

26 June 2023

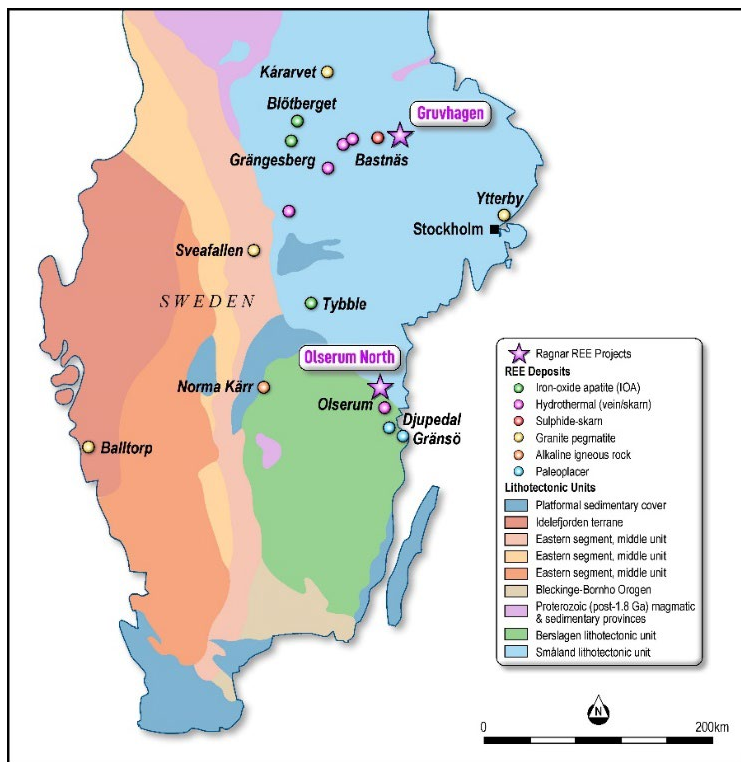
ACQUISITION OF TWO HEAVY RARE EARTH AND NdPr PROJECTS IN SWEDEN

Following a recent review of country-wide datasets in Sweden, Ragnar has identified and secured two new REE licenses, comprising 37.3 km² of tenure highly prospective for heavy rare earth element (HREE) mineralisation and NdPr metals:

- **Olserum North HREE Project:** Strategically located 8.5km north of, and in an identical geological setting to the Olserum Heavy REE deposit. Previous exploration in the area has identified outcropping HREE mineralisation that returned historical exploration results of **4,044 ppm TREE with 63% HREE**.
- **Gruvhagen NdPr Project:** Located within the 'REE-Line' where previous exploration in the area has identified outcropping REE mineralisation that returned historical exploration results of **36,921 ppm (3.7%) TREO with very high Nd/Pr (30%)**.

Both projects are considered highly prospective for the discovery of Rare Earth mineralisation in the southwestern Fennoscandian Province, which is renowned for REE deposits, including Sweden's largest REE deposit, Norma Karr.

The maiden field program is set to commence immediately to identify further REE mineralisation.



Executive Director Eddie King commented:

"We are excited to expand our exploration portfolio for highly sought-after critical minerals within one of the world's best mining jurisdictions. Olserum and Gruvhagen strongly complement our critical minerals portfolio and we look forward to working with our existing in-country experts as well as new stakeholders. We remain committed to creating shareholder value as an active and effective explorer for critical minerals in Sweden."

Figure 1: Simplified geological map of Southwest Fennoscandian Shield showing the location of Ragnar's new REE Projects in relation to the Olserum and Norma Karr REE deposits.

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Program Overview

Ragnar Metals Limited (“Ragnar” or “the Company”, ASX: RAG) is pleased to announce the acquisition of two new REE projects in Sweden in the Southwest Fennoscandian Shield, an area renowned for the formation of REE deposits (Figure 1). The applications follow a nationwide review of geochemical and geophysical datasets in Sweden that aim to identify areas prospective for discovering deposits of critical minerals. In particular, Ragnar was attracted to the potential of the southern Sweden region due to the occurrence of two essential resources of critical minerals:

- A. Sweden’s largest REE resource at Norma Karr hosted in a syenite intrusive¹; and
- B. The Olserum HREE deposit hosted in hydrothermally altered metasedimentary and alkalic granites². Sweden has recently defined the Olserum REE deposit and the surrounding area as a resource of national importance for critical minerals³.

