>Analyses of the percussion samples used for resource estimate</li> <li>Diamond Samples</li> <li>Historic diamond drilling was carried out in the 1950's</li> <li>Selected core samples representing different rock</li> </ul>
		<ul> <li>The core samples are from historic diamond holes</li> <li>The NQ core samples are characterised as point samples as opposed to interval samples.</li> </ul>
		<ul> <li>Analyses of the core samples were used for</li> </ul>

Criteria	JORC Code explanation	Commentary
		resource estimate
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 tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Open-hole, rotary percussion drilling carried out by Eclipse in 2022</li> <li>Historic diamond drilling was carried out using NQ diameter bits</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Drill samples collected by percussion system and bagged on-site.</li> <li>Full core has been partially logged and sampled under controlled conditions.</li> <li>Continual monitoring of sample recovery system.</li> <li>Samples logged on-site, each sample mixed and combined, riffle-split and bagged with duplicates retained in off-site storage facility.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>The samples have been logged geologically and recorded as a guide for future field work and exploration planning.</li> <li>Sample-logging is qualitative in nature.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Samples for geological determination, identification and for assay.</li> <li>Samples riffle split in secure storage facility.</li> <li>Duplicates collected and stored for back-up.</li> <li>QC adequate for early level of exploration.</li> <li>There are small sections of NQ half-core samples sawn in over several periods.</li> <li>The NQ core samples are characterised as point samples as opposed to interval samples and in the context of an inferred resource and a disseminated style of REE deposit are considered to be indicative of whole of rock mineralisation.</li> <li>Field quality control procedures are not applicable for the historical core samples.</li> <li>These data are considered to be representative at the inferred level of resource classification</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Percussion drillhole samples were analysed by ALS Laboratories, Perth, WA.</li> <li>Standard laboratory procedures for sample preparation, elemental determination by ALS Laboratories using ME-MS 61-REE assay method,</li> <li>Standard laboratory QA/QC.</li> <li>Standard laboratory procedures with blanks and duplicates. No external laboratory checks warranted at this stage.</li> <li>Laboratory core sample treatment was carried out by SGS Lakefield, Canada using a sodium peroxide (Na<sub>2</sub>O<sub>2</sub>) digestion followed by ICP-MS (Inductively Coupled Plasma Mass Spectrometry).</li> <li>The data provided by SGS Lakefield, Canada are considered to be of high quality with applicable</li> </ul>

Criteria	JORC Code explanation	Commentary
		QAQC procedure having been applied.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Drilling and trenching for geological and chemical determinations.</li> <li>Twinning not appropriate at this stage of exploration</li> <li>Standard laboratory documentation.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>UTM coordinates for Gronnedal historical drilling have been tabulated.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Each trench location recorded by hand-held GPS.</li> <li>Location data to be used in computer program for indication of continuity or resource estimation.</li> <li>Samples Crushed, riffle- split and bagged with duplicates retained in storage in Greenland.</li> <li>No compositing.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Shallow exploration trenches not oriented.</li> <li>Drill hole azimuth measured and recorded in attached tables.</li> <li>Historic diamond holes originally targeted iron-rich areas.</li> <li>Mineralisation is not structurally controlled.</li> <li>There is no preferred orientation of drillholes</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Percussion drillhole samples secured on-site, transported to private, lock-up building, processed, bagged and transported in locked shipping containe and transported to ALS Laboratories, Perth Australi</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>by ship under normal security procedures.</li> <li>Core samples were held in high-security laboratory environment before air-freighting to SGS Lakefield, Canada</li> </ul>
Audits or • reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits or reviews have been conducted on the project.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>MEL2007-45 tenement granted to Eclipse Metals Greenland (a wholly owned subsidiary of Eclipse Metals Ltd) by the Greenland Minister of Finance, Industry and Minerals Resources, as announced to the ASX on 17 February 2021.</li> <li>No known impediments to obtaining mining licence.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>GEUS Report File No. 20236</li> <li>Planning of the Ivigtût Open Pit of Kryolitselskabet</li> <li>Oresund A/S - Mining of the Flouritic Orebody";</li> <li>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.</li> <li>GEUS Report File No. 20238</li> <li>"The Planning of the Ivigtût Open Pit of</li> </ul>
		Kryolitselskabet Oresund A/S – Report of the First

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Criteria

JORC Code explanation

#### Commentary

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, 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,

