

TRENCHING RESULTS CONFIRM NEODYMIUM-RICH REE MINERALISATION AT GRØNNEDAL, GREENLAND

- Maiden trenching program returns rare earth element (REE) mineralisation in all 52 trenches completed at Grønnedal
- Trench sample assays confirm high neodymium oxide (Nd_2O_5) ratios of up to 56% of total rare earth oxides (TREO) with an average of 31%
- Pr+Nd assay results account for 60% of calculated TREO, indicating that the Grønnedal mineralisation is enriched in the more valuable REE of Pr and Nd
- Best assay results from Grønnedal trenching program include:
 - L1-2: 1.0m @ 16,444 ppm TREO from 1.0-2.0m (Nd_2O_5 ratio = 26%);
 - L1-4: 0.5m @ 15,923 ppm TREO from 0.0-0.5m (Nd_2O_5 ratio = 27%);
 - L2-11: 0.5m @ 10,571 ppm TREO from 0.0-0.5m (Nd_2O_5 ratio = 29%);
 - L2-3: 2.0m @ 12,911 ppm TREO from 1.0-2.0m (Nd_2O_5 ratio = 27%);
 - L3-8: 1.0m @ 9,341ppm TREO from 0.0-1.0m (Nd_2O_5 ratio = 56%);
 - L3-5: 1.0m @ 13,452 ppm TREO from 1.0-2.0m (Nd_2O_5 ratio = 36%);
 - L5-11: 1.5m @ 11,630ppm TREO from 0.0-1.5m (Nd_2O_5 ratio = 30%);
 - L5-12: 0.5m @ 6,317ppm TREO from 0.0-0.5m (Nd_2O_5 ratio = 45%).
- REE mineralisation at Grønnedal is widespread and deep-seated.
- Diamond drilling at Grønnedal expected to commence Q4 2023

Eclipse Metals Ltd (**Eclipse** or the **Company**) (ASX: EPM) is pleased to announce the assay results from its 2022 trenching program for the Grønnedal REE prospect within the 100% owned Ivigtût multi-commodity project in SW Greenland.

Executive Chairman Carl Popal commented:

“The initial results from shallow trenches at Grønnedal are highly significant for Eclipse, as they indicate multiple near-surface targets that remain open at depth and along strike. Our previous geophysical assessment confirmed the deep-seated nature of the host to this REE mineralisation, pointing towards a substantial target.

Following the approval of the 2023 Grønnedal diamond drilling program, we are poised to commence the REE assessment at depth. This aligns with our strategic goal of becoming a prominent supplier of metals and minerals for the green energy industry.

The promising REE prospectivity at both Grønnedal and Ivigtût reinforces our commitment to actively exploring these sites, including the nearby historic Ivigtût pit throughout 2023.”

Results within this release relate to 52 excavated pits (also referred to as trenches) up to 2m deep (refer to Table A) which were completed in October 2022, with samples shipped from Greenland to Australia for laboratory assessment.

Laboratory results for the over-limit values (+1,000ppm) for 28 out of 52 (C. 54%) trench samples have now been received following further testing using appropriate methods. The complete REO trenching results are listed in Table C.



Figure 1. Grønnedal trench sample results in the lower section with REO mineralisation in all trenches. Note that, to date, only a small fraction of this prospect has been explored and that the system is open in all directions.

Analytical values for samples from the lower section of the Grønnedal carbonatite prospect indicate a Pr+Nd ratio increase. In the lower section Nd values in the carbonate impregnated rocks is higher than the top section Nd values in carbonatite breccia. The Nd values in the lower section vary from a low of 25% Nd to a high of 56% Nd whereas at the top section the ratio ranges from a low of 19% Nd to a high of 22% Nd.

Drilling and trenching at Grønnedal identified this material within part of a widespread dolerite dyke system intruding the carbonatite. Analysis of historical geological and geophysical work has indicated that the dolerite dykes are laterally extensive and deep-seated (refer to ASX announcement dated 19 May 2022).

There are three types of Gardar intrusions at the Ivigtût multi-commodity project:

- A) Late-stage, mainly carbonatite dykes.
- B) The Grønnedal alkaline intrusion with its associated carbonatites.
- C) The Ivigtût cryolite pipe (adjoining Bunka Breccia).