What is most attractive about these deposits is the high percentage of heavy rare earth elements (HREE), in particular, **Tb** (Terbium) and **Dy** (Dysprosium), as well as **Nd** (Neodymium). Notably, amongst various other important uses, these metals are critical components in manufacturing performance technology solutions for clean energy, and the global demand for these metals is exceptionally high.

In addition, Ragnar remains committed to exploration in Sweden since the country is consistently ranked in the top 10 of the Fraser Institutes Annual Survey of Mining Investment Attractiveness.

Olserum North HREE Project

Project tenure comprises 20.8km² strategically located 8.5km north of the Olserum HREE deposit in an identical geological setting characterised by the same host Palaeoproterozoic Svekokarelian metasedimentary rocks (1.9Ga) and Palaeoproterozoic alkalic granite and syenite rocks (1.8Ga) mapped by the Geological Survey of Sweden (Figure 2). The prospectivity of this area is strongly supported by rock assays from the Hylleled’s Prospect, where rocks up to **4,044 ppm REE** are previously reported, which includes **63% HREE metals**, including **365 ppm Dy** and **54 ppm Tb** (Table 1). SEM work has confirmed abundant subhedral xenotime and monazite minerals hosting the REE metals that are renowned as easily extractable REE minerals. The Geological Survey of Sweden discovered the prospect during the Eurare Project reported in 2019⁴ and it has never been subject to any follow-up exploration work.

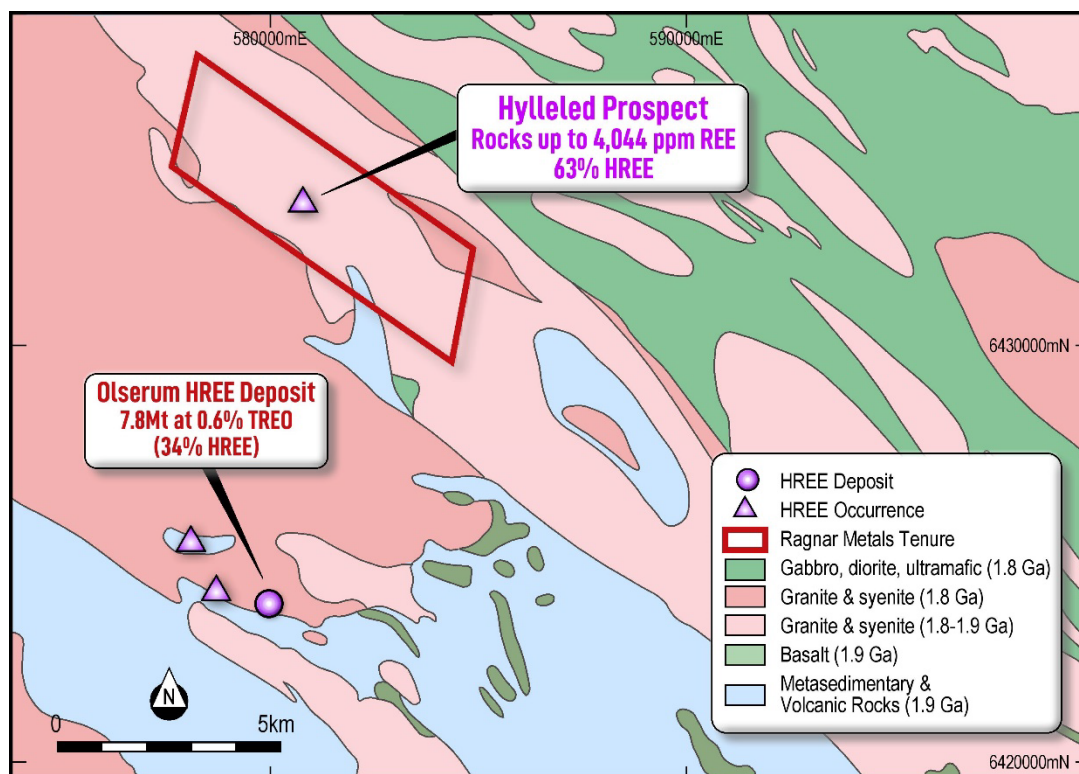


Figure 2: Interpreted bedrock geology map showing Ragnar’s newly acquired Olserum North project in relation to the Olserum HREE deposit.

The records of the sampling at the Hylleled Prospect do not include sufficient information that would enable these results to be reported in accordance with the JORC Code 2012. The specific details of rock sampling undertaken to analyse these samples is not known. The Company considers that while these details are not recorded in extensive detail, nothing has come to its attention that suggests the sampling and analysis was not undertaken in a professional manner using appropriate techniques, and considers that these rock chip samples are sufficiently reliable that they can be considered as suggestive of mineralisation.