Criteria	JORC Code explanation	Commentary
		fluorspar, Fe, Cu, Zn, Pb, S
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The deposit type is a nepheline syenite and carbonatite intrusion into Archean crystalline basement.</li> </ul>
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	All available information is tabulated within the bo of report.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No top cuts applied</li> <li>Downhole analytical data is not composited.</li> </ul>
Relationship between mineralisation	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the</li> </ul>	<ul> <li>Relationship of mineralisation and hole depth recorded and described in body of report.</li> </ul>

Criteria	JORC Code explanation	Commentary
widths and intercept lengths	<ul> <li>drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Appropriate coordinated maps are provided in the body of the text.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>Fully coordinated analytical results included with this report.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	• Exploration by Eclipse Metals of the lvigtût and Grønnedal prospects 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 2023/24 field season at the prospects.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Geological mapping; remote sensing; trenching and drilling.</li> <li>Detailed geological assessments planned for 2023 field season.</li> <li>Diamond drilling.</li> </ul>
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> </ul>	<ul> <li>Drill hole data verified by field geologists and by visual examination on maps.</li> <li>Assay data were imported into the database directly from electronic spreadsheets provide by</li> </ul>

Criteria	JORC Code explanation	Commentary
	Data validation procedures used.	laboratories. Histograms graphical logs were also prepared and reviewed by the CP.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>The CP has not visited the site. Site visits to the project have so far been logistically difficult and seasonally affected.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The resource is contained with rocks of the Proterozoic Grønnedal-Ika Complex that intrude Archean basement gneissic rocks in the Gardar Province, South Greenland.</li> <li>The Grønnedal-Ika complex is formed over a northerly trending 8km x 3km ovoid body that dominated by layered nepheline syenites which were intruded by a xenolithic syenite and a central plug of calcite to calcite-siderite carbonatite.</li> <li>These rocks have, in turn, been intruded by large north-east trending dolerite dykes. The concentration of rare earth elements is developed in the carbonatite.</li> <li>With a high percentage of outcrop the area has been mapped in great detail and hence the extents of the geological units that host the REE mineralization are very well understood and defined.</li> </ul>

#### Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>The Grønnedal REE mineralization has been defined in the northern parts of a central block of carbonatite that measures approximately 1,400m north-south and 750m east-west. The carbonatite is truncated to the north west by dolerite. The extent of dolerite intrusive within the carbonatite is yet to be established but it likely that where grades drop off it is because dolerite dykes have been intersected. It is likely that this carbonatite extends to considerable depths far exceeding at least 500m below surface.</li> <li>The resource area is restricted to a relatively small portion of the carbonatite that has been tested by trench sampling and drilling. Mineralization is developed from surface to at least the maximum vertical extents of drilling which is 200m.</li> <li>The MRE footprint measured 520m from the north-west to the south-east and 380m from south-west to north-east. This footprint is project to a depth of approximately 200m based on the deepest confirmed analytical result in the diamond drilling.</li> <li>Many mineralized holes ended in high grade REE. Trench sampling has returned high grade REE grades to the northern and western limits of the sampling grid. Thus, both the vertical and aerial extents remain largely open.</li> <li>Basedon the current data there appears to be an enrichment in rare earth elements towards the nort-eastern portion of the resource.</li> <li>Therefore, the CP considers the resource area to be open at depth and along strike and width.</li> </ul>
Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values domaining, interpolation parameters and maximum distance of extrapolation from data points. In a computer assisted estimation</li> </ul>	<ul> <li>A wireframe resource constraint was formed using and indicator radial bias function (Indicator RBF) of the drillhole data.</li> <li>RBF parameters were adjusted to maintain reasonable extrapolation of the data.</li> <li>The mean sample interval for the percussion drilling is 1.5m.</li> </ul>