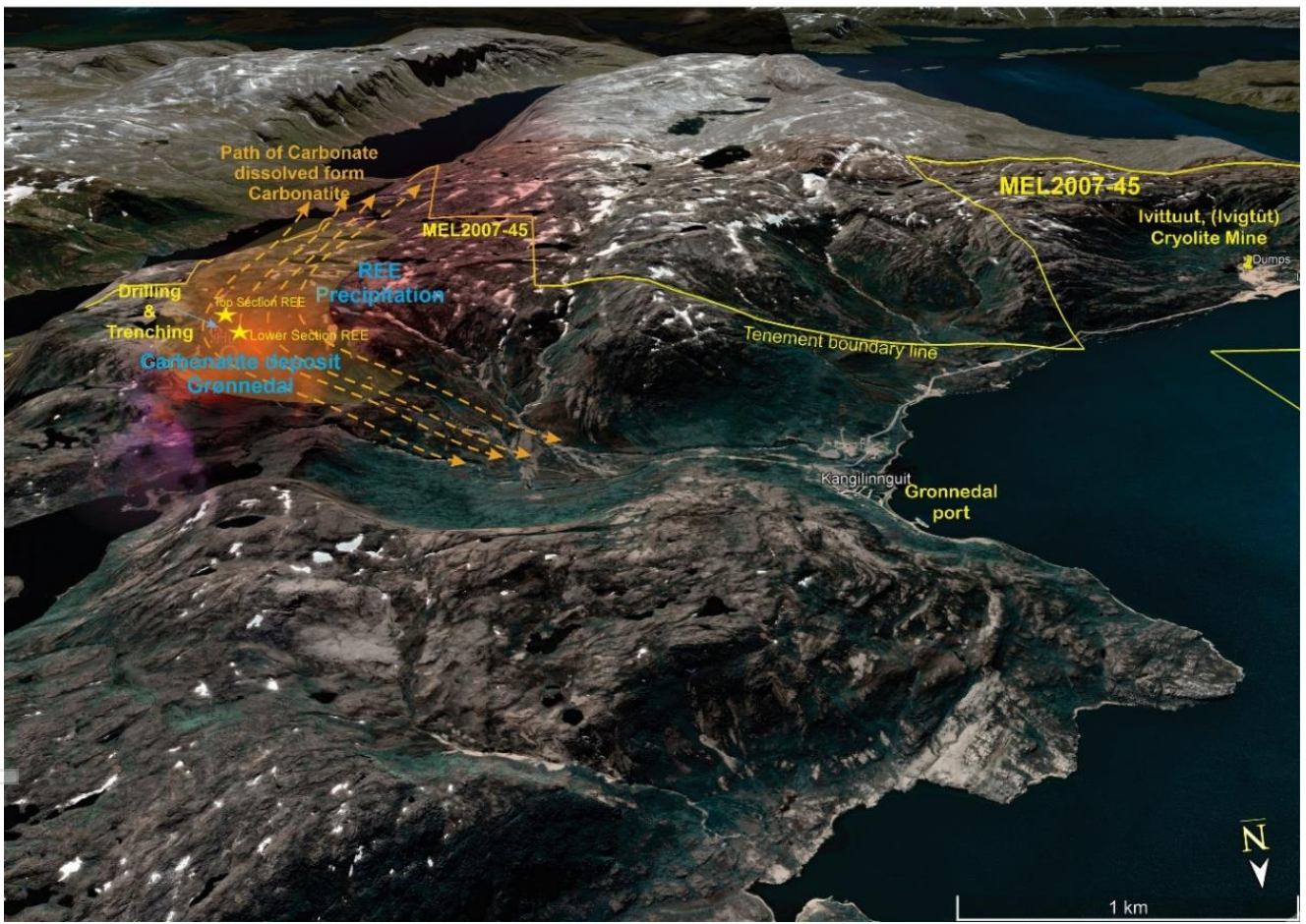


Figure 2: Grønnedal prospect exploration area and the concept of leaching CaCO_3 from carbonatite with the REE precipitating at the top of the hill.

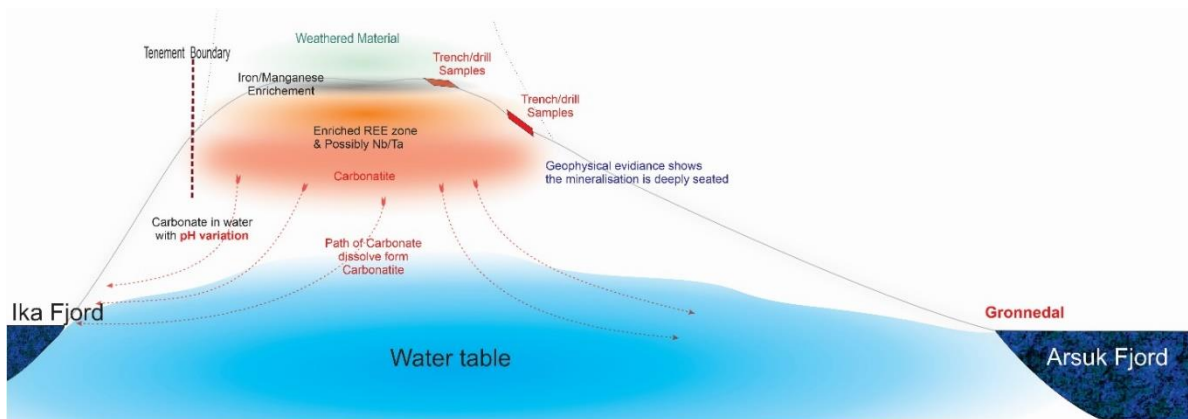


Figure 3: Conceptual illustration of the REE precipitation with carbonatite leaching CaCO_3 into the water table between the two fjords, concentrating remaining REE.

Trends associated with the distribution of the REE are complex, indicating enrichment at depth through leaching and precipitation below the surface. The diagram above shows calcium carbonate (CaCO_3) leaching in rainwater from higher areas via fault and fracture systems with CaCO_3 precipitating in cold sea water as the famous Ikka Columns, located outside the tenement boundary.