Gruvhagen REE (NdPr) Project

Another significant REE opportunity was identified at Gruvhagen, where 16.5 km² tenure was secured 20km north of Ragnar Metals Granmuren Ni-Cu discovery within the northeast extension of the “REE Line” in the district surrounding the town of Bastnas in Sweden (Figure 3). This area is renowned as the worldwide type locality for REE-bearing carbonate minerals *bastnasite*, the most critical REE ore mineral at the Mountain Pass mine in the USA. During the review at Gruvhagen, historical iron-rich rock samples with very high levels of REE were observed up to **36,920 ppm (3.7%) TREE** with a high percentage **Nd/Pr at 32%** at the Morkens prospect and up to **24,573 ppm (2.5%) REE** again with high percentage **Nd/Pr at 24%** at the Gruvhagen prospect (Figure 3, Table 1). Several other iron occurrences occur west of the license within the “REE Line” and have never been assayed for REE (Figure 3).

The occurrences at Gruvhagen are also often associated with other metals such as cobalt, copper, gold and iron and are considered skarn-style REE deposits⁴. Rock samples on the project also returned up to 0.1% cobalt (976ppm) and 1.7% copper (17,200ppm) (Table 1).

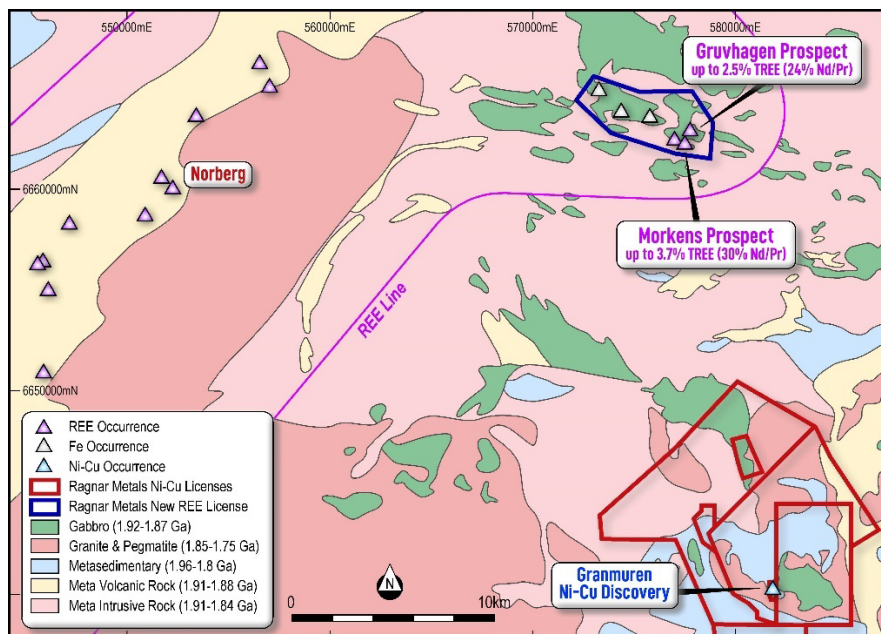


Figure 3: Interpreted bedrock geology map showing Ragnar's newly acquired Gruvhagen Project in relation to the Bastnas-style “REE Line” and Ragnar's Granmuren Ni-Cu discovery.

The records of the sampling at Gruvhagen Prospect do not include sufficient information that would enable these results to be reported in accordance with the JORC Code 2012. The details of the specific sampling techniques undertaken to analyse these samples is not known. The Company considers that while these details are not recorded in extensive detail, nothing has come to its attention that suggests the sampling and analysis was not undertaken in a professional manner using appropriate techniques, and considers that this rock chip sample is sufficiently reliable that it can be considered as suggestive of mineralisation.

Conclusions and Ongoing Work Programs

It is clear from the review by Ragnar that the Olserum North project area has never been subject to any exploration of significance. Ragnar believes there is excellent potential for the discovery of HREE deposits associated with the contact between Proterozoic-aged metasedimentary and intrusive rocks.

Similarly, at Gruvhagen, these REE occurrences have never been subject to any exploration of significance, notwithstanding a number of high-grade assays and NdPr concentrations. Ragnar believes there is excellent potential for discovering NdPr-rich REE mineralisation.