<ul> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Statistical distribution.</li> <li>Estimation was performed using Leapfrog Geo/Edge 2024.1.3 software.</li> <li>The block models contain attributes pertaining to resource block, resource category, g class, geologic domain and numerical attributes for TREO, rare earth oxides of all rare elements.</li> <li>The assumptions made regarding recovery of by-products.</li> </ul>	Criteria JORC	Code explanation	Commentary
<ul> <li>Comparison of model data to drill hole data, and use of reconciliation data if available.</li> <li>Estimated grades compared favorably with the mean composite values</li> </ul>	de an • Th pre pro Mii ap • Th rec • Es or ect for ch • In int rel sp • An of as be • De int the • Dis us	scription of computer software d parameters used. he availability of check estimates, evious estimates and/or mine oduction records and whether the neral Resource estimate takes propriate account of such data. he assumptions made regarding covery of by-products. timation of deleterious elements other non-grade variables of onomic significance (eg sulphur r acid mine drainage aracterisation). the case of block model erpolation, the block size in lation to the average sample acing and the search employed. by assumptions behind modelling selective mining units. Any sumptions about correlation tween variables. escription of how the geological erpretation was used to control e resource estimates. scussion of basis for using or not ing grade cutting or capping. he process of validation, the ecking process used, the mparison of model data to drill le data, and use of reconciliation	<ul> <li>Inverse distance squared interpolation was used to estimate the grade for each RE oxide</li> <li>Top cut were not applied to the RE oxide values as the higher values formed part of th statistical distribution.</li> <li>Estimation was performed using Leapfrog Geo/Edge 2024.1.3 software.</li> <li>The block models contain attributes pertaining to resource block, resource category, grad class, geologic domain and numerical attributes for TREO, rare earth oxides of all rare earl elements.</li> <li>pervasive throughout the sampled areas of the carbonatite body. The results of rock chi sampling indicate that there is significant mineralisation elsewhere both within th carbonatite and external to the carbonatite where mineralisation is associated wit nepheline syenite rocks (Figure 1).</li> <li>The resource footprint is defined by a combination of rock chip sampling, trench samplin and drilling results. Trench sampling was carried out of a regular north-west oriented 15r by 20m grid over a 300mx150m area within the carbonatite intrusive. TREO results of the trenching show pervasive mineralisation over the sampled area with significantly highe grades located towards the southern and eastern areas. It is also notable that mineralisation is spatially open-ended in all directions to the limits of the carbonatite spreading the carbonatite spreading the carbonatite approximately 40m beyond the data points that comprise diamond hole X and V approximately 100m beyond diamond hole T and approximately 30m beyond the carbonatite rock sample</li> <li>The vertical extents of the resource are extrapolated from surface to a depth of approximatel 200m which is approximately 25m beyond the end of the mineralisation that has bee intersected in the historic holes (Figure 3).</li> </ul>

Criteria	JORC Code explanation	Commentary		
		Block Model Parameter	Value	
		Parent Block Size	10mx10mx10m	
		Sub-block count (i, j, k)	4, 4, 4	
		Minimum block size (i, j, k)	2.5m ,2.5m 2.5m	
		Base point (x, y, z)	658647.4,6790605.2,555.9	
		Boundary size (W x L x H)	660,780,460	
		Azimuth	0	
		Dip	0	
		Pitch	0	
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are based or		
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Currently a subjective estimates.	cut-off grade of 2,000	ppm TREO was applied to reported resou
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the	assumes extraction	has been prepared at this by open pit mining metho	s stage however the shallow nature of the dep ods.

Criteria	JORC Code explanation	Commentary
	mining assumptions made.	
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>Eclipse is planning to undertake preliminary metallurgical testwork at Gronnedal. At present Eclipse has not made any definitive metallurgical assumptions about the project.</li> </ul>
Environment al factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental	Eclipse is in the process of outlining environmental, social, and community impacts regarding the potential development of the project. These impacts are being included in conceptual designs of all facets of the project.

Criteria	JORC Code explanation	Commentary
	impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>An average specific gravity of 3.20 represents the in-place ore material at Gronnedal.</li> <li>This value is based on two drillhole samples and three trench rock samples. The SG determinations were carried out by ALS Laboratories, Perth.</li> </ul>
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and	<ul> <li>An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.</li> <li>The limits of the MRE are based on a combination surface rock chip sampling, trenching and drilling.</li> <li>The grade estimate only utilizes laboratory analyses of drillhole information.</li> </ul>

Criteria	JORC Code explanation	Commentary
	distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.	<ul> <li>The mineral resource is classified as 100% inferred.</li> <li>The vertical extents of the resource extend from surface to approximately 25m beyond the end of the mineralisation that has been intersected in the historic holes.</li> <li>Appropriate account has been taken of all relevant factors, including the relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	There have not been any audits of mineral resource estimates.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should</li> </ul>	<ul> <li>The factors that could affect the relative accuracy and confidence of the estimate include:</li> <li>The completeness and accuracy of the database; and</li> <li>The accuracy of the historic assay methods.</li> <li>The Competent Person is of the opinion that the scope for variations is minimal, and if any, the impact on the Mineral Resource estimate is unlikely to be significant.</li> <li>The estimates are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis are those classified as</li> </ul>