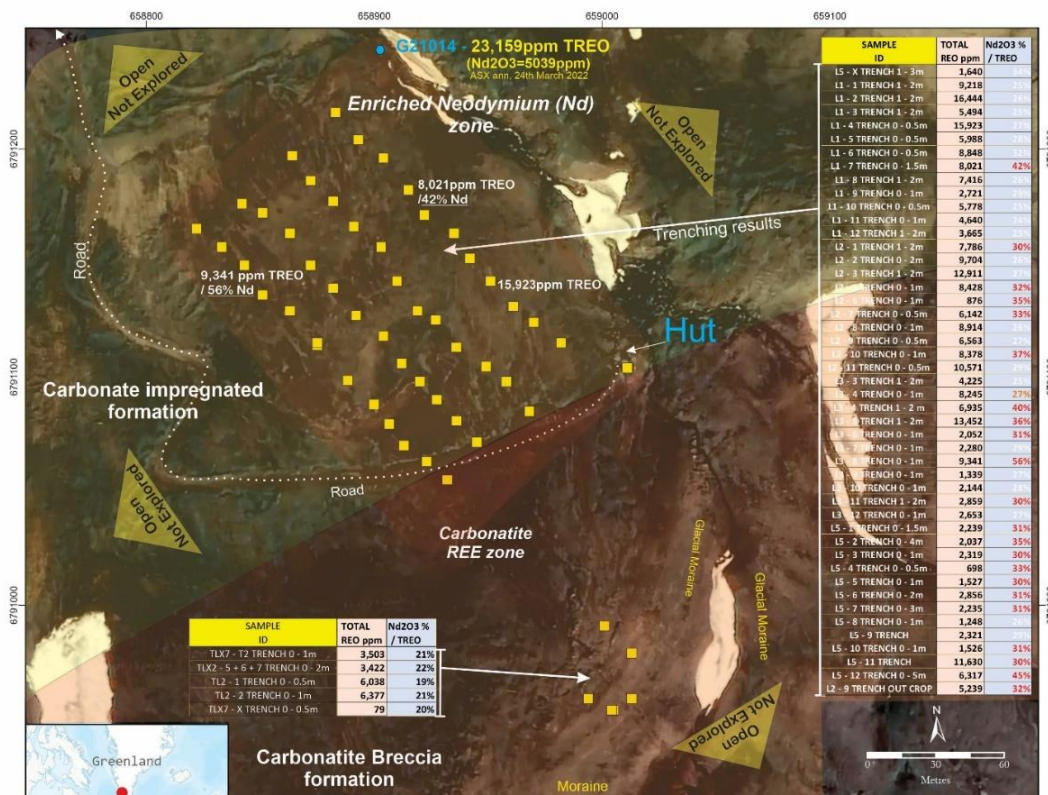


Figure 4: Conceptual overlapping styles of carbonate impregnated formations and carbonatite breccia formation within the carbonatite REE mineralisation

Discussion

Overall, analysis of the Grønnedal trench samples in the carbonate-impregnated formation demonstrated unusual patterns for Pr/La and Nd/Ce ratios compared with other REE-mineralised carbonatite complexes such as Mountain Pass (California) and Mt Weld (Western Australia).

Lower La and Ce content measured by pXRF, has been confirmed by laboratory assay results across the Grønnedal complex or a significant part thereof, and indicate that REE mineralisation at Grønnedal contains a higher proportion of the commercially more valuable magnetic REE, Pr and Nd. The latter are often termed the 'magnet feed' REE which are critical elements for high-performance magnets in high demand from the automotive sector and for wind turbines.

More specifically, pXRF readings and laboratory assay results recorded thus far show a relatively large proportion of Pr and Nd, comprising up to 55% of the measured 4REE. Laboratory results also show a relatively large proportion of Pr and Nd comprising up to 60% of TREO in Trench L3 - 8.

This can be compared with other rare earth deposits:

- i) **Grønnedal Pr+Nd: 55% of the measured 4REE (La+Ce+Pr+Nd)**
- ii) Mountain Pass* Pr+Nd: 17% of the measured 4REE (La+Ce+Pr+Nd)
- iii) Mount Weld CLD* Pr+Nd: 25% of the measured 4REE (La+Ce+Pr+Nd)

* Reference: Technology Metals Research, TMR (2015)

Such a difference in composition for the project could have positive implications for the so-called "basket price". The basket price is described as the sum of the proportions of individual REOs in the product multiplied by the price of the individual REOs.

Table A: Significant neodymium percentages in TREO results are highlighted in red.

SAMPLE ID	TOTAL REO ppm	Nd ₂ O ₃ % / TREO	Pr ₆ O ₁₁ % / TREO	(Pr ₆ O ₁₁ + Nd ₂ O ₃)%	SAMPLE ID	TOTAL REO ppm	Nd ₂ O ₃ % / TREO	Pr ₆ O ₁₁ % / TREO	(Pr ₆ O ₁₁ + Nd ₂ O ₃)%
L5-X-1-3m	1,640	34%	7%	41%	L3-4-0-1m	8,245	27%	6%	33%
L1-1-1-2m	9,218	25%	6%	31%	L3-4-1-2m	6,935	40%	5%	45%
L1-2-H1-2m	16,444	26%	6%	32%	L3-5-T-1-2m	13,452	36%	6%	42%
L1-3-1-2m	5,494	25%	6%	31%	L3-6-0-1m	2,052	31%	6%	37%
L1-4-0-0.5m	15,923	27%	6%	33%	L3-7-0-1m	2,280	29%	7%	36%
L1-5-0-0.5m	5,988	28%	6%	34%	L3-8-0-1m	9,341	56%	4%	60%
L1-6-0-0.5m	8,848	32%	6%	38%	L3-9-0-1m	1,339	27%	5%	32%
L1-7-0-1.5m	8,021	42%	5%	47%	L3-10-0-1m	2,144	28%	7%	35%
L1-8-1-2m	7,416	26%	6%	32%	L3-11-1-2m	2,859	30%	6%	36%