Ragnar is excited about the HREE and NdPr potential of these projects and is launching into an aggressive exploration program starting with its maiden field reconnaissance and sampling program at Olserum North. The field program at Gruvhagen is scheduled to commence later in June. The field programs are designed to relocate and resample the known REE mineralisation at each prospect, track out the strike extents, and evaluate for further mineralisation. Other concurrent work programs comprise acquiring, reprocessing, and interpreting all publicly available geochemistry and geophysics data. The company plans to conduct high-resolution magnetic and radiometric surveys to map out the hot rock lithologies. This work aims to lead to the planning for a drill program for the third quarter of 2023.

Historical Exploration Results not in accordance with JORC Code 2012

Exploration results included in this announcement are historical rock chip samples taken from reports compiled by previous explorers and which were not reported in accordance with the JORC Code 2012. The Company has not yet undertaken sufficient evaluation or exploration that would enable a Competent Person to confirm and report these exploration results in accordance with the JORC Code 2012. It is possible that following further evaluation and exploration work that the confidence in these results may be reduced. Nothing has come to the attention of the Company that causes it to question the accuracy or reliability of the historical exploration results. The Company has not independently validated the exploration results and is not to be regarded as adopting or endorsing them. There are no more recent available relevant exploration data.

Table 1: Historical assays reported in this announcement sourced from the Geological Survey of Sweden rock geochemical database

Sample	SGUR10232	DARKNESS3	MINING HAG1	DARK2	AS08032
Prospect	Hylleleds	Morkens	Gruvhagen	Morkens	Morkens
Rare Earth Element	ppm	ppm	ppm	ppm	ppm
La	82.6	3080	5980	10000	3860
Ce	220	9070	10000	10000	no assay
Pr	34.2	1000	1000	1000	no assay
Nd	195	6430	4950	10000	no assay
Sm	119.5	1000	891	1000	no assay
Eu	6.16	55.2	224	224	no assay
Gd	258	1000	573	1000	no assay
Tb	54.2	144.5	51.2	276	no assay
Dy	365	583	177	816	no assay
Ho	73.9	78.1	21.7	87.3	no assay
Er	216	133.5	35.8	121.5	no assay
Tm	32.8	12.3	3.46	9.57	no assay
Yb	214	48.8	15.65	32.6	no assay
Lu	31.6	5.17	2.1	3.82	no assay
Y	2120	2330	649	2350	no assay
TREE+Y	4022.96	24970.57	24573.91	36920.79	
HREE%	77%	13%	4%	10%	
NdPr %	17%	33%	24%	32%	
Cu	85.7	7530	6.1	2450	17200
Co	40	449	1	467	976
East	580680	577465	577026	577465	577465
North	6433536	6662160	6662377	6662160	6662160

Table 2: Ragnar Metals Sweden Project Tenement Details

Name	License ID	RAG Ownership	Area Ha	Expiry Date
Berga nr 1*	2018 48	100%	2181.52	28/03/2026
Tullsta nr 6*	2017 158	100%	2695.03	06/11/2025
Tullsta nr 7*	2019 5	100%	4452.74	25/01/2024
Tullsta nr 8*	2020 45	100%	31.415	07/05/2025
Tullsta nr 9*	2021 75	100%	1598.83	27/10/2024
Gaddebo Nr 3*	2014 91	100%	99.815	30/10/2026
Gruvhagen nr 1	2023 38	100%	1612.54	23/03/2026
Olserum North	2023 55	100%	2082.61	25/04/2026
Bergom nr 2	2023 35	100%	2767.31	20/03/2026
Hälleberget nr 1	2023 36	100%	2110.45	20/03/2026
Total Area			19,632.26	

Note:

* These tenements are subject to divestment as announced by the Company on 26 June 2023.

For the purpose of ASX Listing Rule 15.5, the Board has authorised this announcement to be released.

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References

¹ Nora Karr indicated resource of 41.6Mt at 5700 ppm TREO (29% HREE) and an additional inferred resource of 16.5Mt at 5400 ppm TREO (31%HREE) reported in 2014 Amended and Restated Pre-Feasibility Study – NI 43-101 – Technical Report for the Nora Karr Rare Earth Element Deposit: https://www.sec.gov/Archives/edgar/data/1474547/000114420415042695/v415241_ex99-1.htm

²Olserum indicated resource of 4.5Mt at 6000 ppm TREO (33.9% HREE) and an additional inferred resource of 3.3Mt at 6300 ppm TREO (33.7% HREE) reported in 2013 Amended and Restated Technical Report for Olserum REE Deposit Southern Sweden: https://www.sec.gov/Archives/edgar/data/1474547/000094935313000119/exh99-1_olserum.htm