Criteria JORC Code explanation	Commentary
include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

Dir	mensions	The extent and variability of the	The Grønnedal REE mineralization has been defi	•	ck of
		Mineral Resource expressed as	carbonatite that measures approximately 1,400m		
			carbonatite is truncated to the north west by dole		
		· · · · · · · · · · · · · · · · · · ·	carbonatite is yet to be established but it likely the	•	
		upper and lower limits of the Mineral	dykes have been intersected. It is likely that this	carbonatite extends to considerable dept	hs far
		Resource.	exceeding at least 500m below surface.		
			The resource area is restricted to a relatively sma	all portion of the carbonatite that has beer	n
			tested by trench sampling and drilling. Mineraliza	•	
			maximum vertical extents of drilling which is 200r		
215			The MRE footprint measured 520m from the north	h-west to the south-east and 380m from s	south
(D)			west to north-east. This footprint is project to a de	epth of approximately 200m based on the	•
			deepest confirmed analytical result in the diamon	d drilling.	
$(f_{\lambda})$			Many mineralized holes ended in high grade REE	Trench sampling has returned high gra	de
			REE grades to the northern and western limits of		
))			aerial extents remain largely open.	the sumpling grid. Thus, sour the vertice	
			denar extento remain largery open.		
			Basedon the current data there appears to be an	enrichment in rare earth elements toward	ds the
			Basedon the current data there appears to be an nort-eastern portion of the resource.	enrichment in rare earth elements toward	ds the
			nort-eastern portion of the resource.		
50					
			nort-eastern portion of the resource.		
,0,			nort-eastern portion of the resource. Therefore, the CP considers the resource area to	be open at depth and along strike and w	
			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter	be open at depth and along strike and w	
			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size	be open at depth and along strike and w Value 10mx10mx10m	
			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k)	be open at depth and along strike and w Value 10mx10mx10m 4, 4, 4	
			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k) Minimum block size (i, j, k)	be open at depth and along strike and w Value 10mx10mx10m 4, 4, 4 2.5m ,2.5m 2.5m	
			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k) Minimum block size (i, j, k) Base point (x, y, z)	velocity       velocity         0       velocity         0       velocity         10mx10mx10m       4, 4, 4         2.5m, 2.5m 2.5m       658647.4,6790605.2,555.9	
			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k) Minimum block size (i, j, k) Base point (x, y, z) Boundary size (W x L x H)	velocity       value         10mx10mx10m         4, 4, 4         2.5m, 2.5m         658647.4,6790605.2,555.9         660,780,460	
			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k) Minimum block size (i, j, k) Base point (x, y, z) Boundary size (W x L x H) Azimuth	Value         10mx10mx10m         4, 4, 4         2.5m, 2.5m         658647.4,6790605.2,555.9         660,780,460         0	
			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k) Minimum block size (i, j, k) Base point (x, y, z) Boundary size (W x L x H) Azimuth Dip	Value         10mx10mx10m         4, 4, 4         2.5m, 2.5m 2.5m         658647.4,6790605.2,555.9         660,780,460         0         0	
			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k) Minimum block size (i, j, k) Base point (x, y, z) Boundary size (W x L x H) Azimuth Dip	Value         10mx10mx10m         4, 4, 4         2.5m, 2.5m 2.5m         658647.4,6790605.2,555.9         660,780,460         0         0	
$\overline{\bigcirc}$			nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k) Minimum block size (i, j, k) Base point (x, y, z) Boundary size (W x L x H) Azimuth Dip	Value         10mx10mx10m         4, 4, 4         2.5m, 2.5m 2.5m         658647.4,6790605.2,555.9         660,780,460         0         0	
	3		nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k) Minimum block size (i, j, k) Base point (x, y, z) Boundary size (W x L x H) Azimuth Dip	Value         10mx10mx10m         4, 4, 4         2.5m, 2.5m 2.5m         658647.4,6790605.2,555.9         660,780,460         0         0	
	3		nort-eastern portion of the resource. Therefore, the CP considers the resource area to Block Model Parameter Parent Block Size Sub-block count (i, j, k) Minimum block size (i, j, k) Base point (x, y, z) Boundary size (W x L x H) Azimuth Dip	Value         10mx10mx10m         4, 4, 4         2.5m, 2.5m 2.5m         658647.4,6790605.2,555.9         660,780,460         0         0	