SAMPLE ID	TOTAL REO ppm	Nd ₂ O ₃ % / TREO	Pr ₆ O ₁₁ % / TREO	(Pr ₆ O ₁₁ + Nd ₂ O ₃)%	SAMPLE ID	TOTAL REO ppm	Nd ₂ O ₃ % / TREO	Pr ₆ O ₁₁ % / TREO	(Pr ₆ O ₁₁ + Nd ₂ O ₃)%
L1 - 9 - 0 - 1m	2,721	29%	6%	35%	L3 - 12 - 0 - 1m	2,653	27%	6%	33%
L1 - 10 - 0 - 0.5m	5,778	25%	6%	31%	L5 - 1 - 0 - 1.5m	2,239	31%	6%	37%
L1 - 11 - 0 - 1m	4,640	24%	6%	30%	L5 - 2 - 0 - 4m	2,037	35%	7%	42%
L1 - 12 - 1 - 2m	3,665	25%	5%	30%	L5 - 3 - 0 - 1m	2,319	30%	6%	36%
L2 - 1 - 1 - 2m	7,786	30%	6%	36%	L5 - 4 - 0 - 0.5m	698	33%	7%	40%
L2 - 2 - 0 - 2m	9,704	26%	6%	32%	L5 - 5 - 0 - 1m	1,527	30%	6%	36%
L2 - 3 - 1 - 2m	12,911	27%	6%	33%	L5 - 6 - 0 - 2m	2,856	31%	6%	37%
L2 - 5 - 0 - 1m	8,428	32%	6%	38%	L5 - 7 - 0 - 3m	2,235	31%	6%	37%
L2 - 6 - 0 - 1m	876	35%	6%	41%	L5 - 8 - 0 - 1m	1,248	26%	7%	33%
L2 - 7 - 0 - 0.5m	6,142	33%	6%	39%	L5 - 9 - - 0 - 1m	2,321	29%	7%	36%
L2 - 8 - 0 - 1m	8,914	26%	6%	32%	L5 - 10 - 0 - 1m	1,526	31%	7%	38%
L2 - 9 - H 0 - 0.5m	6,563	27%	6%	33%	L5 - 11 - - 0 - 1m	11,630	30%	6%	36%
L2 - 10 - 0 - 1m	8,378	37%	6%	43%	L5 - 12 0 - 0.5m	6,317	45%	5%	50%
L2 - 11 - 0 - 0.5m	10,571	29%	6%	35%	L2 - 9 OUT CROP	5,239	32%	6%	38%
L3 - 3 - 1 - 2m	4,225	25%	6%	31%					

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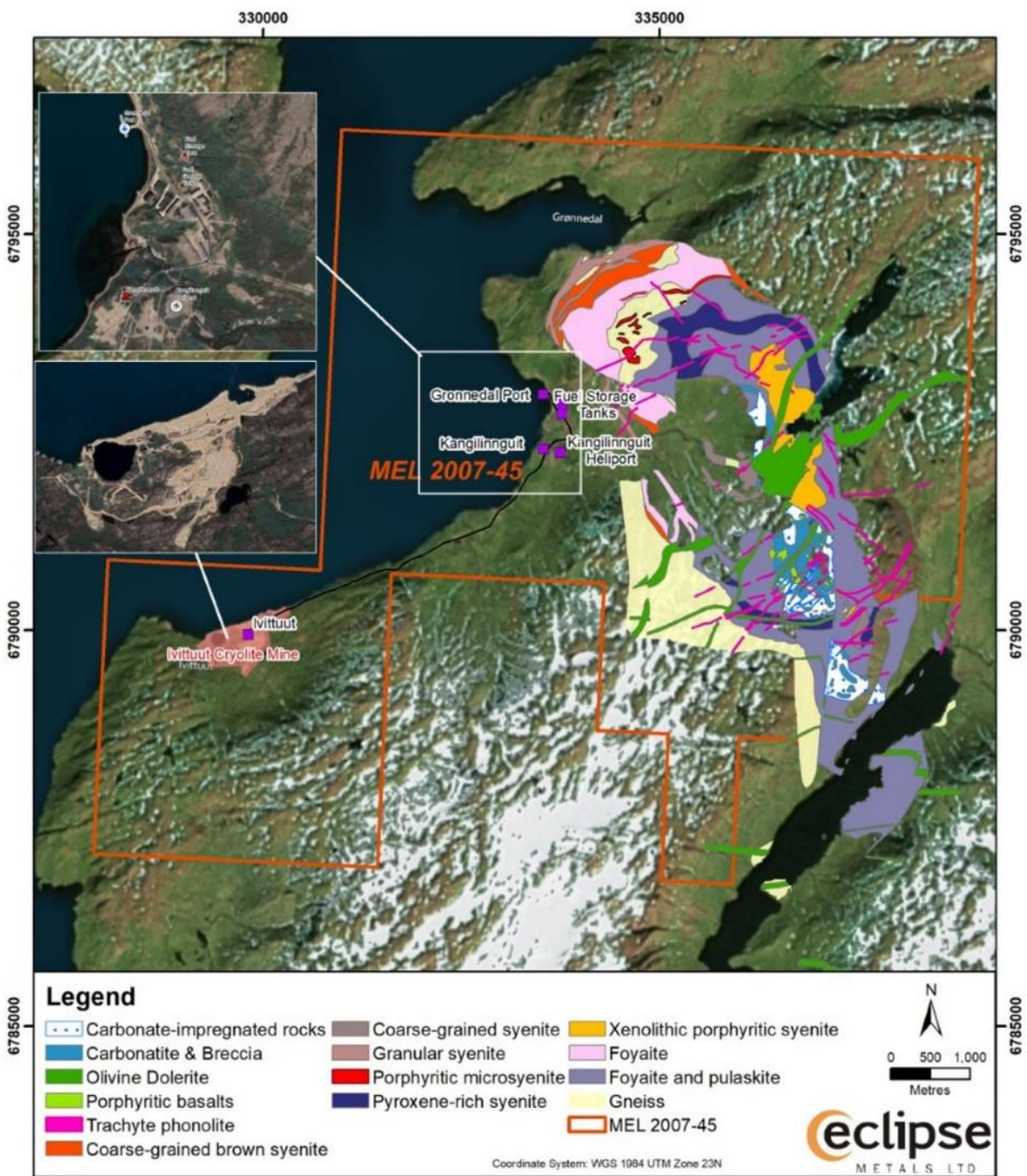


Figure 5. MEL 2007-45 Location Map, showing the geology of the Grønnedal nepheline syenite with a carbonatite plug

Authorised for release by the Board of Eclipse Metals Ltd.