³ <https://www.sgu.se/om-sgu/nyheter/2023/maj/olserum-blir-riksintresse-for-sallsynta-jordartsmetaller/>

⁴ Sadeghi, Arvanitidis, Ripa, 2019. Rare Earth Elements Distribution, mineralisation and exploration potential in Sweden. Geological Survey of Sweden

Competent Person Statement

The information in this announcement relating to exploration results, geology and planning is based on information compiled by Leo Horn of All Terrain Geology, a consultant to Ragnar Metals and a member of The Australasian Institute of Geoscientists. Mr Horn has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking 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". The information in this announcement is an accurate representation of the available data and studies for the Olserum North and Gruvhagen Projects. His commentary on relevant matters is included below. Mr Horn consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

END

APPENDIX 1 JORC TABLE 1 - JORC CODE, 2012 EDITION – TABLE 1
Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	- No drilling was reported in this announcement. - The announcement refers to primarily grab rock samples from previous explorers. Quality of assay data and lab techniques are unknown and should be treated as suggestive. Further work will be undertaken to confirm historical prospects and mineralised occurrences.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	No drilling reported in this announcement.
	Aspects of the determination of mineralisation that are material to the Public Report.	No drilling reported in this announcement.
	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 30g 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	No drilling reported in this announcement.
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).	No drilling reported in this announcement.
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No drilling reported in this announcement.
Logging	- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. - The total length and percentage of the relevant intersections logged.	No drilling reported in this announcement.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• No drilling reported in this announcement. • No sub-sampling completed for historical rock rock chips.
Quality of assay data and laboratory tests	• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• No drilling reported in this announcement. • Historical rock chips: Assays were conducted by Geological Survey of Sweden at ALS Scandinavia AB and are derived from a lithium borate fusion followed by either ICP-AES or ICP-MS.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• No drilling reported in this announcement. • No verification undertaken for historical rock chips.
	• The use of twinned holes.	• No drilling reported in this announcement.
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• No drilling reported in this announcement.
	• Discuss any adjustment to assay data.	• No drilling reported in this announcement.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	• It is assumed that locations of rock samples by the Geological Survey of Sweden were completed utilising a handheld GPS in 2019.
	• Specification of the grid system used.	• SWEREF99TM
	• Quality and adequacy of topographic control.	• No drilling reported in this announcement.
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• No drilling reported in this announcement.
	• 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.	• No drilling reported in this announcement.
	• Whether sample compositing has been applied	• No drilling reported in this announcement.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• No drilling reported in this announcement. • Historical rock chips: Rock chips are inherently biased and selective in nature and should only be treated as suggestive of mineralisation.

Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	Sample security for rock samples not documented
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been conducted for this release given the early stage of the project.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	- Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. - The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	- Exploration Permit Oslerum North (2023:55) and Gruvhagen nr 1 (2023:38) is owned 100% by Ragnar Metals. The tenures are located in Bergslagen District within the Municipality of Sala on Map page 11G. The Permits are valid until 25/04/2026 & 23/03/2026 respectively. - There are no known impediments to operate in the licenses areas for early stage exploration work.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Rock assays reported in this announcement were conducted by the Geological Survey of Sweden as a result of the EURARE project which was funded by the European Commission to address the "Development of a sustainable exploitation scheme for Europe's Rare Earth Element ore deposits".
Geology	Deposit type, geological setting and style of mineralisation.	REE mineralisation style at each prospect are not well understood. However, the Geological Survey of Sweden describes mineralisation at Oslerum as a hydrothermal-style iron oxide-REE mineralisation style possibly sourced from intrusive magmas and Gruvhagen as a Bastnasite-style iron oxide-REE (+/-copper) deposit style.
Data aggregation methods	- In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. - Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No drilling reported in this announcement.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	- No drilling reported in this announcement. - No metal equivalents reported.
Relationship between mineralisation widths and intercept lengths	- These relationships are particularly important in the reporting of Exploration Results. - If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. - If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	No drilling reported in this announcement.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be	Appropriate maps and tables are included in the body of the Report.

Criteria	JORC Code explanation	Commentary
	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.	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	- No drilling reported in this announcement. - The accompanying document is a balanced report with a suitable cautionary note.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All meaningful and material exploration data available to the Company is disclosed in the body of this announcement.
Further work	- The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Further work is described in the body of this announcement.