Estimation and	The nature and appropriateness of the estimation technique(s)	Modelling and estimation work was carried out using Leapfrog
modelling techniques	applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance	Geo/Edge 2024.1.3
	of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	A wireframe resource constraint was formed using and indicator radial bias function (Indicator RBF) of the drillhole data.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	RBF parameters were adjusted to maintain reasonable extrapolation of the data.
	The assumptions made regarding recovery of by-products.	The mean sample interval is 1.61m. For estimation purposes samples were composited to 1.5 metre lengths for statistical analysis
	Estimation of deleterious elements or other non-grade variables of	and grade estimation.
	economic significance (eg sulphur for acid mine drainage characterisation).	Domained estimators were developed for each rare earth (RE) oxide.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Inverse distance squared interpolation was used to estimate the grade for each RE oxide
	Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables.	Top cut were not applied to the RE oxide values as the higher values formed part of the statistical distribution.
	Description of how the geological interpretation was used to control the resource estimates.	Estimation was performed using Leapfrog Geo/Edge 2024.1.3 software.
	Discussion of basis for using or not using grade cutting or capping.	The block models contain attributes pertaining to resource block,
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	resource category, grade class, geologic domain and numerical attributes for TREO, rare earth oxides of all rare earth elements.
		Estimated grades compared favorably with the mean composite values.
29		
27		

Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are based on dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The Mineral Resource Estimate is reported above a cut-off grade of 2,000ppm TREO. This is a generally accepted industry standard reporting cut off and represents a net smelter return calculated based on saleable rare earth element oxides: La2O3, Nd2O3, Pr6O11, Sm2O3, Dy2O3, and Tb4O7. The net smelter return value demonstrates that a 2,000 ppm TREO cut-off grade meets the typical conditions for reporting of a Mineral Resource with reasonable prospects of eventual economic extraction.
assumptions	mining dimensions and internal (or, if applicable, external) mining	No mine plan or design has been prepared at this stage however the shallow nature of the deposit assumes extraction by open pit mining methods.

Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	No metallurgical recovery work has been undertaken. Eclipse believes that there are reasonable prospects for eventua economic extraction based on similar, albeit higher grade carbonatite-derived REEs deposits with similar Pr:Nd ratios and mineralogy such as Mount Weld in Australia and Bayan Obo in China TIMA (TESCAN Integrated Mineral Analyser) mineralogical analysis of Grønnedal samples is currently ongoing. In parallel, preparations for in-depth metallurgical test work are progressing, with results from the integrated program anticipated by the end of 2025.
Environment al factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	Eclipse is in the process of outlining environmental, social, and community impacts regarding the potential development of the project. These impacts are being included in conceptual designs of all facets of the project.

evaluat Classification The bas confide of all re estimat	s assumptions for bulk density estimates used in the tion process of the different materials isis for the classification of the Mineral Resources into varying	The mineral resource is classified as informed
data).	ence categories. Whether appropriate account has been taken elevant factors (ie relative confidence in tonnage/grade tions, reliability of input data, confidence in continuity of y and metal values, quality, quantity and distribution of the	
	er the result appropriately reflects the Competent Person's the deposit.	
Audits or reviews The res	sults of any audits or reviews of Mineral Resource estimates.	There have not been any audits of mineral resource estimates.

Discussion of	Where appropriate a statement of the relative accuracy and	Reported resources for Gronnedal are in-place global estimates of
elative accuracy/	confidence level in the Mineral Resource estimate using an	tonnage and rare earth grade.
	approach or procedure deemed appropriate by the Competent	
	Person. For example, the application of statistical or geostatistical	
	stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated Mineral Resource categories.
	estimates, and, it local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation	This has been determined on a qualitative, rather than quantitative, basis, and is based on the Competent Person's experience with similar deposits around the world.
	I nese statements of relative accuracy and confidence of the	The factors that could affect the relative accuracy and confidence o the estimate include:
		The completeness and accuracy of the database; and
		The accuracy of the historic assay methods.
		The Competent Person is of the opinion that the scope for variation is minimal, and if any, the impact on the Mineral Resource estimate is unlikely to be significant.
		The estimates are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis are those classified as either