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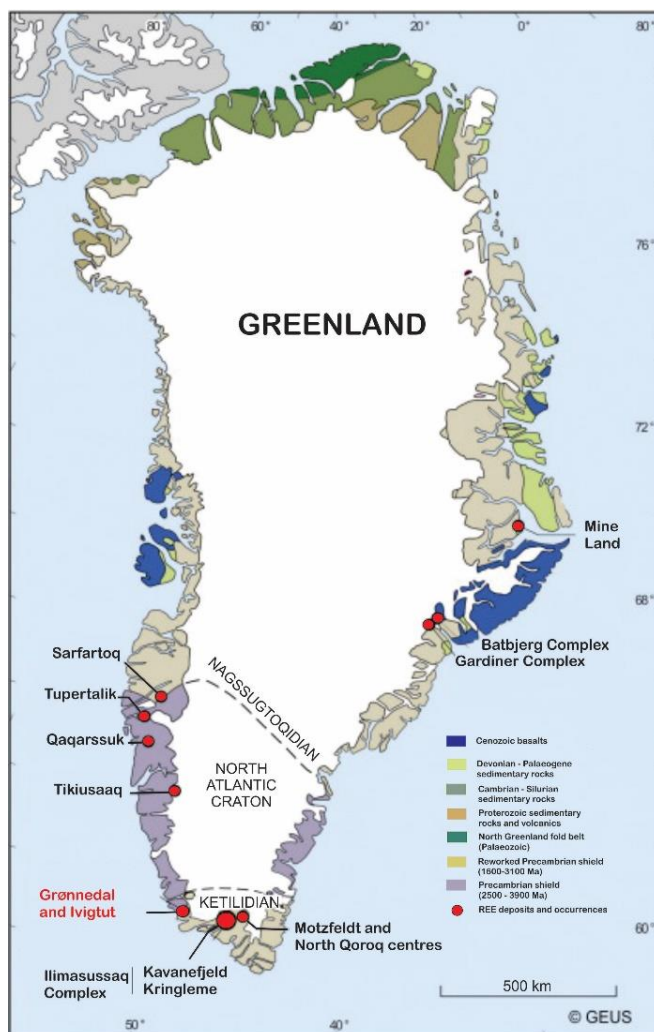


Figure 6. Greenland REE Deposits and location of Grønnedal and Ivigtût

About Eclipse Metals Ltd (ASX: EPM)

Eclipse Metals Ltd is an Australian exploration company focused on mineral exploration in South-western Greenland, Northern Territory and Queensland for multi commodity mineralisation. Eclipse Metals Ltd has an impressive portfolio of assets prospective for cryolite, fluorite, siderite, quartz, REE, gold, platinum group metals, manganese, palladium, vanadium and uranium mineralisation. The Company's mission is to increase shareholders' wealth through capital growth and ultimately dividends. Eclipse Metals Ltd plans to achieve this goal by exploring for and developing viable mineral deposits to generate mining or joint venture incomes.

Competent Persons Statement

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

Table B. Trenching Coordinates

Hole_ID	Sample_typ	Northing	Easting	Elevation
L1-1	Trench sample	6791104	659011	408
L1-10	Trench sample	6791196	658904	364
L1-11	Trench sample	6791204	658893	359
L1-12	Trench sample	6791216	658883	354
L1-2	Trench sample	6791115	658982	399
L1-3	Trench sample	6791124	658970	395
L1-4	Trench sample	6791131	658961	390
L1-5	Trench sample	6791142	658951	385
L1-6	Trench sample	6791152	658942	381
L1-7	Trench sample	6791163	658935	377
L1-8	Trench sample	6791171	658922	370
L1-9	Trench sample	6791182	658915	367
L2-1	Trench sample	6791085	658968	446
L2-10	Trench sample	6791177	658882	369
L2-11	Trench sample	6791181	658876	366
L2-12	Trench sample	6791197	658864	360
L2-2	Trench sample	6791098	658958	406
L2-3	Trench sample	6791101	658953	404
L2-4	Trench sample	6791113	658936	396
L2-5	Trench sample	6791125	658927	392
L2-6	Trench sample	6791129	658919	386
L2-7	Trench sample	6791142	658910	382
L2-8	Trench sample	6791157	658903	376
L2-9	Trench sample	6791166	658891	372
L3-1	Trench sample	6791071	658945	0
L3-10	Trench sample	6791163	658863	363
L3-11	Trench sample	6791172	658851	359
L3-12	Trench sample	6791176	658842	354
L3-2	Trench sample	6791081	658936	0
L3-3	Trench sample	6791090	658927	0
L3-4	Trench sample	6791098	658920	385

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Hole_ID	Sample_typ	Northing	Easting	Elevation
L3-5	Trench sample	6791106	658912	381
L3-6	Trench sample	6791118	658904	378
L3-7	Trench sample	6791127	658892	375
L3-8	Trench sample	6791139	658882	369
L3-9	Trench sample	6791149	658872	366
L5-1	Trench sample	6791055	658932	398
L5-10	Trench sample	6791149	658843	354
L5-11	Trench sample	6791157	658833	353
L5-12	Trench sample	6791165	658822	349
L5-2	Trench sample	6791063	658923	394
L5-3	Trench sample	6791070	658913	390
L5-4	Trench sample	6791079	658965	384
L5-5	Trench sample	6791088	658902	383
L5-6	Trench sample	6791090	658893	380
L5-7	Trench sample	6791115	658875	374
L5-8	Trench sample	6791129	658863	360
L5-9	Trench sample	6791136	658851	357
L5-X	Trench sample	6791114	658875	369
TL2-1	Trench sample	6790991	659001	437
TL2-2	Trench sample	6790991	659001	0
TLX2-1	Trench sample	6790979	659013	454
TLX2-2	Trench sample	6790959	658994	442
TLX2-5	Trench sample	6790959	659013	419
TLX7-T2	Trench sample	6790954	659005	425
TLX7-X	Trench sample	6790954	659004	

Table C: Trenching Total Rare Earth Oxides (TREO) results for all 52 trenches (pits) excavated up to 2 metres within Grønnedal

SAMPLE	Y ₂ O ₃ ppm	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	TOTAL REO ppm
TLX7 - T2 TRENCH 0 - 1m	171.44	586.4	1486.36	193.92	752.33	115.73	33.46	79.99	8.81	43.84	6.36	13.55	1.47	8.23	0.92	3,503
TLX2 - 5 + 6 + 7 TRENCH 0 - 2m	144.77	586.4	1461.8	190.9	743	112.02	32.42	73.88	8.32	41.43	5.88	12.18	1.32	7.24	0.81	3,422
TL2 - 1 TRENCH 0 - 0.5m	270.49	1114.16	2677.91	322.59	1166.4	178	53.26	130.24	13.53	67.26	9.9	20.75	2.15	10.51	0.98	6,038
TL2 - 2 TRENCH 0 - 1m	287	1020.34	2751.62	370.92	1347.19	224.38	64.61	164.82	16.82	81.83	11.31	22.87	2.24	10.45	0.98	6,377
L5 - X TRENCH 1 - 3m	26.03	191.75	526.98	108.86	551.71	88.13	26.52	67.89	7.01	31.91	4.07	6.93	0.5	1.92	0.17	1,640
L1 - 1 TRENCH 1 - 2m	609.55	867.87	3292.11	524.36	2279.15	611.11	196.26	444.9	52.81	238.72	29.9	47.91	4.16	17.71	1.55	9,218
L1 - 2 TRENCH 1 - 2m	491.45	1618.46	6756.2	1023.35	4350.67	941.6	277.9	602.81	60.57	241.02	25.54	38.19	3.05	12.53	1.11	16,444
L1 - 3 TRENCH 1 - 2m	213.34	609.86	2217.26	345.55	1393.85	303.82	86.26	200.55	18.23	76.55	8.9	14.29	1.1	4.37	0.42	5,494
L1 - 4 TRENCH 0 - 0.5m	355.57	1665.38	6989.6	1020.93	4269.02	738.67	202.05	428.77	39.87	156.66	16.32	26.3	2.19	10.12	1.05	15,923
L1 - 5 TRENCH 0 - 0.5m	221.6	621.58	2315.53	352.79	1656.29	340.92	103.52	235.13	21.47	87.8	9.87	16.29	1.09	3.64	0.39	5,988
L1 - 6 TRENCH 0 - 0.5m	172.07	961.7	3513.22	501.4	2834.35	393.1	112.55	239.74	19.88	76.67	7.98	12.06	0.79	2.52	0.27	8,848
L1 - 7 TRENCH 0 - 1.5m	98.67	832.69	2702.48	419.25	3359.23	266.71	76.07	173.47	14.06	57.16	6.6	11.23	0.75	2.33	0.25	8,021
L1 - 8 TRENCH 1 - 2m	261.6	738.86	3009.58	430.12	1953.72	403.54	125.63	296.22	30.46	124.53	12.66	21.1	1.51	5.42	0.61	7,416
L1 - 9 TRENCH 0 - 1m	18.6	351.84	1151.01	175.79	796.65	99.03	27.09	63.05	5.65	23.76	2.88	4.67	0.29	0.91	0.1	2,721
L1 - 10 TRENCH 0 - 0.5m	243.19	750.59	2352.39	337.09	1434.67	255.11	78.97	186.72	17.82	80.57	10.11	20.24	1.76	7.41	0.97	5,778
L1 - 11 TRENCH 0 - 1m	161.28	598.13	1897.88	291.18	1131.41	233.08	67.74	164.25	14.06	57.96	6.64	11.44	0.82	3.39	0.46	4,640
L1 - 12 TRENCH 1 - 2m	245.73	387.02	1375.81	197.54	900.46	193.65	64.5	161.94	16.7	81.14	10.6	21.21	1.64	6.4	0.73	3,665
L2 - 1 TRENCH 1 - 2m	224.77	762.32	2960.44	455.49	2367.79	418.62	126.79	291.61	29.17	107.08	11.68	20.64	1.63	7.05	0.93	7,786
L2 - 2 TRENCH 0 - 2m	351.76	1055.52	4066	565.44	2507.76	465	137.79	311.2	32.82	147.48	16.09	31.56	2.62	11.19	1.34	9,704
L2 - 3 TRENCH 1 - 2m	285.73	1442.54	5552.37	784.12	3464.21	597.19	175.42	396.49	35.99	134.28	12.89	21.61	1.61	6.24	0.74	12,911
L2 - 5 TRENCH 0 - 1m	183.5	891.33	3316.68	497.78	2729.38	368.75	101.43	215.54	17.17	69.78	8.27	17.04	1.68	8.53	1.25	8,428

SAMPLE	Y ₂ O ₃ ppm	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	TOTAL REO ppm
L2 - 6 TRENCH 0 - 1m	8	95.94	315.7	52.19	306.76	40.35	12.45	30.66	2.39	9.01	0.98	1.57	0.1	0.34	0.05	876
L2 - 7 TRENCH 0 - 0.5m	127.62	691.95	2352.39	355.21	2012.04	257.43	75.61	171.74	14.47	59.68	6.85	12.18	0.91	3.26	0.37	6,142
L2 - 8 TRENCH 0 - 1m	255.25	1043.79	3808.04	553.36	2303.64	402.38	116.37	263.95	26.35	100.54	11.4	20.93	1.6	6.07	0.68	8,914
L2 - 9 TRENCH 0 - 0.5m	165.72	727.14	2751.62	396.29	1802.09	311.93	90.2	207.47	17.64	70.24	7.63	11.78	0.78	2.63	0.31	6,563
L2 - 10 TRENCH 0 - 1m	129.53	762.32	3144.7	490.53	3114.29	331.65	91.94	205.16	16.23	65.99	7.77	13.38	0.92	3.42	0.41	8,378
L2 - 11 TRENCH 0 - 0.5m	149.85	1325.26	4667.92	635.51	3020.98	373.39	97.15	202.28	15.41	60.37	6.82	11.66	0.85	3.42	0.45	10,571
L3 - 3 TRENCH 1 - 2m	38.48	680.22	1805.75	250.1	1066.09	153.07	44.35	118.72	9.97	41.66	4.99	8.93	0.64	2.14	0.23	4,225
L3 - 4 TRENCH 0 - 1m	198.74	1231.44	3316.68	459.12	2256.98	322.37	97.5	222.45	19.88	84.24	9.97	18.47	1.36	4.82	0.51	8,245
L3 - 4 TRENCH 1 - 2 m	72.89	609.86	2364.67	373.33	2787.7	308.45	91.01	214.96	17.58	69.67	7.92	13.04	0.89	2.96	0.34	6,935
L3 - 5 TRENCH 1 - 2m	138.42	1372.18	5331.26	796.2	4817.23	485.87	124.47	260.49	22.23	75.29	8.36	14.29	1.07	3.77	0.42	13,452
L3 - 6 TRENCH 0 - 1m	15.81	242.77	819.34	131.69	629.86	88.13	25.36	62.7	5.62	22.78	2.6	4.3	0.28	0.94	0.11	2,052
L3 - 7 TRENCH 0 - 1m	44.45	245.12	955.7	154.65	655.52	98.1	27.09	59.94	5.69	23.18	2.71	5.05	0.43	1.96	0.25	2,280
L3 - 8 TRENCH 0 - 1m	59.18	691.95	2303.25	393.87	5225.47	296.86	83.02	192.48	14.7	58.65	6.78	11.4	0.79	2.72	0.33	9,341
L3 - 9 TRENCH 0 - 1m	33.4	112	538.04	72.73	359.25	72.71	24.89	66.62	7.57	35.46	4.7	8.2	0.58	2.14	0.24	1,339
L3 - 10 TRENCH 0 - 1m	35.18	256.84	910.24	140.76	610.03	88.25	24.32	51.75	4.49	16.81	1.65	2.4	0.17	0.83	0.12	2,144
L3 - 11 TRENCH 1 - 2m	38.73	328.38	1121.53	184.25	853.8	136.83	42.03	99.01	8.6	34.2	3.92	6.33	0.42	1.25	0.15	2,859
L3 - 12 TRENCH 0 - 1m	85.72	293.2	1127.67	161.29	711.5	115.15	34.04	74.8	7.25	30.07	3.41	5.91	0.47	1.95	0.25	2,653
L5 - 1 TRENCH 0 - 1.5m	18.6	269.74	832.86	142.57	701.01	110.63	33.81	86.33	7.28	27.09	2.81	4.62	0.35	1.44	0.18	2,239
L5 - 2 TRENCH 0 - 4m	22.86	193.51	711.24	134.11	715	101.7	31.03	80.68	7.33	29.84	3.33	5.23	0.32	1.07	0.14	2,037
L5 - 3 TRENCH 0 - 1m	20.32	304.93	863.57	144.38	698.67	111.09	34.39	91.86	8.13	31.33	3.3	5.24	0.35	1.24	0.15	2,319
L5 - 4 TRENCH 0 - 0.5m	7.97	88.66	225.41	49.78	227.45	34.79	11.15	30.89	2.89	13.49	1.66	3.03	0.19	0.65	0.07	698
L5 - 5 TRENCH 0 - 1m	19.05	170.06	609.29	97.99	464.23	66.21	19.63	45.64	4.47	20.83	2.69	5.08	0.4	1.51	0.18	1,527

SAMPLE	Y ₂ O ₃ ppm	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	TOTAL REO ppm
L5 - 6 TRENCH 0 - 2m	35.81	316.66	1046.6	181.83	884.13	145.53	45.85	122.18	10.87	47.4	5.61	9.83	0.71	2.46	0.28	2,856
L5 - 7 TRENCH 0 - 3m	41.4	233.97	816.89	141.96	682.34	113.18	35.66	102.7	9.26	41.09	5.04	8.69	0.61	2.08	0.23	2,235
L5 - 8 TRENCH 0 - 1m	44.95	174.16	493.82	82.28	326.59	52.18	14.99	30.66	3.43	16.53	2.2	3.93	0.36	1.43	0.16	1,248
L5 - 9 TRENCH	37.21	254.5	923.76	158.88	668.35	117.7	35.43	71.69	7.28	31.79	3.95	6.92	0.57	2.23	0.26	2,321
L5 - 10 TRENCH 0 - 1m	13.46	207	571.21	109.46	474.72	69.34	19.05	40	3.47	14.17	1.56	2.22	0.14	0.39	0.05	1,526
L5 - 11 TRENCH	323.82	1313.54	4581.93	714.05	3534.19	517.18	150.53	280.08	30.7	131.41	15.29	26.64	2.23	7.91	0.79	11,630
L5 - 12 TRENCH 0 - 5m	140.32	516.03	1762.75	304.47	2846.02	298.02	97.15	210.35	22.7	89.29	10.26	14.52	1.06	3.71	0.39	6,317
L2 - 9 TRENCH OUT CROP	154.29	586.4	1910.16	316.55	1662.12	257.43	77.58	164.25	16.23	69.09	8.09	12.58	0.92	3.21	0.35	5,239
TLX7 - X TRENCH 0 - 0.5m	13.84	12.43	19.47	3.73	15.45	3.26	1.27	3.1	0.43	2.7	0.48	1.26	0.17	1.21	0.16	79

Note: 'TREO' is an abbreviation of Total Rare Earth Oxides, representing a combined group of 15 lanthanides on the periodic table, not including Scandium.

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 style="list-style-type: none"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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 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.</i> 	<ul style="list-style-type: none"> • Grønnedal carbonatite samples are from shallow trenches (and drill-holes to follow). • Initial field tests by hand-held XRF assumed to be indicative only. Instrument not calibrated. • Chemical analyses to assess levels of elements contained, not for ore-grade estimates.
Drilling techniques	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • No drilling was undertaken as part of the grab sampling program.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to</i> 	<ul style="list-style-type: none"> • No drilling was undertaken as part of this grab sampling program.

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Criteria	JORC Code explanation	Commentary
	<i>preferential loss/gain of fine/coarse material.</i>	
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • Samples geologically logged before submission for analysis for identification only. Not quantitative.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • Samples for geological determination and identification only. Not quantitative. • No duplicates collected or determined.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> • Standard laboratory procedures for sample preparation, elemental determination, QA / QC. • Standard laboratory procedures with blanks and duplicates. No external laboratory checks warranted at this stage.
Verification of sampling	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> 	<ul style="list-style-type: none"> • No drilling was undertaken as part of this grab sampling program.

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Criteria	JORC Code explanation	Commentary
and assaying	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Handheld GPS locations:- Grønnedal – within 600m of 658880mE : 6791300mN. No grid. Handheld GPS only and correlation with hard-copy maps. <ul style="list-style-type: none"> UTM
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Each trench location recorded by handheld GPS. No assumption of continuity or resource estimation. Samples Crushed, riffle- split and bagged with duplicates retained in storage in Greenland.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Shallow exploration trenches not oriented.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples secured on-site, transported to private, lock-up building, processed, bagged and transported in locked shipping container and shipped to Perth by ship Australia under normal security procedures.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits have been completed yet.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> MEL 2007 / 45 granted to Eclipse Metals in February 2021 for a period of 3 years with extensions subject to activities and expenditure. Granted by Government of Greenland.

Criteria	JORC Code explanation	Commentary
	<p><i>national park and environmental settings.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<p>GEUS Report File No. 20236 Planning of the Ivigtût Open Pit of Kryolitselskabet Oresund A/S - Mining of the Flouritic Orebody"; Outokompu OY Mining Consultants, 1987. This report provided 18 cross sections showing drill traces with cryolite (kry), fluorite (fs) and siderite (sid) values together with pit profiles, resource blocks and tabulated tonnage estimates on each section with an SG of 2.95.</p> <p>GEUS Report File No. 20238 "The Planning of the Ivigtût Open Pit of Kryolitselskabet Oresund A/S – Report of the First Phase, Investigation of the Quantity and Quality of Extractable Ore from the Ivigtût Open Pit"; Outokompu OY Mining Consultants, 1986. This report contained 23 sections showing drillhole traces and contoured cryolite/fluorite grades with an overlay of resource blocks. These sections were used to check positions of drillholes relative to those shown in the above report (GEUS 20236). Resource tonnages are provided.</p> <p>GEUS Report File No. 20335 Kryolitselskabet Oresund A/S, De Resterende Mineralreserver I Kryolittforekomsten 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)</p> <p>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.</p>

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Criteria	JORC Code explanation	Commentary
		<p>GEUS Report File No. 20241 Kryolitselskabet Oresund A/S, Lodighedsdistribution I, Ivigtût Kryolitbrud, 31.12.1985” (Danish) 108 pages of drillhole analytical data in %: hole ID, from to, cryolite, fluorspar, Fe, Cu, Zn, Pb, S</p>
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • Late stage granitic / syenitic / carbonatite intrusions into crystalline basement.
Drill hole Information	<ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • No drilling was undertaken as part of this trench sampling program.
Data aggregation methods	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • No drilling was undertaken as part of this trench sampling program.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> 	<ul style="list-style-type: none"> • No drilling was undertaken as part of this trench sampling program.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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'). 	
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Appropriate coordinated maps are provided in the body of the text.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Fully coordinated analytical results included with this report.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Exploration by Eclipse Metals of the Ivigtût 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 its 2023 field season at the prospects.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Geological mapping; remote sensing; trenching and drilling. Detailed geological assessments planned for 2023 field season.

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